# POORNIMA
## COLLEGE OF ENGINEERING

**Approved by AICTE**
**Affiliated to Rajasthan Technical University, Kota**
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# *List of National and International Conference Report*

# *(2017-18 to 2020-21)*

**ISI-6, RIICO Institutional Area, Sitapura, Jaipur-302022 (Rajasthan)**
**• Phone: +91-9829255102, +91-9414728922• E-mail: principal.pce@poornima.org**
**Website: www.pce.poornima.org**

# Poornima College of Engineering, Jaipur

## List of Student Participation in Various Activities


| S .N. | Name of the Conference | Session | Date | Page No |
|---|---|---|---|---|
| 1 | Report on Sustainable Energy, Environment and Green Technologies (ICSEEGT 2022) | 2021-22 | 24-25/06/2022 | 3-66 |
| 2 | Report on Artificial Intelligence: Advances and Applications, ICAIAA-2022 | 2021-22 | 23-24/4/2022 | 67-79 |
| 3 | Report on International Conference on Recent Advances and Innovations in Engineering | 2021-22 | 01-03/12/2021. | 80-122 |
| 4 | Report on Artificial Intelligence Advances and Applications | 2020-21 | 27-28/03/ 2021 | 123-133 |
| 5 | Report on Sustainable Energy, Environment and Green Technologies (ICSEEGT 2021) | 2020-21 | 05-06/03/2021 | 134-162 |
| 6 | Report on Recent Advances and Innovation in Engineering (ICRAIE-2019) | 2019-20 | 28-29/11/2019 | 163-179 |
| 7 | Report on Artificial Intelligence Advances and Applications (ICAIAA-2019) | 2018-19 | 28-29/06/2019 | 180-190 |
| 8 | Report on Advances in Refrigeration & Energy Systems | 2017-18 | 7-8/04/2018 | 191-222 |

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# International Conference

## A Report on 2-day International Conference

**TITLE AND DURATION:** "Sustainable Energy, Environment and Green Technologies (ICSEEGT 2022)" (June 24-25, 2022)

**SPONSORS:** NIL

**SUPPORTERS:** NIL

**ORGANIZING PARTNERS:** NIL

**PUBLISHER(S):** Springer & IOP Conference Series

**ISBN / PART NO. / INDEXING AGENCY:**

**Name:** IOP Conference Series: Earth and Environmental Science (EES)
**Website:**https://iopscience.iop.org/journal/1755-1315 (Online ISSN: 1755-1315, Print ISSN: 1755-1307).
**Scope:** https://iopscience.iop.org/journal/1755-1315/page/scope
**Indexing:**https://www.scopus.com/sourceid/19900195068

***Special Issue (Direct Submission)***

**Name:** Environmental Science and Pollution Research (ESPR)
**Website:**https://www.springer.com/journal/11356/ (Electronic ISSN 1614-7499)
**Scope:**Environmental Science and Pollution Research | Aims and scope (springer.com)
**Indexing:**https://www.scimagojr.com/journalsearch.php?q=23918&tip=sid&clean=0

**THEMES / TRACKS:**

| **Track 1: Sustainable/Renewable Energy** | |
|---|---|
| Alternative Fuels | Internal Combustion Engines Performance with Bio-Fuels |
| Bio-Energy, Biomass, and Bio-Fuels | Renewable Energy Supply and Technologies |
| Energy Conservation Technologies | Solar Photovoltaic Technology |
| Energy Forecasting and Optimization Models | Sustainable and Renewable Energy |

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|---|---|
| Energy Management Systems | Sustainable Building Technologies |
| Energy storage concepts and materials | Sustainable Solutions |
| Environmental Sustainability and Development | Waste Energy Utilization |
| Hydrogen as a Future Energy Source | |

| **Track 2: Environment and Transportation** | |
|---|---|
| Advanced Construction Material | Intelligent Transport, Smart Traffic Control |
| Climate Change and the Urban Environment | Low Carbon Economy and Society |
| Construction Technology and Equipment | Remote Sensing and Gis |
| Disaster and Supply Chain Management | Road and Bridge Engineering |
| Environment Impact Assessment | Solid Waste Management |
| Environmental Engineering and Management | Surface and Ground Water Studies |
| Global Warming and Greenhouse Gas Mitigation | Sustainable Transportation Infrastructures |
| Greenhouse Effect and Climate Change | Transportation Safety |
| Highway Design and Safety Measures, Mega Structure Design | Wastewater Management and Treatment |

| **Track 3: Green Technologies and Urban Development** | |
|---|---|
| Advances in Structural Designing | Green Nanotechnology |
| Emerging and Advanced Green Energy Technologies | Green Urbanization |
| Green Building Technologies | Rural Development through Green Energy |
| Green Design, Products, and Manufacturing Processes | Town Planning |
| Green Energy Policies and Programs | Urban Infrastructures |
| Green Energy Trade for Economic Development | Urban Policies and Management |

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**OBJECTIVES:**

The conference on Sustainable Energy, Environment, and Green Technologies (ICSEEGT-2022) is the second International Conference organized at Poornima College of Engineering, Jaipur, Rajasthan, India. This conference aims to bring researchers from academia, government agencies, research laboratories, and the corporate sector together to present their research work in sustainable and renewable energy, environment, and green technologies. Since Green growth is the pursuit of economic development in an environmentally sustainable manner. If the development goal is to improve living standards, access modern energy services, and use energy more efficiently, green growth must play a key role. For this aim, the conference ICSEEGT 2022 can be a great platform to promote research in the subject area and exchange new ideas in these fields among academicians, engineers, scientists, and practitioners across the world.

**EXPECTED OUTCOMES:**

The conference will strengthen contacts and foster cooperation among accelerator-based science and application researchers, accelerator manufacturers, facility operators and the coordinators of academic programs in the accelerator sciences, leading to a comprehensive review of the status of accelerator-based research and applications. The conference is expected to generate ideas that will form the basis of future ICSEEGT-2022 programs in the area of research and applications using accelerator technologies.

**BROCHURE / POSTER / LEAFLET / FLYER:**

**PROGRAM OUTLINE/ PROGRAM SCHEDULE:**

CONFERENCE SCHEDULE (HYBRID MODE)

DAY-I, FRIDAY, JUNE 24, 2022

| TIME (IST) | EVENT | GUEST/SPEAKER/HOST | *Session Link (MS Teams)/Venue* |
|---|---|---|---|
| **8:30 AM–9:00 AM** | **Registration and Gathering of Participants** | | |
| **9:00 AM–9:45 AM** | **Inaugural Ceremony** | **Chief Guest:**<br>**Professor S.A Sherif,** Department of Mechanical and Aerospace Engineering, University of Florida, USA<br>**Guest of Honor (s):**<br>1. **Professor L.M. Das**, Former Professor, Centre for Energy Studies, Indian Institute of Technology, Delhi, India<br>2. **DR. L. N. Thakural,** Senior Scientist, Surface Water Division, National Institute of Hydrology, Roorkee, India<br>**Session Host(s):**<br>***Dr. Pooja Gupta and Mr. Sanjay Kumawat***, *Poornima College of Engineering, Jaipur, India* | **Offline Mode: PCE, CAMPUS (Seminar Hall, CG-05)**<br>**+**<br>**Virtual Mode: MS Teams Platform**<br>**https://tinyurl.com/ICSEEGT-2022** |
| **9: 45AM-10:15 AM** | ***Session Break*** | | |
| **10:15 AM-11: 00AM** | **Keynote Session -I** | **Title of Talk:** *Energy Efficient and Environment-Friendly Porous Radiant Burners for Cooking and Industrial Applications*<br>**Speaker: Professor P. Muthukumar,** Department of Mechanical Engineering, Indian Institute of Technology, Guwahati, India<br>**Session Host**: *Mr. Kalpit Jain, Poornima College of Engineering, Jaipur, India* | **https://tinyurl.com/ICSEEGT-2022** |

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| | | **Session Chair(s): Dr. Narayan Lal Jain & Dr. Pran Nath Dadhich, Poornima College of Engineering, Jaipur, India Moderator: Mr. Rahul Sharma, Poornima College of Engineering, Jaipur, India** | |
| **11:45 AM-12:15PM** | ***Session Break*** | | |
| **12:15 PM-2:15 PM** | **Technical Session-II** | **Session Chair: Dr. Salifu Tahiru Azeko**, Tamale Technical University, Tamale, Ghana **Moderator***: Mr. Sanjay Kumawat, Poornima College of Engineering, Jaipur, India* | **https://tinyurl.com/TS-2-ICSEEGT-2022** |
| | **Technical Session-III** | **Session Chair: Dr. Tanuj Chopra**, Thapar Institute of Engineering and Technology, Patiala, India **Moderator***: Mr. Divya Vishnoi, Poornima College of Engineering, Jaipur, India* | **https://tinyurl.com/TS-3-ICSEEGT-2022** |
| | **Technical Session-IV** | **Session Chair (s): (s):** 1. **Dr. Puneet Kumar Jain**, National Institute of Technology, Rourkela, India 2. **Dr. Ram Niwash Mahia,** National Institute of Technology, Hamirpur, India **Moderator:** *Dr. Monika Vardia, Poornima College of Engineering, Jaipur, India* | **https://tinyurl.com/TS-4-ICSEEGT-2022** |
| **2:15 PM-2:30 PM** | ***Session Break*** | | |
| **2:30 PM-3:15 PM** | **Keynote Session-II** | **Title:** *Recent Advances Materials on Energy Storage Technology and Sustainability* | |
| | | **Speaker: Dr. M. V. Reddy**, Senior Professional Researcher, Nouveau Monde Graphite (New Graphite World) (NMG), Quebec, Canada **Session Host:** *Mr. Rahul Sharma, Poornima* | **https://tinyurl.com/TS-5-ICSEEGT-2022** |

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| | | *College of Engineering, Jaipur, India* | |
| **3:15 PM-4:00 PM** | **Keynote Session-III** | **Title:** *Noble Metal-Free Electrocatalysts for Oxygen Reduction Reaction in Low-Temperature Fuel Cells* | |
| | | **Speaker: Dr. Wong Wai Yin**, Research Fellow, and Senior Lecturer, Fuel Cell Institute, Universiti Kebangsaan, Malaysia *Moderator: Dr. Monika Vardia, Poornima College of Engineering, Jaipur, India* | **https://tinyurl.com/ICSEEGT-2022** |

DAY-II, SATURDAY, JUNE 25, 2022

| TIME (IST) | EVENT | GUEST/SPEAKER/HOST | *Session Link (MS Teams)* |
|---|---|---|---|
| **8:30 AM - 9:15 AM** | **Keynote Session-IV** | **Title**: *Hydrometeorological Disasters as a Consequence of Climate Change* | **https://tinyurl.com/ICSEEGT-2022** |
| | | **Speaker: Dr. Arindam Dey**, Department of Civil Engineering & Center for Disaster Management and Research (CDMR), Indian Institute of Technology Guwahati, India **Session Host:** *Mr. Kalpit Jain, Poornima College of Engineering, Jaipur, India* | |
| **9:15 AM-9:30 AM** | ***Session Break*** | | |
| **9:30AM - 11:30 AM** | **Technical Session-V** | **Session Chair: Dr. Pankaj Dumka,** Jaypee University of Engineering and Technology, Guna, India **Moderator:** *Dr. Surendra Kumar Saini, Poornima College of Engineering, Jaipur, India* | **https://tinyurl.com/ICS-TS-5-ICS-U-2** |

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| | **Technical Session-VI** | **Session Chair: Dr. Pradeep Kumar Gautam,** National Institute of Technology Meghalaya, India<br>**Moderator:** *Mr. Divya Vishnoi, Poornima College of Engineering, Jaipur, India* | https://tinyurl.com/TS-6-ICSEEGT-2022 |
| | **Technical Session - VII** | **Session Chair (s): Dr. Narayan Lal Jain and Dr. Pran Nath Dadhich,** Poornima College of Engineering, Jaipur, India<br>**Moderator:** *Mr. Sanjay Kumwat, Poornima College of Engineering, Jaipur, India* | https://tinyurl.com/TS-7-ICSEEGT-2022 |
| | | | |
| **11:30 AM -11:45 AM** | ***Session Break*** | | |
| **11:45AM - 12:30 PM** | **Keynote Session-V** | **Title:** *Sustainable Livelihoods and Adaptation to Climate Change* | |
| | | **Speaker: Dr. Ravindra S. Gavali**, Head, Centre for Natural Resource Management, Climate Change & Disaster Mitigation (CNRM, CCC&DM), National Institute of Rural Development & Panchayati Raj, Hyderabad, India | https://tinyurl.com/ICSEEGT-2022 |
| | | **Session Host: Mr. Rahul Sharma, Poornima College of Engineering, Jaipur, India** | |
| **12:30 PM-1:00 PM** | ***Session Break*** | | |
| **1:00 PM – 1:45 PM** | **Keynote Session-VI** | **Title:** *Hydrogen as a Future Fuel* | |
| | | **Speaker: Dr. Dilip Sharma,** Malviya National Institute of Technology, Jaipur, India<br>**Session Host:** *Mr. Kalpit Jain, Poornima College of Engineering, Jaipur, India* | https://tinyurl.com/ICSEEGT-2022 |
| **2:00 PM-2:30 PM** | ***Session Break*** | | |

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| **2:30 PM-3:15 PM** | **Valedictory Ceremony** | **Chief Guest:**<br>**Dr. Herb S. Rhee,** Managing Director, Innovative Technology and Energy Centre (ITEC), Tanzania<br>**Guest of Honor:**<br>1. **Anand Krishnan Plappally,**Head, Center for Emerging Technologies for Sustainable Development (CETSD), Indian Institute of Technology, Jodhpur, India.<br>2. **Dr. Perumalla Janaki Ramulu**, Director, Centre of Excellence for Advanced Manufacturing Engineering, Adama Science & Technology University Adama, Ethiopia<br>**Session Host(s):**<br>***Dr. Pooja Gupta and Mr. Sanjay Kumawat***, *Poornima College of Engineering, Jaipur, India* | **https://tinyurl.com/ICSEEGT-2022** |

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**INAUGURAL SESSION:**

The inaugural session was followed by a keynote session of Professor P. Muthukumar, Professor, Indian Institute of Technology, Guwahati, India, on the *Energy Efficient and Environment Friendly Porous Radiant Burners for Cooking and Industrial Applications*. Later, four parallel technical sessions were organized on the first day, where authors and participants participated and presented their papers. Overall, 186 research papers were received for ICSEEGT 2022 from different organizations worldwide, out of which our expert team of reviewers accepted 102 papers. The research papers in this conference were invited considering these three tracks: sustainable/renewable energy, environment and transportation, green technologies, and urban development. The presenters and attendees participated with full enthusiasm in all the technical sessions. As a result, 43 papers were presented in the technical sessions on the first day. The first Technical Session in offline mode was chaired by Dr. Narayan Lal Jain and Dr. Pran Nath Dadhich, and moderated by Mr. Rahul Sharma of Poornima College of Engineering, Jaipur, India. The second Technical Session was chaired by Dr Salifu Tahiru Azeko, Tamale Technical University, Tamale, Ghana: Mr. Sanjay Kumawat, Poornima College of Engineering, was the moderator for this session. Dr. Tanuj Chopra from Thapar Institute of Engineering and Technology, Patiala, India chaired the third Technical Session. The second and third session moderators were Mr. Divya Vishnoi and Mr. Sanjay Kumawat, Poornima College of Engineering respectively. Dr. Puneet Kumar Jain, National Institute of Technology, Raurkela, and Dr Ram Niwash Mahia, National Institute of Technology, Hamirpur, India chaired the fourth Technical Session, and moderated by Dr. Monika Vardia from Poornima College of Engineering.

The day ended with a keynote session on *Recent Advances Materials for Energy Storage Technology and Sustainability* by Dr. M V Reddy, Senior Professional Researcher, Nouveau Monde Graphite (New graphite world) (NMG), Quebec, Montreal, Canada.

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On the second day of this conference, ICSEEGT 2022, two more technical sessions were organized and about 40 more accepted papers were presented. The sessions were chaired by Dr. Pankaj Dumka, Jaypee University of Engineering and Technology, Guna, India and Dr. Pradeep Kumar Gautam, National Institute of Technology Meghalaya, Dr. Surendra Kumar Saini, and Mr. Divya Vishnoi, PCE were the moderators for these sessions. There were three keynote sessions organized on this day. The first keynote talk, entitled *Noble Metal-Free Electro catalysts for Oxygen Reduction Reaction in Low-Temperature Fuel Cells*" was delivered by Dr. Wong Wai Yin, Research Fellow/ Senior Lecturer Fuel Cell Institute, University Kebangsaan Malaysia. The second talk title was *Sustainable Livelihoods and Adaptation to Climate Change* and Dr. Ravindra S. Gavali, delivered it, representing National Institute of Rural Development & Panchayati Raj, Hyderabad. The third session was on *Hydrogen as a Future* Fuel by Dr. Dilip Sharma, Malviya National Institute of Technology, Jaipur, India.

At the end of the second day in the valedictory ceremony, Dr. Herb S. Rhee, Managing Director, Innovative Technology and Energy Centre (ITEC), Tanzania, joined as the chief guest. In contrast, Dr. Anand K. Plappally, Head, Center for Emerging Technologies for Sustainable Development (CETSD), IIT Jodhpur, India, Dr. Perumalla Janaki Ramulu, Director, Centre of Excellence for Advanced Manufacturing Engineering, Adama Science and Technology University Adama, Ethiopia participated as the guest of honor of the ceremony. On the contrary, the event was a great success with addresses and sessions of learned persons, wholehearted participation from all our authors, co-authors, attendees, and an expert team of reviewers, coordinators, staff members, and organizing team members.

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## DETAILS OF RESOURCE PERSONS/ ORGANIZING COMMITTEES:

**Chief Patrons:**

- **Dr. S.M. Seth,** Chairman Emeritus Poornima Group, Former Director, National Institute of Hydrology, Roorkee, India
- **Sh. Shashikant Singhi,** Chairperson, Poornima Group, Jaipur, India

**Patrons:**

- **Sh. M.K.M, Shah,** Director General, Poornima Group, Jaipur, India
- **Sh. Hari Singh Shekhawat,** Director infrastructure, Poornima Group, Jaipur, India
- **Ar. Rahul Singhi,** Director, Poornima Group, Jaipur, India

**General Chair:**

- **Dr. Mahesh Bundele**, Principal & Director, Poornima College of Engineering, Jaipur, India

**Organizing Chairs:**

- **Pankaj Dhemla,** Vice Principal, Poornima College of Engineering, Jaipur, India
- **Dr. Narayan Lal Jain,** Head of the Department, Mechanical Engineering, Poornima College of Engineering, Jaipur, India
- **Dr. Pran Nath Dadhich,** Head of the Department, Civil Engineering, Poornima College of Engineering, Jaipur, India

**Conveners/Organizing Secretary:**

- **Dr. Raj Kumar Satankar,** Department of Mechanical Engineering, Poornima College of Engineering, Jaipur, India
- **Dr. Pooja Gupta,**Department of Civil Engineering, Poornima College of Engineering, Jaipur, India

**Advisory Committee:**

- **Dr. Omprakash Yadav,** Professor, North Dakota State University, USA
- **Prof. Abdul Ghani Albaa,** Visiting Professor, Environment Technology and Management, Princess Sumaya University for Technology, Jordan
- **Dr. Sandeep Choudhary,** Professor, Indian Institute of Technology, Indore, India
- **Dr. Rajat Rastogi,** Professor, Indian Institute of Technology, Roorkee, India
- **Dr. Rosalin Sahoo,** Professor, Indian Institute of Technology (BHU), Varanasi, India
- **Dr. Manoj Neergat,** Professor, Indian Institute of Technology, Bombay, India
- **Dr. K.S. Reddy,** Professor, Indian Institute of Technology, Madras, India
- **Dr. Avinash Kumar Agarwal,** Professor, Indian Institute of Technology, Kanpur, India

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- **Dr. B. Ravindra,** Associate Professor, Indian Institute of Technology, Jodhpur, India
- **Dr. Rohit Goyal,** Professor, Malaviya National Institute of Technology, Jaipur, India
- **Dr. A. B. Gupta,** Professor, Malaviya National Institute of Technology, Jaipur, India
- **Dr. Dilip Sharma,** Professor, Malaviya National Institute of Technology, Jaipur, India
- **Dr. Jyotirmay Mathur,** Professor, Malaviya National Institute of Technology, Jaipur, India
- **Dr. G. D. Agrawal,** Professor, Malaviya National Institute of Technology, Jaipur, India
- **Dr. D. Dutta,** Director, NRSC, Hyderabad, India

**Technical Program Committee:**

- **Dr. Vitalis Anye**, Senior Lecturer, Department of Materials Science and Engineering, African University of Science and Technology, Abuja, Nigeria.
- **Dr. Kabiru Mustapha**, Senior Lecturer Department of Materials Science and Engineering, Kwara State University, Malete, Nigeria
- **Dr. Anand K Plappally**, Associate Professor, Indian Institute of Technology, Jodhpur, India
- **Dr. T. N. Verma**, Assistant Professor, Maulana Azad National Institute of Technology, Bhopal, India
- **Dr. Rahul Goyal**, Professor, Manipal University Jaipur
- **Dr. Yogesh Kumar**, Assistant Professor, National Institute of Technology, Patna
- **Dinesh Kumar Rajendran**, Assistant Professor, National Institute of Technology, Srinagar
- **Dr. P. Sudhakar Rao**, Assistant Professor, NITTTR, Chandigarh
- **Dr. K. B. Rana**, Assistant Professor, Rajasthan Technical University, Kota, India

**Reviewer(s):**

- **Dr. Abhishek Jain,** SKIT M&G Jaipur, India
- **Dr. Aditya R. Gautam,** Birla Institute of Technology and Science, Pilani, India
- **Dr. Ahmed Albahnasawi,** Gebze Technic University, Turkey
- **Dr. Akshay Jain,** Symbiosis University of Applied Sciences Indore, India
- **Dr. Ali Fadhil Naser,** Al-Furat Al-Awsat Technical University, Iraq
- **Dr. Anil Kumar Sharma**, National Institute of Technology Patna, India
- **Dr. Anjali Peter,** Apex University, Jaipur, India

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- **Dr. Bindhu B.K.,** Rajiv Gandhi Institute of Technology, Kottayam, India
- **Dr. Biswajit Acharya,** Rajasthan Technical University Kota, India
- **Dr. Chandni Tiwari,** Graphic Era (Deemed To Be University), Dehradun, India
- **Dr. Deepika Shekhawat,** Manipal University Jaipur, India
- **Dr. Denis Jangeed,** Geetanjali Institute of Technical Studies Udaipur Rajasthan, India
- **Mr. Harendra Pratap Singh,** Indian Institute of Science Bangalore, India
- **Dr. Jyoti Shukla,** Poornima College of Engineering, Jaipur, India
- **Dr. K. I. Syed Ahmed Kabeer,** SRM Institute of Science And Technology, Srm Nagar, Kattankulathur, India
- **Dr. Karan Singh,** GH Raisoni College of Engineering and Management, Pune, India
- **Dr. Khubi Lal Khatri,** Swarnim Startup and Innovation University, Gandhinagar, India
- **Mr. Kuldeep,** Rajasthan Technical University, Kota, India
- **Dr. N. R. N. V. Gowripathi Rao,** Aditya Engineering College, Andhra Pradesh, India
- **Dr. Navita Mahajan,** Amity International Business School, Noida, India
- **Dr. Neha Bansal,** SRM Institute of Science and Technology, Chennai, India
- **Dr. P. Kavipriya,** Sathyabama Institute of Science and Technology, Chennai, India
- **Dr. Pankaj Dumka,** Jaypee University of Engineering and Technology, Guna, India
- **Dr. Paresh Gujarati,** C G Patel Institute of Technology (Uka Tarsadia University), Bardoli, India
- **Dr. Pradeep Kumar Gautam,** National Institute of Technology Meghalaya, India
- **Dr. Prarthita Basu,** Shriram Institute For Industrial Research, Delhi, India
- **Dr. Pravin Sonwane**, Poornima College of Engineering, Jaipur, India
- **Dr. R. K. Kumawat,** I K Gujral Punjab Technical University, Amritsar, India
- **Dr. Rahul Sen,** Poornima University, Jaipur, India
- **Dr. Raj Shree Charan,** MSU Baroda, India
- **Dr. Ranjit N. Patil,** Priyadarshini Bhagwati College of Engineering, Nagpur, India
- **Dr. Rashmi Kumari,** National Institute of Technology Hamirpur, India
- **Dr. Richa Jagatramka,** Manipal University Jaipur, India

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- **Dr. Sangeeta Choudhary,** Geetanjali Institute of Technical Studies, Udaipur, India
- **Dr. Seelam Srikanth,** Reva University Bengaluru, India
- **Dr. Shyam A.,** Anna University, Chennai, India
- **Dr. Thiyam Tamphasana Devi,** National Institute of Technology Manipur, India
- **Dr. Vikash Kumar,** Maulana Azad National Institute of Technology Bhopal, India
- **Dr. Vipin Sharma,** Sagar Institute of Research and Technology Bhopal, India
- **Dr.P.Sivagurunathan,** Annamalai University, Chidambaram, India
- **Mr. Akashdeep Dey,** National Institute of Technology Raipur, India
- **Mr. Amit M. Kharwade,** Nagpur Institute of Technology,Nagpur, India
- **Mr. Amit Shrivastava,** Indian Institute of Technology Jodhpur, India
- **Mr. Ashish Solanki,** Rajasthan Technical University, Kota, India
- **Mr. Chander Prakash,** Dr. B R Ambedkar National Institute of Technology Jalandhar, India
- **Mr. Deepak Singh,** Delhi Technological University Delhi, India
- **Mr. Kamal Hassan,** Lovely Professional University, Phagwara, India
- **Mr. Mahendra Kumar Singar,** Vivekananda Global University, Jaipur, India
- **Mr. Manoj Dubey,** Jaypee University of Engineering and Technology, Guna, India
- **Mr. Md. Mustafa Kamal,** Indian Institute of Technology Roorkee, India
- **Mr. Padala Raja Shekar,** National Institute of Technology Trichy, India
- **Mr. Prem Ranjan,** North Eastern Regional Institute of Science and Technology, Nirjuli, India
- **Mr. Rahul Kanaoujiya,** University of Allahabad, Pragyagraj, India
- **Mr. Ramkiran B.,** Sastra Deemed University, Kumbakonam, India
- **Mr. Rohit Kumar,** Dr. B R Ambedkar National Institute of Technology Jalandhar, India
- **Mr. Sachin Jain,** Indian Institute of Technology Roorkee, India
- **Mr. Sameer Gujar,** Visvesvaraya National Institute of Technology Nagpur, India
- **Mr. Sandeep Kumar,** Indian Institute of Technology Delhi, India
- **Mr. Sohil Sisodiya,** Rajasthan Technical University, Kota, India
- **Mr. Vinay Chahar,** Government Engineering College Bharatpur, India
- **Mr. Vishwa Deepak Kumar,** Indian Institute of Technology Jodhpur, India
- **Ms. Behnaz Shirdel,** Islamic Azad University, Tabriz Branch, Tabriz, Iran

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- **Ms. Dipti Trivedi,** Jawaharlal Nehru College of Technology, Rewa, India

**KEYNOTE SPEAKERS:**

| | | |
|---|---|---|
| **TITLE OF THE TALK** | Noble Metal-Free Electro catalysts for Oxygen Reduction Reaction in Low-Temperature Fuel Cells | |
| **SPEAKER:1** | **Dr. WONG WAI YIN**<br>Research Fellow/ Senior Lecturer Fuel Cell Institute, Universiti Kebangsaan Malaysia. | |
| **PROFILE LINK** | https://scholar.google.com/citations?user=t3xOL00AAAAJ&hl=en&oi=ao | |

**BRIEF BIO SKETCH**

**Dr. Wong Wai Yin** is currently a research fellow at the Fuel Cell Institute, Universiti Kebangsaan Malaysia (2016 – present). She received her Ph.D. degree in Fuel Cell Engineering (2014) at the Universiti Kebangsaan Malaysia with National Science Fellowship Malaysia Award. She received her bachelor's degree in Chemical Engineering (2009) with distinction at the same university. Currently, her research is focusing on design, characterization, and application of electrocatalysts and proton exchange membranes for polymer electrolyte membrane fuel cell and water electrolyser technologies. She has led several national and university research projects, as well as being active project members in university level, ministry level and industrial projects related to hydrogen and fuel cell technology development. She has published more than 70 papers and 3 book chapters with current H-index of 19 on Scopus. She has been invited by 5 international conferences/symposium to deliver keynote/invited speech. She is also an active reviewer for various SCIE journals from Elsevier, Wiley, Springer and RSC. She involves herself with the editor roles for several journals such as Frontiers in Chemistry, International Journal of Integrated Engineering and Journal of Engineering, Science and Technology. She has graduated 9 PhD and Master students and currently supervising 16 postgraduate students. She has been collaborated actively with researchers from Japan, China and Indonesia and managed to secure research funding from Chinese company on fuel cell materials development in 2022. She has also acted as a consultant for techno-economic analysis on biomass conversion into value-added product in 2020. Recently, she has been appointed as lead consultant for a project involving the development of component materials in Alkaline Electrolyte Membrane Electrolyser. She is active organizing conference/symposium/workshop with various roles such as [illegible], co-chair, and deputy chairman and committee members since she joined [illegible] academician. She is currently acting as the vice chairman for [illegible] group on developing fuel cell technology related technical codes, under the Malaysian

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Technical Standard Forum Bhd. She and her team has successfully published one technical code related to hydrogen safety, and two more technical codes under way for final publication. She is also the member of the Malaysian Association of Hydrogen Energy established in 2017 and I Chem E.

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| **TITLE OF THE TALK** | Energy Efficient and Environment Friendly Porous Radiant Burners for Cooking and Industrial Applications | |
| **SPEAKER:2** | **PROF. P. MUTHUKUMAR**<br>Professor, Department of Mechanical Engineering,<br>Indian Institute of Technology, Guwahati, India | |
| **PROFILE LINK** | https://www.iitg.ac.in/pmkumar/ | |

**BRIEF BIO SKETCH**

Prof. P. Muthukumar received PhD degree in Mechanical Engineering from IIT Madras during 2005. He joined at IIT Guwahati as Assistant Professor in January 2006 and became Professor in January 2015. He joined at IIT Tirupati as Professor in Mechanical Engineering on 25th May 2022. He received DAAD research fellowships during September – December 2000, June-July 2008, and June - July 2010. He is the recipient of IEI Young Engineer Award - 2010 in Mechanical Engineering from Institute of Engineers (India). He received **Bhaskara Advanced Solar Energy Fellowship (BASE Fellowship)** from Indo -
U.S. Science and Technology Forum (USIEF), Jan 2014 and also received Er. M.P. Baya National Award 2015 from Instituted by the Institution of Engineers (India), Udaipur. He is also the Fellow of Institute of Engineers (India). He is one of the Commission Member to represent India in the International Institute of Refrigeration (IIR). He also received **Fulbright-Nehru Academic and Professional Excellence Fellowship from (USIEF) in 2018**. He has served as the President, Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE), Guwahati sub-chapter. He also received "Mechanical Engineering Design Award 2017, from **National Design & Research Forum (NDRF) of "The Institution of Engineers (India)", on 21st Dec 2017**. During 2019, he was honoured as Eminent Engineer - 2019 from "The Institution of Engineers (India)", Assam State Centre. In 2020, he appeared in the **World's Top 2 % Scientist published by Stanford University** USA report. He has won **BIRAC- Innovation Challenge Award [illegible] for stage – 1 and stage – 2**. He was honoured with an award of Outstanding [illegible] service to country by the Institution of Engineers (India), Rajasthan [illegible] on 15th September 2021. To recognise his outstanding contributions in the field of

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Thermal Science and Energy Technology as well as his contribution in the growth of the country's engineering profession, recently, he has been awarded for the prestigious "Abdul Kalam Technology Innovation National Fellowship 2021". He served as visiting Professor in many Universities from the USA and Germany and also having research collaborations with over 25 International Universities.

He has been published around 350 research articles in various International Journals and conference proceedings, edited four books and written 16 book chapters. He is having 12 national patents for his credit. He has served as guest editor in 3 elsevier Journal special issues. He has supervised 24 PhD, 65 M.Tech and 5 MS student's theses. He has successfully completed 10 sponsored research projects worth of 650 lakhs and five consultancy projects worth of 75 lakhs. Currently he is handling 7 research projects worth of 1200 lakhs. He is the reviewer of more than 75 International Journals in the area of hydrogen energy, energy storage, refrigeration, heat transfer, etc. and also reviewed several research proposals from DST, MNRE, Qatar Research Board, etc. He has been serving as expert member in several ministries including DST, MHRD, Ministry Oil and Natural Gas, Ministry of External Affair, etc for research project funding and monitoring. He is also expert / steering committee member in BIS, AICTE, NAAC and many other professor organizations. His area of research includes sorption heating and cooling systems, hydrogen energy storage, metal hydride based thermal machines, coupled heat and mass transfer in porous medium, porous medium combustion, etc.

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| **TITLE OF THE TALK** | Hydrometerological Disasters as a Consequence of Climate Change | |
| **SPEAKER:3** | **DR. ARINDAM DEY**<br>Associate Professor<br>Department of Civil Engineering & Center for Disaster Management and Research (CDMR)<br>Indian Institute of Technology Guwahati Guwahati | |
| **PROFILE LINK** | | |
| **BRIEF BIO SKETCH** | | |

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Dr. Arindam Dey is currently an Associate Professor in the Geotechnical Engineering Division, Department of Civil Engineering, Indian Institute of Technology Guwahati. He obtained his B.E. from Jadavpur University, Kolkata (in 2003), followed by M.Tech. (in 2005) and Ph.D. (in 2009) from IIT Kanpur. Before joining IIT Guwahati in 2011, he has been a post-doctoral fellow at the StreGa Laboratory, University of Molise, Italy. He works in varied fields of geotechnical engineering including foundation engineering, geotechnical earthquake engineering, geophysical investigation, computational geotechnics and slope stability and landslides. His current research group includes 8 PhD students and 3 MTech students, and has

already supervised 7 PhDs and 22 M. Tech students. His research group has more than

250 technical contributions in international/ national journals and conference/seminar proceedings including books, chapters and technical reports. He is a member of several professional bodies including ISSMGE TC-208 Committee on 'Slope Stability and Landslides', IGS, TRG, IEI, and FOSET. He has received several research awards, and has been an active research consultant in the area of geotechnical engineering

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| **TITLE OF THE TALK** | Recent advances materials on energy storage technology and sustainability | |
| **SPEAKER:4** | **DR. M V REDDY**<br>Senior Professional Researcher, Nouveau Monde Graphite (New graphite world) (NMG), Quebec, Montreal, Canada | |
| **PROFILE LINK** | https://scholar.google.com/citations?user=pWKr2M0AAAAJ&hl=en | |
| **BRIEF BIO SKETCH** | | |

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Dr. M.V. Reddy obtained his Ph. D (2003) in the area of Materials Science and Engineering (with highest distinction) from the University of Bordeaux, France. From July 2003 to May 2019, he worked at the Department of Materials Science and Engineering, Chemistry and Physics, National University of Singapore (NUS). Singapore. June 2019 to Aug 2021, he had worked at the Centre of Excellence in Transportation Electrification and Energy Storage, Hydro-Québec, Canada. Currently working as a Senior Professional Researcher at Nouveau Monde Graphite (New graphite world) (NMG), Quebec, Montreal, Canada.

Over the past 21 years, he has conducted leading research on Materials for Energy Storage (cathodes, anodes, supercapacitors and electrolytes), Materials processing & characterization, and the development of in situ techniques for Energy storage renewable technologies.

Dr. Reddy has published 220 papers in various international journals. He has obtained an h- index of 68 with over 17000 citations. These have recently placed him within the top 2% highly cited researchers in Energy (world Ranking the 1002$^{nd}$ out of 186500 researchers) and Highly cited Researcher in Materials Science in Canada (National ranking:39)

Dr. Reddy is serving as an editorial advisory board member in Materials Research Bulletin and Journal of Energy Storage (Elsevier, Scopus journal) as well as several open access journals

Awards: Outstanding Science Mentorship Award (2010- 2018), and Inspiring Research Mentor Award (2011 to 2019), 2021 Battery Materials electrochemistry award from the Electrochemical Society of India, Indian Institute of Science (IISc), Bangalore, India.

Invited life member in ICDD USA and given 150 talks at various conferences and workshops & FDP.

Invited committee member in various international Research proposals, theses and conference organizations and visiting Professor at various Universities.

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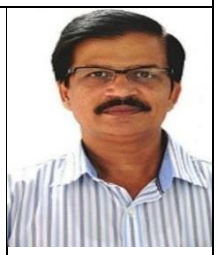
| TITLE OF THE TALK | Hydrogen As a Future Fuel | |
|---|---|---|
| **SPEAKER:5** | **PROF DILIP SHARMA**<br>Professor, HAG<br>Malaviya National Institute of Technology Jaipur (MNIT), Jaipur, India |  |
| **PROFILE LINK** | https://mnit.ac.in/dept_mech/profile?fid=Qqk= | |

**BRIEF BIO SKETCH**

Prof. Dilip Sharma is a Mechanical Engineering Graduate (1988) from MREC Jaipur (Now known as MNIT Jaipur). After working with CIMMCO Ltd, Bharatpur for a short while, he joined Roorkee University for Post Graduation in Thermal Engineering and was awarded with University Medal for securing highest marks in Post Graduation. Dr. Sharma joined as a faculty in Mechanical Engineering (1992) at MREC, which is now known as MNIT Jaipur. He is presently working as Head, Mechanical Engineering Department.

He has done research in the field of biodiesels, engine performance, emissions and tribology investigations at MNIT Jaipur and was awarded Ph.D. degree from University of Rajasthan Jaipur.

12 students have completed Ph.D. under his supervision and 04 are pursuing in the field of Alternate Sources of energy. He has published more than 150 research papers in Journals and Conferences. He has filed 07 patents (2 Awarded), published 15 books and 07 book chapters. Dr. Sharma has completed 07 major R&D projects. He has done more than 41 consultancy projects.

He had been a member of various Selection Committees, Academic Councils and Board of Studies Various Universities and Colleges.

He is associated with various academic bodies such as NBA, NAAC, AICTE and TEQIP etc. He had also been member of various committees in UPSC, DRDO and RPSC etc. He had been a member of Research Degree committee of PTU Jalandhar and MANIT Bhopal. He is actively associated in innovation activities and is a board member of State Innovative council (SIC)

(Earlier known as GIAN) and member of many other bodies working in the field of Innovations.

He was a member of Technical committee for finalizing the specifications of buses for

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BRTS (Bus Rapid Transit System) in Jaipur.

Dr. Sharma has taken various assignments at MNIT, Jaipur, such as Dean (Students Welfare & Alumni Affairs), Associate Dean (Students Welfare and Alumni Affairs), Coordinator Institute Security, Coordinator Transportation, Coordinator Central Workshop, Coordinator Alumni Affairs, Hostel Warden, Vice President Games and Sports, Assistant Proctor, In-charge of Institute Guest house etc.

He at present is working with Alcohols, Hydrogen, Acetylene, Biodiesels, Waste vegetable oils and other additives as substitution fuel in I.C. engines for single generation as well as trigeneration. He is also working in the field of Solar Cogeneration and Trigeneration systems.

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| **TITLE OF THE TALK** | Sustainable Livelihoods and Adaptation to Climate Change | |
| **SPEAKER:6** | **DR. RAVINDRA S. GAVALI**<br>Professor & Head, School of Sustainable Development,<br>Centre for Natural Resource Management, Climate Change & Disaster Mitigation (CNRM, CC & DM). National Institute of Rural Development & Panchayati Raj, Rajendra Nagar, Hyderabad, India | |
| **PROFILE LINK** | http://nirdpr.org.in/drrsgavali.aspx | |
| **BRIEF BIO SKETCH** | | |

**Dr. Ravindra S. Gavali** is currently working as a Professor & Head at School of Sustainable Development, Centre for Natural Resource Management, Climate Change & Disaster Mitigation (CNRM, CC & DM), at National Institute of Rural Development & Panchayati Raj, Hyderabad, India. Professor Ravindra has obtained his Ph.D. in Environmental Science, JNU, New Delhi, India. He is having a research experience of 18 years in the area of Natural Resource Management and Conservation, Water Watershed Management, Climate Change, Disaster Management, Rural Development, Geoinformatics, Water Pollution Monitoring and Assessment.

**Dr. Ravindra** has been an expert member of various committees including National Committee of India-IIASA (Technology and International Institute for Applied Systems Analysis, Austria) Programme. National Advisory Committee on Climate Resilient

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Agriculture, DST-TIFAC. Project Assessment Committee, DST- TIFAC, Scientific Advisory Committee, SRTM University, Nanded, Policy Research Advisory Committee, NIRDPR etc. In his competent leadership he has conducted several national & international trainings on natural resource management, application on remote sensing & GIS, watershed management, biodiversity conservation, climate change, Disaster management etc.

**Dr. Ravindra** is a Life Member, INSEE – Indian Society for Ecological Economics, Indian Society of Remote Sensing, Indian Science Congress Association and member of Indian Environment Network, Conservation Alliance, UK and Kalinga Development Foundation. Being an excellent researcher, he has published 30 international papers, 24 National research papers and delivered more than 100 expert talks at national and international events. Till date he has guided 12 PhD students, completed 5 major and 3 Consultancy Projects

**PLENARY TALK SPEAKERS:**

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| **CHIEF GUEST** | **Professor S.A. Sherif,** Department of Mechanical and Aerospace Engineering, University of Florida, USA | ICSEEGT2022_T3_3152 |
| **BRIEF BIO SKETCH** | | |

Dr. S.A. Sherif is a tenured Professor of Mechanical and Aerospace Engineering and is the Founding Director of the Wayne K. and Lyla L. Masur HVAC Laboratory, the Director of the Industrial Assessment Center and the Director of the Mobile Energy Laboratory at the University of Florida. He served as Co-Director of the Southeastern Center for Industrial Energy Intensity Reduction at the University of Florida (2009-2013). He also served on the faculties of the University of Florida (1991-present), University of Miami (1987-1991), and Northern Illinois University (1984-1987). He is a Life Fellow of ASME, a Life Fellow of ASHRAE, a Fellow of the Royal Aeronautical Society, an Associate Fellow of AIAA, a Vice President of Commission B-2 on Refrigerating Equipment and a Member of Commission B-1 on Thermodynamics and Transfer Processes of the International Institute of Refrigeration, a Member of the Advisory Board of Directors of the International Association for Hydrogen Energy, and a Founding Member of the Board of Directors of the American

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Society of Thermal and Fluids Engineers (ASTFE). He is the 2013-2014 Chair of the ASME Heat Transfer Division Executive Committee (2009-2016) and a member of the ASME's Basic Engineering Group Operating Board (2010-2014). He is also the 2002-2003 Chair of the ASME Advanced Energy Systems Division, and a past chair of the K-19 Committee on Environmental Heat Transfer of the ASME Heat Transfer Division (2003-2007), the Coordinating Group on Fluid Measurements (1992-1994) and the Fluid Applications and Systems Technical Committee (2008-2010) of the ASME Fluids Engineering Division. He is also a past chair of the Steering Committee of the Intersociety Energy Conversion Engineering Conference (2001-2003), ASHRAE's Standards Project Committee 41.6 on Measurement of Moist Air Properties (1989-1994), and ASHRAE's TC1.1 Committee on Thermodynamics and Psychrometrics (2012-2013). He also served as a member of the ASME's Energy Resources Board (2001-2003) and was the Board's representative to the ASME's International Mechanical Engineering Congress Committee (2003-2006). He was the Head of the Refrigeration Section of ASHRAE (2004-2008), the Technical Conference Chair of both the 2008 ASME Summer Heat Transfer Conference and the 12th AIAA/ASME Thermophysics and Heat Transfer Conference (2018), a member of the ASME Frank Kreith Energy Award Selection Committee (2005-2011), and the General Conference Chair of the 2013 ASME Summer Heat Transfer Conference. He also served as the Technical Conference Co-Chair of the 2nd ASTFE Thermal and Fluids Engineering Conference (2017) and the Technical Discipline Chair of the 2019 AIAA Aviation and Aeronautics Forum and the 2020 AIAA Science and Technology Forum. Dr. Sherif is currently serving as an ABET Program Evaluator (PEV) in Mechanical Engineering (2019-2024). Dr. Sherif currently serves as Editor-in-Chief of the ASME Journal of Solar Energy Engineering (1/1/2020-1/1/2025). He also served as Editor-in-Chief of the ASME Journal of Thermal Science and Engineering Applications (1/1/2014-6/30/2019). He currently serves as Subject Editor of Solar Energy (2004-2021), and a Subject Editor Emeritus of the International Journal of Hydrogen Energy (2011-present). He is a past Associate Technical Editor of the ASME Journal of Heat Transfer (2007-2011) and the ASME Journal of Thermal Science and Engineering Applications (2011-2014). He is also a past Subject Editor of the International Journal of Hydrogen Energy (2005-2010) and a past Book Review Editor of ASME's Applied Mechanics Reviews (2001-2003). He is on the editorial boards of 22 other thermal science journals such as Applied Thermal Engineering, Heat Transfer – Asian Research, the International Journal of Exergy, and the

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International Journal of Energy for a Clean Environment. He has served as member or chair of over 60 administrative and technical committees in five professional societies, 350 conference organizing or scientific committees, and as chair or member of over 265 master's and doctoral committees. Dr. Sherif has given over 150 invited lectures worldwide. He is the recipient of the E.K. Campbell Award of Merit from ASHRAE in 1997 for "outstanding service and achievement in teaching" and a "TIP" teaching award from the University of Florida in 1998. In 2000, 2004, and 2007, he was selected by the University of Florida as an Anderson/CLAS Scholar Faculty Honoree. He is the recipient of the 2001 Kuwait Prize in Applied Sciences, a Heat Transfer Division 75th Anniversary Medal (2013), an ASHRAE Distinguished Service Award (2003), an ASHRAE Exceptional Service Award (2010), and two Best Paper Awards from AIAA (2005) and ASME (2005). He is the recipient of three "Certificates of Recognition for Research Contributions" from NASA, a Premium of Academic Excellence (PACE) Award from Iowa State University, four research awards from the University of Miami, and a "Graduate Research and Artistry Award" from Northern Illinois University. He has received certificates of appreciation from the ASME Board of Governors, Heat Transfer Division, Solar Energy Division, Advanced Energy Systems Division, Fluids Engineering Division, ASME's International Mechanical Engineering Congress Committee, the Japan Society of Mechanical Engineers (JSME), ASHRAE, AIAA, ASTFE, and numerous conference-organizing committees. In 2007, he received a Superior Accomplishment Award from the University of Florida's Office of the Provost. In 2008, he was elected as an ASHRAE Distinguished Lecturer. In 2018, he was awarded a UF Research Foundation Term Professorship (2018-2021) and in 2021 was awarded an MAE Excellence Term Professorship (2021-2024). Dr. Sherif has 140 refereed journal papers, one book, 20 published bound volumes, 24 book chapters, 155 conference papers, 190 technical reports, and two US patents.

| GUEST OF HONOR | **Professor L.M Das,**<br>Former Professor,<br>Centre for Energy Studies, Indian Institute of Technology, Delhi, India |
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**BRIEF BIO SKETCH**

Dr. L. M. Das is currently Retired Professor at the Centre for Energy Studies, IIT Delhi. He took his Bachelor's degree in Mechanical Engineering from Regional Engg

college, Rourkela in 1970 and M Tech degree from Indian Institute of Technology, Kharagpur and PhD from IIT, Delhi Dr Das has got a teaching/research experience of about thirty-eight years to his credit. His primary areas of research interest include development of alternative-fuelled low emission engines/vehicles. He has supervised 34 PhD theses and about 78 M. Tech Projects in this area. Dr Das has published more than 80 research papers in various independently refereed international and national journals in the area of alternative fuels such as Hydrogen, CNG, Biodiesel and Hydrogen-CNG blend. Dr. Das has had a close international research interaction. He had several research assignments in University of California, Riverside (USA), Thornton Research Centre, Chester, (England) INRETS, Lyon, (France) and at the Institution Superior Technico, Lisbon (Portugal). He had delivered invited lecturers in several international symposia/conferences in India and abroad such as USA, England, France, Germany, Japan, Switzerland, Australia, Belgium, Netherlands, Thailand, Moscow, Turkey Philippines, Nepal and Srilanka. He was a Member, Expert Group on Transportation constituted by the Steering Group of the National Hydrogen Energy Board, India as well as a Member of the CAR (Core group of Automotive Research) of the Govt of India. He was the Convener of the Technical Committee of the World Hydrogen Technology Convention held in August 2009 at New Delhi. Extremely eco-conscious in his research models aiming at sustainable growth and development he has been rather passionate about the use of Biodiesel extracted from several Indian non-edible seeds in existing vehicles. As part of a sponsored project by General Motors, vehicle was operated on road from Delhi to Kanyakumari using 20% biodiesel .He has been awarded “Rajiv Gandhi Samman” by the Department of Science and Technology, Government of Orissa as an Exemplary Scientist and Educationist for Achievements and contributions in the field of Non-conventional Energy Sources in 2005.This year in 2012 he has been a winner at the “Innovators Competition” for DST-Lockheed Martin India Innovation Growth Program. Dr Das has had several consultancy/projects sponsored by UNIDO, General Motors (USA), European Union, Shell, MNRE, and DST. With an effort to transfer the technology from lab to land, Dr Das has coordinated an academia-industry UNIDO-Sponsored project consortium consisting of IIT, Delhi, Mahindra and Air products with support from UNIDO-ICHET, UNIDO (India) and ITPO in which world’s first fleet of hydrogen-operated three wheelers demonstrated during Auto-expo 2012 in New Delhi.

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| GUEST OF HONOR | **DR. L. N. Thakural**<br><br>Senior Scientist, Surface Water Division, National Institute of Hydrology, Roorkee, India | |
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**BRIEF BIO SKETCH**

Dr. L N Thakural, an alumnus of the Indian Institute of Technology (IIT), Roorkee, he is graduated in Civil Engineering from Jamia Millia Islamia, New Delhi in 1994. He was awarded a Diploma in Geo-informatics for Environmental Assessment and Disaster Management from the Indian Institute of Remote Sensing, Dehradun in 2003. He achieved M. Tech with specialization in Water Resources Development from the Indian Institute of Technology (IIT), Roorkee in 2007 and was awarded with PhD in "Streamflow modeling and Climate Change" from IIT Roorkee.

Dr. Thakural is presently working as Scientist-D in the National Institute of Hydrology, Roorkee under the Ministry of Jal Shakti, Government of India. He has over 24 years of professional experience in water resources and management. He specializes in Remote Sensing and GIS applications in water resources, Hydrological modeling, Climate change and Irrigation Water Management. He has published several technical research papers in National/International Journals and conferences and has been involved in many R &D/Consultancy projects. He is also member of the editorial board of technical journals. Dr. Thakural have guided M Tech students from IIT Roorkee, DTU (Delhi), BHU (Banaras), MANIT (Bhopal) MMMUT (Gorakhpur),

Graphic Era University (Dehradun) and internship students. He has been the coordinator for technical visits by government officials/students from various academic institutes and organizations.

He has been on technical visit to United Kingdom and Nepal. He is a recipient of the Best Research Paper Award by the International Society of Science and Technology (ISST), Mumbai. He has organized several national and international training programs for field engineers and academic institutes.

He is a Nodal officer for the Swachh Bharat Mission, Jal Shakti Abhiyan and the State Specific Action Plan for Water launched by the Ministry of Jal Shakti, Government of India. He is also a Key Resource Person for the Jal Jeevan Mission. He is being honored with the title "Swachhta Hero" of Jal Shakti Swachhta Movement

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and contribution to Swachhta programs led by the Government of India. He is an expert member of various committees related to water resources.

**CONTENT DELIVERY / PRACTICAL SESSIONS:** NIL

**GLIMPSES OF PRESENTATIONS:**

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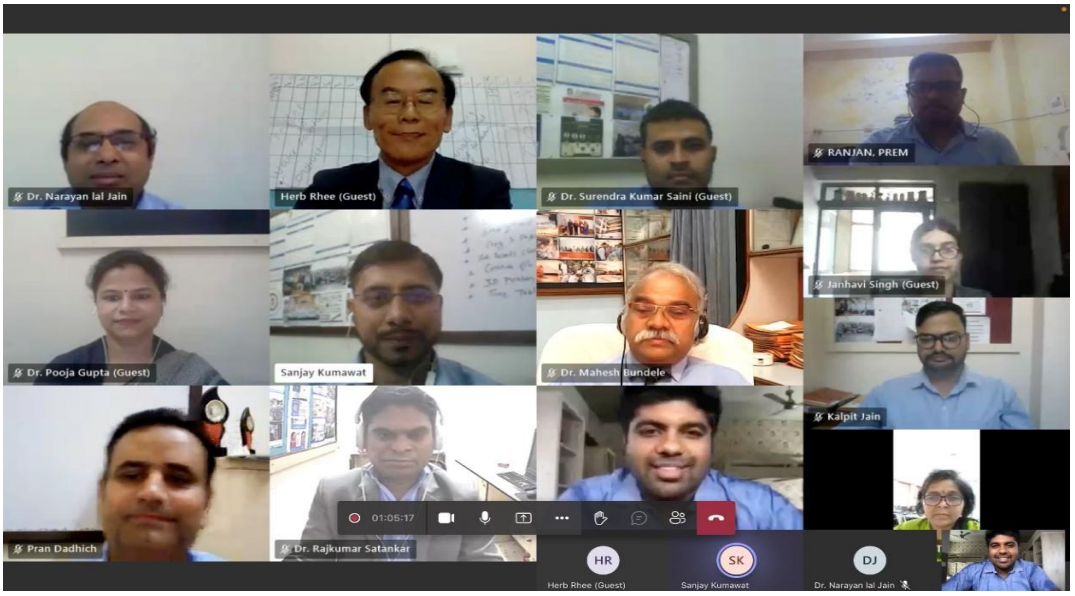


## LIST OF PARTICIPANTS:

| Paper ID | Title | First Author Name | First Author Email | First Author Affiliation | Reviewed at | Reviewer Name | Decision |
|---|---|---|---|---|---|---|---|
| 1 | AAC Blocks an Innovation as Eco-friendly Material in Construction | Dr. Pooja gupta | Pooja.gupta @poornima. org | Poornima College of Engineering, Jaipur | 2022-04-07 09:32:14+0000 | Raj | Rejected |
| 2 | Quality Assessment of Composts from different Organic sources | Parveen parihar | Pparihar253 @gmail.com | Bhartiya Skill Development University | 2022-05-23 10:00:33+0000 | Dr. Prarthita Basu | Accepted |
| 2 | Quality Assessment of Composts from different Organic sources | Parveen parihar | Pparihar253 @gmail.com | Bhartiya Skill Development University | 2022-05-24 09:33:50+0000 | N r n v gowripath i rao | Accepted |
| 3 | Framework for freight movement in Bangalore city, India | Dr. Seelam srikanth | Ssseelamsrik anth@gmail. com | REVA University | 2022-04-22 10:19:55+0000 | Dr Biswajit Acharya | Accepted |
| 3 | Framework for freight movement in Bangalore city, India | Dr. Seelam srikanth | Ssseelamsrik anth@gmail. com | REVA University | 2022-04-28 08:31:47+0000 | Sohil Sisodiya | Accepted |
| 5 | Application of eco-friendly and smart materials in geotechnical engineering for subgrade stabilization: a review | Piyush | Piyushkolhe 007@gmail. com | Sant Gadge Baba Amravati University | 2022-04-27 06:06:52+0000 | Basuraj Bhowmik | Accepted |
| 5 | Application of eco-friendly and smart materials in geotechnical engineering for subgrade stabilization: a review | Piyush | Piyushkolhe 007@gmail. com | Sant Gadge Baba Amravati University | 2022-05-14 08:52:43+0000 | Anjal[illegible] | Accepted |
| 7 | Experimental investigations and quasi dimensional modelling of spark ignition engine fueled with | Manjunat ha swamy k m | Manjukm11 411@gmail. com | Siddaganga Institute of Technology | 2022-[illegible] 09:0[illegible] | [illegible] [illegible]UMAR | [illegible]nges_request ed |

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| | gasoline and oxyhydrogen gas mixture | | | | | | |
| 7 | Experimental investigations and quasi dimensional modelling of spark ignition engine fueled with gasoline and oxyhydrogen gas mixture | Manjunatha swamy k m | Manjukm11411@gmail.com | Siddaganga Institute of Technology | 2022-05-23 09:39:14+0000 | Dr. Akshay Jain | Changes_requested |
| 8 | Tannery Waste as a Partial Replacement of Cement in Mortar | Dr. Md. Naimul haque | Naimul@ewubd.edu | East West University | 2022-05-23 10:17:56+0000 | Dr.Prarthita Basu | Rejected |
| 8 | Tannery Waste as a Partial Replacement of Cement in Mortar | Dr. Md. Naimul haque | Naimul@ewubd.edu | East West University | 2022-05-05 07:46:09+0000 | K I SYED AHMED KABEER | Rejected |
| 10 | Low frequency Vibration Energy Harvester using Compliant Mechanism driven Rosen-type Piezoelectric Transformer | Nilanjan chattaraj | Nilanjan.chattaraj@gmail.com | National Institute of Technology Durgapur | 2022-05-30 17:03:16+0000 | Dr. Jyoti Shukla | Accepted |
| 10 | Low frequency Vibration Energy Harvester using Compliant Mechanism driven Rosen-type Piezoelectric Transformer | Nilanjan chattaraj | Nilanjan.chattaraj@gmail.com | National Institute of Technology Durgapur | 2022-06-09 11:52:04+0000 | Md. Mustafa Kamal | Accepted |
| 11 | Relationship of shading devices and its effects on daylight in Commercial buildings in Pune. | Pradnya nishad patki | Pradnyapatki@bkps.edu | BKPS College of Architecture | 2022-04-28 06:53:23+0000 | Rashmi Kumari | Accepted |
| 11 | Relationship of shading devices and its effects on daylight in Commercial buildings in Pune. | Pradnya nishad patki | Pradnyapatki@bkps.edu | BKPS College of Architecture | 2022-05-23 10:44:36+0000 | Dr Biswajit Acharya | Accepted |
| 13 | A Bibliometric Analysis of Sustainability Centered Corporate Social Responsibility Research in the Year 2000s | Dr.umesh kumar chaturvedi | Umesh.chaturvedi@gla.ac.in | GLA University | 2022-05-24 14:56:49+0000 | Dr. P. Kavipriya | Accepted |
| 13 | A Bibliometric Analysis of Sustainability Centered Corporate Social Responsibility Research in the Year 2000s | Dr.umesh kumar chaturvedi | Umesh.chaturvedi@gla.ac.in | GLA University | 2022-05-27 04:33:18+0000 | Mr. Denis Jangeed | Accepted |
| 14 | Analysis and providing solutions for the rectification of black spots on nh-27(old nh-28) | Vishal pandey | Pandeyvishal750@gmail.com | Galgotias University | 2022-05-09 17:57:38+0000 | RAHUL KANAOUJIYA | Accepted |
| 14 | Analysis and providing solutions for the rectification of black spots on nh-27(old nh-28) | Vishal pandey | Pandeyvishal750@gmail.com | Galgotias University | 2022-05-24 08:02:52+0[illegible] | [illegible] Sisodia | Accepted |
| 15 | Experimental Investigation of Direct Injection Diesel Engine using Waste Plastic | Jatadhara G S | Jatadhara@sit.ac.in | Siddaganga Institute of Technology | 20[illegible] 17:25:26+0000 | [illegible] A | Accepted |

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| | oil as fuel | | | | | | |
| 16 | A case study on indore brts with reference to other indian cities | Jayati singh | Jayatisingh97@gmail.com | Galgotias University | 2022-06-07 09:45:12+0000 | Dr. Akshay Jain | Accepted |
| 17 | Making roads safer and congestion-free in aligarh city for pedestrians and two-wheeler users | Shahbaz shamshad khan | Ms.shahbaz344@gmail.com | Galgotias University | 2022-05-27 10:39:15+0000 | Sachin Jain | Accepted |
| 17 | Making roads safer and congestion-free in aligarh city for pedestrians and two-wheeler users | Shahbaz shamshad khan | Ms.shahbaz344@gmail.com | Galgotias University | 2022-06-03 08:13:35+0000 | Dr Biswajit Acharya | Accepted |
| 21 | Estimation of fatigue and rutting life using falling weight deflectometer of flexible pavement road in hilly terrain | Gagan sharma | Gagan.vashishtha98@gmail.com | Galgotias University | 2022-05-24 12:32:50+0000 | Akashdeep Dey | Accepted |
| 22 | A study of on-street parking vehicle in sonipat city | Harivansh kumar chaudhary | Harivanshbiet@gmail.com | Galgotias University | 2022-05-20 14:49:02+0000 | Harendra Pratap Singh | Accepted |
| 26 | Soil dissolved organic carbon leaching characteristics of the coastal saline seep weed wetlands in the Wuleidaowan national wetland | Yijie zhang | 1227032587@qq.com | Beijing Jiaotong University | 2022-05-27 06:47:52+0000 | Sivagurunathan Paramasivam | Accepted |
| 26 | Soil dissolved organic carbon leaching characteristics of the coastal saline seep weed wetlands in the Wuleidaowan national wetland | Yijie zhang | 1227032587@qq.com | Beijing Jiaotong University | 2022-05-28 04:52:39+0000 | Ashish Solanki | Accepted |
| 28 | Relation between traffic volume count and accident data and diverting the traffic to new greenfied alignment | Harivansh kumar chaudhary | Harivanshbiet@gmail.com | Galgotias University | 2022-05-19 17:00:40+0000 | Harendra Pratap Singh | Accepted |
| 32 | Perpetual Flexible Pavement vs. Rigid Pavement: An Economic and Environmental Cost Comparison | Rahul kumar | 20mce212@nith.ac.in | National Institute of Technology Hamirpur | 2022-06-06 08:29:16+0000 | Anil Kumar Sharma | Accepted |
| 33 | Measuring the Level of Road Safety Through Road Safety Audit and Star Rating Method – A Case Study From Himalayan Expressway | Saurabh kumar s | 20mce216@nith.ac.in | National Institute of Technology Hamirpur, India | 2022-06-06 08:27:18+0000 | Anil Kumar Sharma | Accepted |
| 33 | Measuring the Level of Road Safety Through Road Safety Audit and Star Rating Method – A Case Study From Himalayan Expressway | Saurabh kumar s | 20mce216@nith.ac.in | National Institute of Technology Hamirpur, India | 2022-06-07 10:36:18+0000 | [illegible] | |
| 34 | Standard Operating Procedure for Assessment and Rating of National | Sunil sharma | Sunils@nith.ac.in | National Institute of Technology Hamirpur, India | [illegible] 06:03:34+0000 | [illegible] Singh | Accepted |

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| | Highways based on Highway Efficiency | | | | | | |
| 34 | Standard Operating Procedure for Assessment and Rating of National Highways based on Highway Efficiency | Sunil sharma | Sunils@nith.ac.in | National Institute of Technology Hamirpur, India | 2022-05-28 06:17:59+0000 | Ashish Solanki | Accepted |
| 35 | Performance Rating of National Highways Based on Road User Perspective – A Case Study of Kalka–Shimla Highway | Sunil sharma | Sunils@nith.ac.in | National Institute of Technology Hamirpur, India | 2022-05-14 20:59:38+0000 | Sandeep Kumar | Accepted |
| 35 | Performance Rating of National Highways Based on Road User Perspective – A Case Study of Kalka–Shimla Highway | Sunil sharma | Sunils@nith.ac.in | National Institute of Technology Hamirpur, India | 2022-05-28 06:26:25+0000 | Ashish Solanki | Accepted |
| 36 | Psychological predictors of Sustainable Transportation Behaviour: Implications for Low Carbon Economy and Society | Shiromi chaturvedi | Shiromichaturvedi@gmail.com | St Xavier's College | 2022-05-29 21:15:19+0000 | Rajshree charan | Accepted |
| 37 | Spring Water Management to Ensure Long Term Sustainability in North Eastern Regions of India | Prem ranjan | Prem009ranjan@gmail.com | North Eastern Regional Institute of Science and Technology | 2022-05-17 06:05:17+0000 | Ahmed Albahnasawi | Accepted |
| 37 | Spring Water Management to Ensure Long Term Sustainability in North Eastern Regions of India | Prem ranjan | Prem009ranjan@gmail.com | North Eastern Regional Institute of Science and Technology | 2022-05-31 13:16:54+0000 | Padala Raja Shekar | Accepted |
| 38 | Green Healthcare-Bandwagon to Environmental Sustainability | Dr. Harleen kaur | Harleen261292@gmail.com | Guru Nanak Dev University | 2022-05-09 18:01:24+0000 | RAHUL KANAOUJIYA | Rejected |
| 38 | Green Healthcare-Bandwagon to Environmental Sustainability | Dr. Harleen kaur | Harleen261292@gmail.com | Guru Nanak Dev University | 2022-05-23 10:51:56+0000 | Dr Biswajit Acharya | Rejected |
| 39 | Challenges Related to Flexible Manufacturing Systems | Kaustubh purushottam sakhare | Kaustubhpurushottamsakhare_2k18me111@dtu.ac.in | Delhi Technological University | 2022-05-22 10:27:33+0000 | Dr. Khubi Lal Khatri | Rejected |
| 41 | A study of cost comparison of flexible pavement using different soils | Dr. M v s s sastri | Mvss.sastri@staff.vce.ac.in | VASAVI COLLEGE OF ENGINEERING | 2022-05-26 01:54:58+0000 | Pradeep Kumar Gautam | Accepted |
| 42 | Durability Characteristics of Recycled Aggregates for Physical and Chemical Properties of Concrete | Dr. Shailesh choudhary | Shaileshmbm@gmail.com | MBM UNIVERSITY JODHPUR | 2022-05-23 10:40:31+0000 | Dr.Prarthita B[illegible] | Accepted |
| 42 | Durability Characteristics of Recycled Aggregates for Physical and Chemical Properties of | Dr. Shailesh choudhary | Shaileshmbm@gmail.com | MBM UNIVERSITY JODHPUR | 2022-05-[illegible] 07:4[illegible] | [illegible] SOMDUTT [illegible]ABEER | Accepted |

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| | Concrete | | | | | | |
| 45 | Analysis of different buffer layers on cuo based solar cells using SCAPS-1D. | Chandni tiwari | Chandnitiwari.ece@geu.ac.in | Graphic Era University | 2022-05-03 18:01:58+0000 | Vishwa Deepak Kumar | Accepted |
| 47 | Traffic Count Analysis during COVID-19: Case Study of Toll Plazas under Project Highway along Nagpur-Jabalpur National Highway (NH44) near Nagpur, India | Kalpana n kawathekar thakare | Kalpana@students.vnit.ac.in | Visvesvaraya National Institute of Technology and KITS Ramtek | 2022-06-02 15:56:51+0000 | K I SYED AHMED KABEER | Accepted |
| 47 | Traffic Count Analysis during COVID-19: Case Study of Toll Plazas under Project Highway along Nagpur-Jabalpur National Highway (NH44) near Nagpur, India | Kalpana n kawathekar thakare | Kalpana@students.vnit.ac.in | Visvesvaraya National Institute of Technology and KITS Ramtek | 2022-05-26 02:18:23+0000 | Pradeep Kumar Gautam | Accepted |
| 47 | Traffic Count Analysis during COVID-19: Case Study of Toll Plazas under Project Highway along Nagpur-Jabalpur National Highway (NH44) near Nagpur, India | Kalpana n kawathekar thakare | Kalpana@students.vnit.ac.in | Visvesvaraya National Institute of Technology and KITS Ramtek | 2022-05-14 20:26:21+0000 | Sandeep Kumar | Accepted |
| 50 | Prediction of Rainfall Using Hybrid SVM-HHO Model | Abinash sahoo | Bablusahoo1992@gmail.com | National Institute of Technology, Silchar | 2022-06-13 19:11:02+0000 | Rohit Kumar | Accepted |
| 51 | Impact Assessment of Citizen Engagement and Citizens' Experience of Services on Service Quality in Smart Cities in India | Vikrant dhenge | Vdhenge@students.vnit.ac.in | Visvesvaraya National Institute of Technology | 2022-06-13 13:48:39+0000 | Rohit Kumar | Accepted |
| 54 | Chambal River Water Quality Assessment at Kota Metropolis Through the Irrigation Water Quality Indices from 2018-2021 | Kuldeep kamboj | Kuldeep.kamboj44@rtu.ac.in | Rajasthan Technical University | 2022-05-24 07:20:34+0000 | BINDHU BK | Accepted |
| 54 | Chambal River Water Quality Assessment at Kota Metropolis Through the Irrigation Water Quality Indices from 2018-2021 | Kuldeep kamboj | Kuldeep.kamboj44@rtu.ac.in | Rajasthan Technical University | 2022-05-13 14:57:59+0000 | Behnaz Shirdel | Accepted |
| 55 | Numerical investigation of concentrated solar central billboard with hexagonal tubes | Sanjay N. Havaldar | Sanjay.havaldar@mitwpu.edu.in | Dr. Vishwanath Karad World Peace University | 2022-05-22 13:26:09+0000 | Amit Shrivasta[illegible] | Accepted |
| 55 | Numerical investigation of concentrated solar central billboard with hexagonal tubes | Sanjay N. Havaldar | Sanjay.havaldar@mitwpu.edu.in | Dr. Vishwanath Karad World Peace University | 2022-05-05 10:02:10+0000 | Vishwa Deepak [illegible] | [illegible] |
| 58 | Comparison of multi linear | Rajat nainwal | Rajatn@nith.ac.in | National Institute of Technology | 2022-04-25 09:23:06+0000 | Dr. Akshay | Accepted |

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| | regression and artificial neural network to predict the energy consumption of residential buildings | | | Hamirpur | | Jain | |
| 59 | Organic farming in the tropical, disaster-prone coasts: interventions, major challenges and success story from Sundarban Biosphere Reserve, India | Aliya naz | Naazaliya6 @gmail.com | Indian Institute of Technology Dhanbad | 2022-05-24 18:32:15+0000 | Anjali peter | Accepted |
| 60 | Sustainable Energy Business Model and Strategies for Marketing of Solar Products in Rural Areas of Odisha | Dr. Shiv sankar das | Shivsankard as85@gmail. com | Zenith School of Management | 2022-04-29 10:37:55+0000 | Manoj Dubey | Accepted |
| 60 | Sustainable Energy Business Model and Strategies for Marketing of Solar Products in Rural Areas of Odisha | Dr. Shiv sankar das | Shivsankard as85@gmail. com | Zenith School of Management | 2022-05-09 18:12:41+0000 | Dr. Richa Jagatramk a | Accepted |
| 60 | Sustainable Energy Business Model and Strategies for Marketing of Solar Products in Rural Areas of Odisha | Dr. Shiv sankar das | Shivsankard as85@gmail. com | Zenith School of Management | 2022-05-09 09:42:46+0000 | Pankaj Dumka | Accepted |
| 61 | Performance evaluation of the Absorbing Plate of a Hybrid Solar Dryer for Potato Drying | Dr. Shiv sankar das | Shivsankard as85@gmail. com | Zenith School of Management | 2022-04-29 09:42:10+0000 | VIKASH KUMAR | Accepted |
| 61 | Performance evaluation of the Absorbing Plate of a Hybrid Solar Dryer for Potato Drying | Dr. Shiv sankar das | Shivsankard as85@gmail. com | Zenith School of Management | 2022-05-14 08:23:38+0000 | SHYAM A | Accepted |
| 64 | Hydro-biological assessment of small Water Harvesting Ponds (Talabs&Nadis) of Western Rajasthan Using Physico-chemical Characteristics and Phyto-planktonic Indices | R singh | Chemdrranv eersingh201 5@gmail.co m | M.L.B. Govt College, Nokha (Bikaner), Rajasthan | 2022-05-19 07:09:43+0000 | Ahmed Albahnas awi | Rejected |
| 64 | Hydro-biological assessment of small Water Harvesting Ponds (Talabs&Nadis) of Western Rajasthan Using Physico-chemical Characteristics and Phyto-planktonic Indices | R singh | Chemdrranv eersingh201 5@gmail.co m | M.L.B. Govt College, Nokha (Bikaner), Rajasthan | 2022-05-24 09:36:08+0000 | N R N V GOWRIP ATHI RAO | Rejected |
| 65 | An Investigation of Sick Building Syndrome (SBS) affecting health of occupants in Western Maharashtra, India. | Amol digambar pawar | Apawar@ms .nicmar.ac.in | NICMAR Pune | 2022-05-[illegible] 06:4[illegible]+0000 | [illegible] | Rejected |
| 67 | Hydrogeologic evaluayion of area around nokha, | Dr. Priyanka pandey | Dr.priyankap andey1981@ gmail.com | Sangam University bhilwara | 2022-05-26 02:28:56+0000 | Pradeep Kumar Gautam | Accepted |

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| | district | | | | | | |
| 68 | Integrating Digital Mission and Sustainable Development Goal-9 for Building Technologies: A study of Navratna Companies of India | Dr. Navita mahajan | Navitamahajan07@gmail.com | Amity University | 2022-05-30 08:44:23+0000 | Anil Kumar Sharma | Pending |
| 68 | Integrating Digital Mission and Sustainable Development Goal-9 for Building Technologies: A study of Navratna Companies of India | Dr. Navita mahajan | Navitamahajan07@gmail.com | Amity University | 2022-05-19 05:59:43+0000 | Rashmi Kumari | Pending |
| 70 | Four-year spatiotemporal distribution & analysis of PM2.5 and its precursor air pollutants SO2, NO2 & NH3 and their impact on LST in Bengaluru city, India | Gourav suthar | 2019rce9106@mnit.ac.in | Malaviya National Institute of Technology Jaipur | 2022-05-24 18:40:21+0000 | Anjali peter | Accepted |
| 71 | Urban environmental challenges associated with dynamics of slum settlement | Rashmi kumari | Rashmi@nith.ac.in | National Institute of Technology Hamirpur | 2022-05-20 06:13:51+0000 | Karan Singh | Accepted |
| 71 | Urban environmental challenges associated with dynamics of slum settlement | Rashmi kumari | Rashmi@nith.ac.in | National Institute of Technology Hamirpur | 2022-05-24 08:23:30+0000 | Sohil Sisodiya | Accepted |
| 72 | Review on Recycling of Micro-plastics in Cigarette Butts | Mary george | Marycgeorge30041975@gmail.com | ANJUMAN-I-ISLAM'S ABDUL RAZZAK KALSEKAR POLYTECHNIC | 2022-05-30 08:46:51+0000 | Anil Kumar Sharma | Accepted |
| 72 | Review on Recycling of Micro-plastics in Cigarette Butts | Mary george | Marycgeorge30041975@gmail.com | ANJUMAN-I-ISLAM'S ABDUL RAZZAK KALSEKAR POLYTECHNIC | 2022-05-23 09:40:20+0000 | Dr. Akshay Jain | Accepted |
| 73 | Automated solar panel cleaning system using wiper mechanism | Pollapelli bhavana | B18me053@kitsw.ac.in | Kakatiya Institute of Technology & Science | 2022-05-22 07:54:52+0000 | Dr. Khubi Lal Khatri | Rejected |
| 74 | An Experimental Behavior on Green Concrete utilizing Granite Slurry Waste (GSW) as Partial Substitute of Cement | Dr. Pooja gupta | Pooja.gupta@poornima.org | Poornima College of Engineering, Jaipur | 2022-05-17 03:33:07+0000 | Abhishek Jain | Accepted |
| 74 | An Experimental Behavior on Green Concrete utilizing Granite Slurry Waste (GSW) as Partial Substitute of Cement | Dr. Pooja gupta | Pooja.gupta@poornima.org | Poornima College of Engineering, Jaipur | 2022-05-27 10:39:48+0000 | Sachin Jain | Accepted |
| 75 | Driving through sustainable systems: A Study of Air Quality Index of Delhi During COVID-19 Pandemic | Seema | Seemagarg1@gmail.com | Amity University | 2022-06-03 13:44:56+0000 | MAHEN DRA KUMAR SINGH | Accepted |
| 75 | Driving through sustainable systems: A Study of Air Quality | Seema | Seemagarg1@gmail.com | Amity University | 2022-05-06 08:41:26+0000 | Mander Prakash | Accepted |

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| | Index of Delhi During COVID-19 Pandemic | | | | | | |
| 76 | Energy, geopolitics and the dying arctic ice fields: an enviro- political perspective | Dr. Abhiroop chowdhury | Abhiroop.chowdhury@gmail.com | O. P. Jindal Global University | 2022-05-20 10:21:22+0000 | RAMKIRAN B | Accepted |
| 76 | Energy, geopolitics and the dying arctic ice fields: an enviro- political perspective | Dr. Abhiroop chowdhury | Abhiroop.chowdhury@gmail.com | O. P. Jindal Global University | 2022-05-19 07:13:23+0000 | Ahmed Albahnasawi | Accepted |
| 77 | A Modified Incremental Conductance MPPT Algorithm and its Comparison with Perturb & Observe Algorithm | Vedant yadav | Vedantyadav_2k18ee237@dtu.ac.in | Delhi Technological University | 2022-05-09 08:01:04+0000 | Aditya R. Gautam | Accepted |
| 77 | A Modified Incremental Conductance MPPT Algorithm and its Comparison with Perturb & Observe Algorithm | Vedant yadav | Vedantyadav_2k18ee237@dtu.ac.in | Delhi Technological University | 2022-05-12 06:46:36+0000 | Chandni Tiwari | Accepted |
| 79 | Gender-friendly cities and the built environment raise a few concerns | Asmita yadav | Ar.asmitayadav@gmail.com | National Institute of Technology Hamirpur | 2022-05-25 05:45:55+0000 | Dr. P. Kavipriya | Accepted |
| 80 | Mapping Groundwater Potential Zone and Flood Risk Zone in the Visakhapatnam District, India. | Potta vamsi krishna prasad | Pvkprasad029@gmail.com | Vignan's institute of information technology | 2022-05-29 21:15:54+0000 | Rajshree charan | Accepted |
| 81 | The need for legislation on renewable energy for sustainable development in india | Dr khyati kochhar | Khyati.kochhar.12@gmail.com | Banasthali University | 2022-05-09 18:25:27+0000 | Dr. Richa Jagatramka | Accepted |
| 81 | The need for legislation on renewable energy for sustainable development in india | Dr khyati kochhar | Khyati.kochhar.12@gmail.com | Banasthali University | 2022-05-23 09:40:36+0000 | Dr. Akshay Jain | Accepted |
| 82 | Eco-Anxiety and Environmental Concern as Predictors of Eco-Activism | Dr. Prashasti jain | Prashasti.jain@jaipur.manipal.edu | Manipal University Jaipur | 2022-05-16 09:58:04+0000 | Padala Raja Shekar | Accepted |
| 82 | Eco-Anxiety and Environmental Concern as Predictors of Eco-Activism | Dr. Prashasti jain | Prashasti.jain@jaipur.manipal.edu | Manipal University Jaipur | 2022-05-27 05:57:19+0000 | Sivagurunathan Paramasivam | Accepted |
| 84 | Effect of Pozzolanic Material on Drying Shrinkage Characteristics of Blended Cementitious Mortar | Nitesh balaji thikare | Nthikare7391@gmail.com | Rashtrasant Tukadoji Maharaj Nagpur University | 2022-05-31 06:38:26+0000 | KULDEEP KAMBOJ | Accepted |
| 85 | Tainted wastewater remediation through inverted multimedia biofilter | Dr. Ranjit N. Patil | Shaliniy1975@gmail.com | Priyadarshini Bhagwati College of Engineering, Nagpur | 2022-05-10 20:30:30+0000 | Ali Fadil Naser | Accepted |
| 85 | Tainted wastewater remediation through inverted multimedia biofilter | Dr. Ranjit N. Patil | Shaliniy1975@gmail.com | Priyadarshini Bhagwati College of Engineering, Nagpur | 2022-05-09 09:40:17 | [illegible] | Accepted |
| 86 | Urban Organic | Nirjhar | Nirjhargupta | UIT- RGPV | 2022-05-09 | Pankaj | Accepted |

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| | Waste as a Source of Bioenergy for Electricity Generation in Bhopal (M.P) | gupta | 070@gmail.com | | 09:37:26+0000 | Dumka | |
| 86 | Urban Organic Waste as a Source of Bioenergy for Electricity Generation in Bhopal (M.P) | Nirjhar gupta | Nirjhargupta070@gmail.com | UIT- RGPV | 2022-05-15 03:34:10+0000 | Basuraj Bhowmik | Accepted |
| 88 | Strength and durability of concrete by partial replacement of sand by Copper Slag and cement by Egg Shell Powder: A Review | Mr.dhiraj ramesh naxine | Naxinecivil@gmail.com | G H RAISONI UNIVERSITY, AMRAVATI | 2022-05-17 03:34:52+0000 | Abhishek Jain | Accepted |
| 88 | Strength and durability of concrete by partial replacement of sand by Copper Slag and cement by Egg Shell Powder: A Review | Mr.dhiraj ramesh naxine | Naxinecivil@gmail.com | G H RAISONI UNIVERSITY, AMRAVATI | 2022-05-25 05:00:33+0000 | Dr. P. Kavipriya | Accepted |
| 89 | Life Cycle Costing Methodology for Sustainable Construction | Mustafa soyab sadliwala | Msadliwala97@gmail.com | MIT World Peace University Pune | 2022-06-07 09:52:49+0000 | Dr. Akshay Jain | Accepted |
| 90 | Utilization of Silica Fume and Fly ash in Cement and Partial Substitution of Fine Aggregate Using Quarry Dust in Concrete | Mr.sudhir kapgate | Kapgate.sudhir68@gmail.com | G H Raisoni University,Amravati | 2022-06-13 05:07:53+0000 | Dr. Akshay Jain | Accepted |
| 91 | Lowcost renewable feedstock an important source for sustainable Biofuel Production | Dr(mrs)sumita shukla | Sshukla3@amity.edu | Amity University | 2022-05-13 07:57:06+0000 | RAHUL SEN | Changes_requested |
| 92 | An Intuitive Comparison of Four Meta-heuristic MPPT Algorithms for a DC-DC Converter based Solar PV System under Partial Shading Effect (PSE) | Vinay kumar | Vk390677@gmail.com | Delhi Technological University | 2022-05-11 08:07:10+0000 | Aditya R. Gautam | Accepted |
| 92 | An Intuitive Comparison of Four Meta-heuristic MPPT Algorithms for a DC-DC Converter based Solar PV System under Partial Shading Effect (PSE) | Vinay kumar | Vk390677@gmail.com | Delhi Technological University | 2022-05-24 05:23:48+0000 | Dr. R. K. Kumawat | Accepted |
| 93 | Design of Biogas plant: An unique approach to an alternative source of energy in Vignan's institute of information & technology | M.leela priyanka | Viitpriyanka09@gmail.com | Vignan's institute of information & technology | 2022-05-13 09:11:46+0000 | RAHUL SEN | Changes_requested |
| 93 | Design of Biogas plant: An unique approach to an alternative source of energy in Vignan's institute of information & technology | M.leela priyanka | Viitpriyanka09@gmail.com | Vignan's institute of information & technology | 2022-05-20 07:[illegible] | [illegible] | [illegible]s_requested |

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| 95 | Approximate Climate Analysis for Assessing the Suitability of Indian Climate Zones for Hydroponic Fodder Applications | Souryadeep basak | Souryadeep.basak@terias.ac.in | TERI University | 2022-05-27 10:46:12+0000 | Sachin Jain | Accepted |
| 95 | Approximate Climate Analysis for Assessing the Suitability of Indian Climate Zones for Hydroponic Fodder Applications | Souryadeep basak | Souryadeep.basak@terias.ac.in | TERI University | 2022-05-14 06:50:42+0000 | Sandeep Kumar | Accepted |
| 97 | Assessment and Identification of drought prone zone in a Low Laying Area by AHP and MIF method: A GIS based study | Thiyam tamphasana devi | Thiyam85@gmail.com | NIT Manipur | 2022-05-30 08:47:45+0000 | Anil Kumar Sharma | Accepted |
| 97 | Assessment and Identification of drought prone zone in a Low Laying Area by AHP and MIF method: A GIS based study | Thiyam tamphasana devi | Thiyam85@gmail.com | NIT Manipur | 2022-05-30 05:36:13+0000 | Prem Ranjan | Accepted |
| 98 | Sustainable Rural Development through Renewable Energy Technologies: Identification of Potential Methods to Increase Rural Incomes | Dr. Sunny dawar | Sunny.dawar86@gmail.com | Manipal University Jaipur | 2022-05-15 03:34:57+0000 | Basuraj Bhowmik | Accepted |
| 99 | Studies on Passive Energy storage systems using pcms including its properties and characterization for different Engineering Applications -a review. | Priyanka | Priyankargowda1995@gmail.com | Siddaganga Institute of Technology | 2022-05-22 10:48:12+0000 | Dr. Khubi Lal Khatri | Rejected |
| 99 | Studies on Passive Energy storage systems using pcms including its properties and characterization for different Engineering Applications -a review. | Priyanka | Priyankargowda1995@gmail.com | Siddaganga Institute of Technology | 2022-05-29 15:15:46+0000 | Mr. Denis Jangeed | Rejected |
| 101 | Transport infrastructure investment: a comparative analysis between China, Russia and India | Preeti aneja | Paneja@ddn.upes.ac.in | University of petroleum and energy studies, dehradun | 2022-05-12 11:14:59+0000 | Ali Fadhil Naser | Accepted |
| 103 | Secure Authenticating system for Banking Transaction using Facial Recognition | Dr. Manu gupta | Manugupta@sreenidhi.edu.in | Sreenidhi Institute of Science and Technology | 2022-06-02 16:00:19+0000 | K I SYED AHMED KALEEL | Rejected |
| 104 | Application of circular economy in wastewater treatment using biochar based adsobent derived from sewage sludge | Pooja panchappa kenchannavar | Poojapanchappa@gmail.com | National Institute of Technology Karnataka | 2022-05-24 07:[illegible] | [illegible] | Accepted |

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| 104 | Application of circular economy in wastewater treatment using biochar based adsobent derived from sewage sludge | Pooja panchappa kenchanna var | Poojapanchappa@gmail.com | National Institute of Technology Karnataka | 2022-05-13 14:50:54+0000 | Behnaz Shirdel | Accepted |
| 105 | Sustainable Energy Efficient Green Campuses: A Systematic Literature Review and Bibliometric Analysis | Chintan pandya | Pandyachintan@gmail.com | Anant National University | 2022-05-06 06:10:17+0000 | Karan Singh | Accepted |
| 106 | Wind turbine based electric vehicle battery charging technique | Vivek yadav | Viveky841@gmail.com | Delhi Technological University | 2022-05-11 17:53:03+0000 | Aditya R. Gautam | Accepted |
| 106 | Wind turbine based electric vehicle battery charging technique | Vivek yadav | Viveky841@gmail.com | Delhi Technological University | 2022-05-30 15:58:33+0000 | Dr. Jyoti Shukla | Accepted |
| 107 | Assessment of Fixed Rack and 1–Axis Tracking Crystalline Silicon Photovoltaic Array on Their Ideal Energy Performance | Prakhar duggal | Pduggal@amity.edu | Amity University | 2022-05-12 07:39:17+0000 | Chandni Tiwari | Accepted |
| 107 | Assessment of Fixed Rack and 1–Axis Tracking Crystalline Silicon Photovoltaic Array on Their Ideal Energy Performance | Prakhar duggal | Pduggal@amity.edu | Amity University | 2022-05-20 10:44:52+0000 | RAMKIRAN B | Accepted |
| 111 | Annual and seasonal assessment of variation in PM2.5 and gaseous pollutants in Bengaluru, India | Gourav suthar | 2019rce9106@mnit.ac.in | Malaviya National Institute of Technology Jaipur | 2022-05-12 19:44:45+0000 | Ali Fadhil Naser | Rejected |
| 114 | Trend Analysis and Forecasting of Long-Term Temperature Data to Anticipate Local Warming: A Case Study of Jawa Timur, Indonesia | Abdur rohman | Abdur@unej.ac.id | Universitas Jember | 2022-05-24 18:54:16+0000 | Anjali peter | Accepted |
| 115 | Formulation of Parking Demand estimation in cbds without Transit service: A Review | Dr. Debasish das | Debasish.das@jiscollege.ac.in | JIS College of Engineering, Kalyani, West Bengal | 2022-06-12 15:00:50+0000 | Chander Prakash | Changes_requested |
| 116 | Formulation of Parking Demand estimation in Transit oriented cbds: A Review | Dr. Debasish das | Debasish.das@jiscollege.ac.in | JIS College of Engineering, Kalyani, West Bengal | 2022-06-03 14:15:36+0000 | MAHENDRA KUMAR SINGAR | Accepted |
| 117 | Manufacturing of Brick from Medical Waste (MW) | Dr. Debasish das | Debasish.das@jiscollege.ac.in | JIS College of Engineering, Kalyani, West Bengal | 2022-06-04 08:16:38+0000 | Aditya R. Gautam | Changes_requested |
| 118 | Corrosion Analysis of RCC Beam using Simplified FEM Model | Yamuna bhagwat | Yamuna.bhagwat1@gmail.com | MIT Manipal | 2022-06-04 13:08:31+0000 | [illegible] | [illegible] |
| 123 | Traffic Count Analysis during COVID-19: Case Study of Toll Plazas under Project Highway along Nagpur- | Kalpana n kawathekar thakare | Kalpana@students.vnit.ac.in | Visvesvaraya National Institute of Technology and KITS Ramtek | [illegible] | [illegible] Jain | [illegible]ges_requested |

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|---|---|---|---|---|---|---|---|
| | Jabalpur National Highway (NH44) near Nagpur, India | | | | | | |
| 124 | Urban Transport Measures Inclusive of Non-Motorized Traffic in respect of Resilient and Livable City Planning | Kalpana n kawathekar thakare | Kalpana@students.vnit.ac.in | Visvesvaraya National Institute of Technology and KITS Ramtek | 2022-06-10 12:20:37+0000 | Deepak singh | Accepted |
| 124 | Urban Transport Measures Inclusive of Non-Motorized Traffic in respect of Resilient and Livable City Planning | Kalpana n kawathekar thakare | Kalpana@students.vnit.ac.in | Visvesvaraya National Institute of Technology and KITS Ramtek | 2022-05-27 05:15:23+0000 | Sameer Gujar | Accepted |
| 125 | Strength Behavior of Expansive Subgrade Soil Stabilized with Coronus Material | Swetha priya darshini thammadi | Swetha.thammadi@fnu.ac.fj | FIJI NATIONAL UNIVERSITY | 2022-05-28 08:56:13+0000 | Dr. Navita Mahajan | Accepted |
| 126 | Review of open space rules and regulations and identification of specificities for plot-level open spaces to facilitate sustainable development: An Indian case | Sameer gujar | Sameergujar.vnit@gmail.com | Visvesvaraya National Institute of Technology | 2022-05-28 08:58:10+0000 | Dr. Navita Mahajan | Accepted |
| 127 | Review of open space rules and regulations and identification of specificities for plot-level open spaces to facilitate sustainable development: An Indian case | Sameer gujar | Sameergujar.vnit@gmail.com | Visvesvaraya National Institute of Technology | 2022-05-28 08:59:35+0000 | Dr. Navita Mahajan | Accepted |
| 127 | Review of open space rules and regulations and identification of specificities for plot-level open spaces to facilitate sustainable development: An Indian case | Sameer gujar | Sameergujar.vnit@gmail.com | Visvesvaraya National Institute of Technology | 2022-05-25 05:23:54+0000 | Dr. P. Kavipriya | Accepted |
| 129 | Biofuel Production through Algae Route using Solar Assisted Carbon Capture Plant | Ravi kumar singh pippal | Ravesingh@gmail.com | RKDF University, Bhopal | 2022-06-07 10:42:04+0000 | Dr. Akshay Jain | Accepted |
| 131 | Role of ADR methods in environmental conflicts in the light of sustainable development | Jaffar alkhayer | Jaffaralkhayer89@gmail.com | Shoolini University | 2022-06-04 02:13:38+0000 | Amit Madhanrao Kharwade | Accepted |
| 131 | Role of ADR methods in environmental conflicts in the light of sustainable development | Jaffar alkhayer | Jaffaralkhayer89@gmail.com | Shoolini University | 2022-06-13 05:08:30+0000 | Dr. Akshay Jain | Accepted |
| 133 | Response Spectrum Analysis of a RC Building Based on Complete Quadratic Combination (CQC) Method | Dr.uddipta ghosh | Uddipta.ghosh@jiscollege.ac.in | JIS COLLEGE OF ENGINEERING | 2022-06-[illegible] 12:2[illegible]+0000 | Deep[illegible] | Accepted |
| 133 | Response Spectrum Analysis of a RC Building Based on | Dr.uddipta ghosh | Uddipta.ghosh@jiscollege.ac.in | JIS COLLEGE OF ENGINEERING | 2022-06-02 16:19:12+0000 | SYED AHMED KABEER | Accepted |

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| | Complete Quadratic Combination (CQC) Method | | | | | | |
| 134 | Assessment of groundwater chemistry and degree of pollution in some rural parts of sirsa using water quality index (WQI) and pollution index of groundwater (PIG) | Parul kumar | Parulsardana3@gmail.com | Government National College,Sirsa | 2022-05-24 18:59:16+0000 | Anjali peter | Accepted |
| 134 | Assessment of groundwater chemistry and degree of pollution in some rural parts of sirsa using water quality index (WQI) and pollution index of groundwater (PIG) | Parul kumar | Parulsardana3@gmail.com | Government National College,Sirsa | 2022-05-28 07:52:56+0000 | Sangeeta Choudhary | Accepted |
| 138 | Nanotechnology and building construction: Towards effective stakeholder engagement | Swetha priya darshini thammadi | Swetha.thammadi@fnu.ac.fj | FIJI NATIONAL UNIVERSITY | 2022-06-10 08:08:41+0000 | Dr Biswajit Acharya | Accepted |
| 138 | Nanotechnology and building construction: Towards effective stakeholder engagement | Swetha priya darshini thammadi | Swetha.thammadi@fnu.ac.fj | FIJI NATIONAL UNIVERSITY | 2022-06-10 12:21:29+0000 | Deepak singh | Accepted |
| 139 | Factors affecting the Biogas Yield Production with Different Techniques: A Review | Anil gupta | Guptaanil9812@gmail.com | Poornima College of Engineering | 2022-05-30 07:03:33+0000 | Prem Ranjan | Changes_requested |
| 139 | Factors affecting the Biogas Yield Production with Different Techniques: A Review | Anil gupta | Guptaanil9812@gmail.com | Poornima College of Engineering | 2022-06-07 09:27:38+0000 | Dr.Neha Bansal | Changes_requested |
| 139 | Factors affecting the Biogas Yield Production with Different Techniques: A Review | Anil gupta | Guptaanil9812@gmail.com | Poornima College of Engineering | 2022-05-28 07:41:25+0000 | Ashish Solanki | Changes_requested |
| 140 | Clean Drinking water solution for Rural India: Portable Sip-Up | Meraj ahmad | Meraj.1@iitj.ac.in | Indian Institute of Technology Jodhpur | 2022-06-03 18:03:21+0000 | Vinay Chahar | Accepted |
| 140 | Clean Drinking water solution for Rural India: Portable Sip-Up | Meraj ahmad | Meraj.1@iitj.ac.in | Indian Institute of Technology Jodhpur | 2022-06-08 13:47:02+0000 | Amit Shrivastava | Accepted |
| 141 | Towards optimization of horizontal flow constructed wetland (HFCW) design by employing Machine Learning on the secondary datasets | Saurabh singh | 2020rce9516@mnit.ac.in | MNIT | 2022-06-02 08:29:08+0000 | Sangeeta Choudhary | Accepted |
| 142 | Analysis of Blended Concrete Cubes under Impact loading using ANSYS | Janhavi singh | Janhavisingh_2k20ste09@dtu.ac.in | Delhi Technological University | 2022-06-05 04:11:43+0000 | Dr. [illegible] | Accepted |
| 142 | Analysis of Blended Concrete | Janhavi singh | Janhavisingh_2k20ste09 | Delhi Technological | 2022-06-07 10:44:35+0000 | Dr. Akshay | Accepted |

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|---|---|---|---|---|---|---|---|
| | Cubes under Impact loading using ANSYS | | @dtu.ac.in | University | | Jain | |
| 143 | Determination of GERR lifespan using RUSLE method and GIS integration | Ahmed salah elshobary | A.s.shobary @mtc.edu.eg | Military Technical College | 2022-05-30 07:54:35+0000 | Dr. Ranjit N. Patil | Rejected |
| 144 | Application of eco - friendly and smart materials for subgrade stabilization of road pavement: a review | Piyush | Piyushkolhe 007@gmail. com | Sant Gadge Baba Amravati University | 2022-05-27 05:27:46+0000 | Vipin Sharma | Changes_request ed |
| 144 | Application of eco - friendly and smart materials for subgrade stabilization of road pavement: a review | Piyush | Piyushkolhe 007@gmail. com | Sant Gadge Baba Amravati University | 2022-05-27 11:57:04+0000 | RAMKIR AN B | Changes_request ed |
| 147 | Development of machine learning-based model for prediction of PM2.5 concentration in India: a case study for Jaipur | Dr. Ruchi sharma | Ruchi.ce@m nit.ac.in | Malaviya National Institute of Technology Jaipur | 2022-05-30 07:59:40+0000 | Dr. Ranjit N. Patil | Rejected |
| 149 | Soil Erosion mapping using Remote Sensing and GIS - A case study of Rewa River Watershed, Naitasiri province, Fiji | Swetha priya darshini thammadi | Swetha.tham madi@fnu.a c.fj | FIJI NATIONAL UNIVERSITY | 2022-05-30 08:08:45+0000 | Dr. Ranjit N. Patil | Accepted |
| 149 | Soil Erosion mapping using Remote Sensing and GIS - A case study of Rewa River Watershed, Naitasiri province, Fiji | Swetha priya darshini thammadi | Swetha.tham madi@fnu.a c.fj | FIJI NATIONAL UNIVERSITY | 2022-06-07 10:45:07+0000 | Dr. Akshay Jain | Accepted |
| 152 | A Novel Fuzzy Direct Control of Induction Motor Drive | Dr. Gaurav jain | Gaurav.jain @poornima. org | I K Gujral Punjab Technical University, Punjab | 2022-06-16 10:00:44+0000 | Aditya R. Gautam | Accepted |
| 152 | A Novel Fuzzy Direct Control of Induction Motor Drive | Dr. Gaurav jain | Gaurav.jain @poornima. org | I K Gujral Punjab Technical University, Punjab | 2022-06-09 10:12:23+0000 | Pravin Sonwane | Accepted |
| 153 | Investigation of heat transfer enhancement of pipe heat exchanger using outer helical fins and v-fins axial inserts | Sanjay N. Havaldar | Sanjay.haval dar@mitwpu .edu.in | Dr. Vishwanath Karad World Peace University | 2022-06-14 11:53:44+0000 | Vishwa Deepak Kumar | Changes_request ed |
| 153 | Investigation of heat transfer enhancement of pipe heat exchanger using outer helical fins and v-fins axial inserts | Sanjay N. Havaldar | Sanjay.haval dar@mitwpu .edu.in | Dr. Vishwanath Karad World Peace University | 2022-06-14 20:13:59+0000 | Amit Shrivasta va | Changes_request ed |
| 154 | Digitalization of Kanban | Bhaskar tambi | Tambibhask ar@gmail.co m | MIT WPU Pune | 2022-05-30 10:02:01+0[illegible] | Ad[illegible] Sola[illegible] | Rejected |
| 155 | Experimental Investigation of Drying Potato for Visakhapatnam climatic condition | Dr. Susant kumar sahu | Susantsahuki it@gmail.co m | Vignan's Institute of Information Technology, Visakhapatnam | 2022-05-[illegible] 06:5[illegible] | M[illegible] Murt[illegible] Kamal | Accepted |

Dr. Mahesh Bundele B.E., M.E., Ph.D. Director Poornima College of Engineering ISI-6, RIICO Institutional Area Sitapura, JAIPUR

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| 155 | Experimental Investigation of Drying Potato for Visakhapatnam climatic condition | Dr. Susant kumar sahu | Susantsahukiit@gmail.com | Vignan's Institute of Information Technology, Visakhapatnam | 2022-05-26 16:09:57+0000 | Thiyam Tamphasana Devi | Accepted |
| 157 | GIS Mapping for Distribution of Ground Water Quality in Udaipur | Sangeeta choudhary | Sangeeta27apr@gmail.com | Geetanjali Institute of Technical Studies, Udaipur | 2022-06-06 06:58:06+0000 | Kamal Hassan | Accepted |
| 158 | Tannery Waste as a Partial Replacement of Cement in Mortar | Dr. Md. Naimul haque | Naimul@ewubd.edu | East West University | 2022-05-28 03:30:06+0000 | Dr. Seelam Srikanth | Rejected |
| 159 | Numerical Analysis of RCC Beam Using ABAQUS | Hemamathi | Hod.civil@rmkec.ac.in | R.M.K Engineering College | 2022-06-02 08:56:47+0000 | Abhishek Jain | Accepted |
| 159 | Numerical Analysis of RCC Beam Using ABAQUS | Hemamathi | Hod.civil@rmkec.ac.in | R.M.K Engineering College | 2022-06-15 09:34:33+0000 | Dr. Paresh Gujarati | Accepted |
| 160 | Performance Rating of National Highways Based on Road User Perspective – A Case Study of Kalka–Shimla Highway | Sunil sharma | Sunils@nith.ac.in | National Institute of Technology Hamirpur, India | 2022-06-07 10:46:27+0000 | Dr. Akshay Jain | Accepted |
| 162 | Investigation into the Compressive Stress on Lumber Spine among Tractor Driver during different Ride Conditions | Chander prakash | Chanderpra95@gmail.com | Dr. B. R. Ambedkar National Institute of Technology Jalandhar | 2022-06-07 10:49:11+0000 | Dr. Akshay Jain | Accepted |
| 165 | Geo-statistical analysis of ground water fluctuations for sustainable management of groundwater resources within the chaliyar basin, southwest india | Mohd izharuddin ansari | Izharansari17@gmail.com | Jamia Millia Islamia | 2022-06-02 14:22:41+0000 | Thiyam Tamphasana Devi | Accepted |
| 166 | Environmental Impact Assessment of Maize Production in Northern India | Rohit kumar | Bhardwaja@nitj.ac.in | Dr BR Ambedkar National Institute of Technology Jalandhar | 2022-06-05 10:52:18+0000 | Rashmi Kumari | Accepted |
| 167 | A Literature Review on Mechanical Properties of Waste PET Bottle Based Fibre | Dr. Raj kumar satankar | Rajkumar.satankar@poornima.org | Poornima College of Engineering | 2022-06-20 06:46:52+0000 | Manoj Dubey | Accepted |
| 168 | Compressive Strength of Waste PET Bottle Based Fibre | Devendra somwanshi | Imdev.som@gmail.com | Poornima College of Engineering | 2022-06-11 16:08:52+0000 | Kamal Hassan | Accepted |
| 169 | Experimental Study on Strength Behaviour of Geogrid Reinforced Subgrade Soil | Swetha priya darshini thammadi | Swetha.thammadi@fnu.ac.fj | FIJI NATIONAL UNIVERSITY | 2022-06-04 04:34:51+0000 | Dr. Akshay Jain | Accepted |
| 171 | Optimization of Renewable Energy Resource -A Review | Dr. Raj kumar satankar | Rajkumar.satankar@poornima.org | Poornima College of Engineering | 2022-06-03 05:41:59+0000 | Pankaj Dumka | Accepted |
| 171 | Optimization of Renewable Energy Resource -A Review | Dr. Raj kumar satankar | Rajkumar.satankar@poornima.org | Poornima College of Engineering | 2022-06-04 09:07:28+0000 | Dr. [illegible]priya | Accepted |
| 172 | A Literature Review on Renewable Energy Resource and Optimization | Devendra somwanshi | Imdev.som@gmail.com | Poornima College of Engineering | 2022-06-02 09:07:23+0000 | [illegible] | [illegible] |
| 173 | Performance Evolution of Water Treatment Plant of Kekri, | | Rsroopsingh81@gmail.com | | 2022-06-07 10:32:41+0000 | Vipin Sharma | Accepted |

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| | Rajasthan, India | | | | | | |
| 175 | An Investigation of Sick Building Syndrome (SBS) affecting health of occupants in Western Maharashtra, India. | Dr. Sudarshan D. Kore | Skore@nicmar.ac.in | National Institute of Construction Management and Research (NICMAR) Pune | 2022-06-15 06:29:02+0000 | Vipin Sharma | Accepted |
| 177 | The Uptake of Environmental Management System by Small and Medium Enterprises (smes) in India | Dr. Hari prapan sharma | Hariprapan @gmail.com | GLA University | 2022-06-10 08:23:52+0000 | Chander Prakash | Accepted |
| 178 | Design and Development of the Divergent Wind Turbine | Anil gupta | Guptaanil9812@gmail.com | Poornima College of Engineering | 2022-06-11 16:20:51+0000 | Kamal Hassan | Pending |
| 178 | Design and Development of the Divergent Wind Turbine | Anil gupta | Guptaanil9812@gmail.com | Poornima College of Engineering | 2022-06-09 11:50:43+0000 | Md. Mustafa Kamal | Pending |
| 179 | Energy efficient buildings in india: key area and challenges | Dr. Preeti tarkar | Preeti.tarkar @gla.ac.in | GLA University, Mathura | 2022-06-14 05:45:17+0000 | Amit Madhanrao Kharwade | Accepted |

## LIST OF REGISTERED CANDIDATES

| S N | Track | ID | Topic | Candiadte Name | Presenter | Institute |
|---|---|---|---|---|---|---|
| 1 | Track-3 | ICSEEGT2022_T3_3002 | Quality assessment of composts from different organic sources | Parveen parihar, and rakesh choudhary | Ms. Parveen parihar | Bhartiya skill development university, jaipur, india |
| 2 | Track-2 | ICSEEGT2022_T2_2003 | Framework for freight movement in bangalore city, india | Seelam srikanth, syed omar ballari, and sala eswar | Dr. Seelam srikanth | Reva university, bengaluru, india |
| 3 | Track-2 | ICSEEGT2022_T2_2005 | Application of eco-friendly and smart materials in geotechnical engineering for subgrade stabilization: a review | Piyush v. Kolhe, and anant i. Dhatrak | Mr. Piyush v. Kolhe | Prof. Ram meghe institute of technology and research badnera, amravati, maharashtra , india |
| 4 | Track-1 | ICSEEGT2022_T1_1010 | Low frequency vibration energy harvester using compliant mechanism driven rosen-type piezoelectric transformer | Sanniva bhattacharjee, aryan kanu, arnab roy chowdhury, soumyadeep mondal, nilanjan chattaraj, and nirmal baran hui | Mr. Soumyadeep mondal | National institute of technology durgapur, india |
| 5 | Track-3 | ICSEEGT2022_T3_3011 | Relationship of shading devices and its effects on daylight in commercial buildings in pune. | Neha joshi, and pradnya nishad patki | Ms. Neha [illegible] | Mksss's dr. B. [illegible] Dept of Architecture [illegible] |

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| 6 | Track-2 | ICSEEGT2022 _T2_2015 | Experimental investigation of direct injection diesel engine using waste plastic oil as fuel | Jatadhara g s, t k chandrashekhar, n r banapurmath, s b nagesh, and keerthi kumar n | Mr. Jatadhara g s | Siddaganga institute of technology, b h road, tumakuru, karnataka, india |
| 7 | Track-1 | ICSEEGT2022 _T1_1026 | Soil dissolved organic carbon leaching characteristics of the coastal saline seepweed wetlands in the wuleidaowan national wetland | Zhang yijie, zhang haotian, zhang yihang, and tian xiujun | Ms. Zhang yijie | Department of environmental engineering, college of civil engineering, beijing jiaotong university, beijing, china |
| 8 | Track-2 | ICSEEGT2022 _T2_2032 | Perpetual flexible pavement vs. Rigid pavement: an economic and environmental cost comparison | Rahul kumar, and sunil sharma | Mr. Rahul kumar | National institute of technology hamirpur, india |
| 9 | Track-2 | ICSEEGT2022 _T2_2033 | Measuring the level of road safety through road safety audit and star rating method – a case study from himalayan expressway | Saurabh kumar s, and sunil sharma | Mr. Saurabh kumar s | National institute of technology hamirpur, hamirpur, india |
| 10 | Track-2 | ICSEEGT2022 _T2_2034 | Standard operating procedure for assessment and rating of national highways based on highway efficiency | Agrita singh, and sunil sharma | Ms. Agrita singh | National institute of technology hamirpur, india |
| 11 | Track-2 | ICSEEGT2022 _T2_2035 | Performance rating of national highway based on road user perspective-a case study of kalka-shimla highway | Pratik solanki, and sunil sharma | Mr. Pratik solanki | National institute of technolohy hamirpur,india |
| 12 | Track-2 | ICSEEGT2022 _T2_2036 | Psychological predictors of sustainable transportation behaviour: implications for low carbon economy and society | Bhavana arya, and shiromi chaturvedi | Dr. Bhavana arya | Manipal university jaipur, india |
| 13 | Track-2 | ICSEEGT2022 _T2_2037 | Spring water management to ensure long term sustainability in north eastern regions of india | Prem ranjan, pankaj kumar pandey, vanita pandey, and pema tshering lepcha | Mr. Prem ranjan | North eastern regional institute of science and technology, nirjuli, india |
| 14 | Track-2 | ICSEEGT2022 _T2_2041 | A study of cost comparison of flexible pavement using different soils | Bhupathi sridhar, kuchu jayasree, and m v s s sastri | Dr. M v s s sastri | Vasavi college of engineering (a), hyderabad, |
| 15 | Track-1 | ICSEEGT2022 _T1_1042 | Durability characteristics of recycled aggregates for physical and chemical properties of concrete | Rohit choudhary, s[illegible] jangid, ramdayal meena, and shailesh choudhary | Mr. R[illegible] choudh[illegible] | M.b.m. univer[illegible] [illegible] asthan, india |

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| 16 | Track-2 | ICSEEGT2022 _T2_2044 | Modeling and optimization of the anaerobic digestion system for domestic wastewater treatment with the development of monitoring techniques | Rajshree mathur, and meena kumari sharma | Dr. Meena kumari sharma | Manipal university jaipur, india |
| 17 | Track-1 | ICSEEGT2022 _T1_1045 | Analysis of different buffer layers on cuo based solar cells using scaps-1d | Varun mishra, chandni tiwari, and rahul chauhan | Dr. Chandni tiwari | Graphic era (deemed to be university) dehradun, india |
| 18 | Track-2 | ICSEEGT2022 _T2_2047 | Traffic count analysis during covid-19: case study of toll plazas under project highway along nagpur- jabalpur national highway (nh44) near nagpur, india | Kalpana n kawathekar (thakare), dr. Vilas k bakde | Ms. Kalpana n kawathekar (thakare) | kits, ramtek, dist nagpur, india |
| 19 | Track-2 | ICSEEGT2022 _T2_2050 | Prediction of rainfall using hybrid svm-hho model | Lipika moharana, abinash sahoo, and dillip kumar ghose | Lipika moharana | National institute of technology silchar, india |
| 20 | Track-3 | ICSEEGT2022 _T3_3051 | Impact assessment of citizen engagement and citizens' experience of services on service quality in smart cities in india | Vikrant dhenge, and gopi nimbarte | Mr. Vikrant dhenge | Visvesvara ya national institute of technology nagpur, india |
| 21 | Track-2 | ICSEEGT2022 _T2_2054 | Chambal river water quality assessment at kota metropolis through the irrigation water quality indices from 2018-2021 | Aparna sharma, kuldeep, and anil k. Mathur | Ms. Aparna sharma | University department , rajasthan technical university, kota, india |
| 22 | Track-1 | ICSEEGT2022 _T1_1055 | Numerical investigation of concentrated solar central billboard with hexagonal tubes | Sanjay n havaldar, harsh malapur, and kaustubh kulkarni | Mr. Harsh malapur | Mit-world peace university, pune, india |
| 23 | Track-1 | ICSEEGT2022 _T1_1058 | COMPARISON OF MULTI LINEAR REGRESSION AND ARTIFICIAL NEURAL NETWORKS to predict the energy consumption of residential buildings | Rajat nainwal, and aniket sharma | Mr. Rajat nainwal | National institute of technology hamirpur, india |
| 24 | Track-2 | ICSEEGT2022 _T2_2059 | Organic farming in the tropical, disaster-prone coasts: interventions, major challenges and a success story from sundarban biosphere reserve, india | Abhiroop chowdhury, aparna shankar iyer, santanu bhattacharyya, shaad ullah khan, and aliya naz | Dr. Aliya naz | Tagore society for rural developme nt, kolkata, india |
| 25 | Track-1 | ICSEEGT2022 _T1_1060 | Sustainable energy business model and strategies for marketing of clean energy products in rural areas of india | Shiv sankar das, bijaya bijeta nayak, debashree debadatta behera, rita kumari sahu,sasmita sahu, and soumyaranjan giri | Dr. Shiv sankar das | Zenith school of manageme nt, zenith group of institutions, bhubanesw [illegible] |
| 26 | Track-1 | ICSEEGT2022 _T1_1061 | Performance evaluation of the absorbing plate of a hybrid solar dryer for potato drying | Debashree debadatta behera, r.c. mohanty, a.m. mohanty, shiv san[illegible] and bijaya bijeta na[illegible] | [illegible] | Centurion [illegible] nology and manageme nt, odisha, |

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| | | | | | | india |
| 27 | Track-1 | ICSEEGT2022 _T1_1068 | Integrating digital mission and sustainable development goal-9 for building technologies: a study of navratna companies of india | Navita mahajan, vibha singh, navleen kaur, and astha gupta | Dr. Navita mahajan | Amity university, noida, india |
| 28 | Track-2 | ICSEEGT2022 _T2_2070 | Four-year spatiotemporal distribution & analysis of pm2.5 and its precursor air pollutant $so_2$, $no_2$& nh3 and their impact on lst in bengaluru city, india | Gourav suthar, rajat prakash singhal, sumit khandelwal, nivedita kaul, vinod parmar, and abhey p singh | Mr. Gourav suthar | Malaviya national institute of technology jaipur, india |
| 29 | Track-2 | ICSEEGT2022 _T2_2071 | Urban environmental challenges associated with dynamics of slum settlement | Rashmi kumari | Dr. Rashmi kumari | National institute of technology hamirpur, india |
| 30 | Track-1 | ICSEEGT2022 _T1_1072 | Review on recycling of microplastics in cigarette butts | Mary christine george, and rupali pratik khadtar | Ms. Mary christine george | Anjuman-i-islam's abdul razzak kalsekar polytechnic , new panvel, navi mumbai, , india |
| 84 | Track 1 | ICSEEGT2022 _T1_1072 | Review on recycling of microplastics in cigarette butts | Mary christine george, and rupali pratik khadtar | rupali pratik khadtar | Anjuman-i-islam's abdul razzak kalsekar polytechnic , new panvel, navi mumbai, , india |
| 31 | Track-1 | ICSEEGT2022 _T1_1074 | An experimental behavior on green concrete utilizing granite slurry waste (gsw) as partial substitute of cement | Sachin sharma, priyanka pandey, pooja gupta, abhay m. Shende, and rakesh bhandari | Mr. Sachin sharma | Sangam university, bhilwara, india |
| 32 | Track-2 | ICSEEGT2022 _T2_2076 | Energy, geopolitics and the dying arctic ice fields: an enviro- political perspective | A thangaraj, and a chowdhury | Mr. Abhilash thangaraj | Jindal school of international affairs, o.p. jindal global university, sonipat, haryana, india |
| 33 | Track-3 | ICSEEGT2022 _T3_3079 | Gender-friendly cities and the built environment raise a few concerns | Asmita yadav, and rashmi kumari | Ms. Asmita yadav | National institute of technology bhilai, india |

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| 34 | Track-2 | ICSEEGT2022 _T2_2080 | Mapping groundwater potential zone and flood risk zone in the visakhapatnam district, india | P. Vamsi krishna prasad, m. Leela priyanka, r. Sarath, b. Raghupathi naidu, and t. Ravi | Mr. P. Vamsi krishna prasad | Vignan's institute of information technology, visakhapatnam, india |
| 35 | Track-1 | ICSEEGT2022 _T1_1081 | The need for legislation on renewable energy for sustainable development in india | Aniket bhargava, and khyati kochhar | Mr. Aniket bhargava | Faculty of law, banasthali vidyapith village, banasthali, rajasthan, india |
| 36 | Track-1 | ICSEEGT2022 _T1_1082 | Eco-anxiety and environmental concern as predictors of eco-activism | Nishtha jain , and prashasti jain | Dr. Prashasti jain | Manipal university jaipur, india |
| 37 | Track-1 | ICSEEGT2022 _T1_1084 | Effect of pozzolanic material on drying shrinkage characteristics of blended cementitious mortar | Nitesh balaji thikare, shalini yadav, and ranjit patil | Mr. Nitesh balaji thikare | Rabindranath tagore university, bhopal, india |
| 38 | Track-3 | ICSEEGT2022 _T3_3085 | Tainted wastewater remediation through inverted multimedia biofilter | Amit m.kharwade, shalini yadav, ranjit patil , and sunil k sharma | Mr. Amit m.kharwade | Department of civil engineering , rabindranath tagore university, bhopal, india |
| 39 | Track-1 | ICSEEGT2022 _T1_1086 | Urban organic waste as a source of bioenergy for electricity generation in bhopal, madhya pradesh | Nirjhar gupta, jitendra patel, nitesh gupta, and amit vishwakarma | Mr. Nirjhar gupta | University institute of technology (rgpv), bhopal, india |
| 40 | Track-1 | ICSEEGT2022 _T1_1088 | Strength and durability of concrete by partial replacement of sand by copper slag and cement by egg shell powder: a review | Dhiraj naxine, and anita nag | Mr. Dhiraj ramesh naxine | G h raisoni university, amravati, india |
| 41 | Track-1 | ICSEEGT2022 _T1_1089 | Life cycle costing methodology for sustainable construction | Mustafa soyab sadliwala, and nivedita.g.gogate | Mr. Mustafa soyab sadliwala | Mit world peace university kothrud, pune, india |
| 85 | Track 1 | ICSEEGT2022 _T1_1089 | Life cycle costing methodology for sustainable construction | Mustafa soyab sadliwala, and nivedita.g.gogate | Nivedita.g.gogate | Mit world peace university pune, india |
| 42 | Track-1 | ICSEEGT2022 _T1_1090 | Utilization of silica fume and fly ash in cement and partial substitution of fine aggregate using quarry dust in concrete | Sudhir kapgate, and anjul tomar | Mr.sudhir kapgate | G h raisoni university,amravati, india |
| 43 | Track-1 | ICSEEGT2022 _T1_1095 | Approximate climate analysis for assessing the suitability of indian climate zones for hydroponic fodder applications | Souryadeep basak, and aviruch bhatia | Mr. Souryadeep basak | Teri school of advanced studies, new, india |

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| 44 | Track-2 | ICSEEGT2022 _T2_2097 | Assessment and identification of drought prone zone in a low laying area by ahp and mif method: a gis based study | Nameirakpam momo singh, and thiyam tamphasana devi | Mr. Nameirakpam momo singh | National institute of technology manipur, india |
| 45 | Track-1 | ICSEEGT2022 _T1_1098 | Sustainable rural development through renewable energy technologies: identification of potential methods to increase rural incomes | Amitabh patnaik, pallavi kudal, sunny dawar, and prince dawar | Dr. Sunny dawar | Manipal university jaipur, rajasthan, india |
| 46 | Track 2 | ICSEEGT2022 _T2_2101 | Transport infrastructure investment: a comparative analysis between china, russia and india | Banga raju , preeti aneja, and biswajeet mishra | Ms. Preeti aneja | University of petroleum and energy studies, dehradun, india |
| 47 | Track-2 | ICSEEGT2022 _T2_2104 | Application of circular economy in wastewater treatment using biochar based adsorbent derived from sewage sludge | Pooja panchappa kenchannavar, and anupama surenjan | Ms. Pooja panchappa kenchannavar | National institute of technology karnataka, surtahkal, india |
| 48 | Track-1 | ICSEEGT2022 _T1_1105 | Sustainable energy efficient green campuses: a systematic literature review and bibliometric analysis | Chintan pandya, saurabh prajapati, and rupam gupta | Mr. Chintan pandya | Anant national university, ahmedabad , gujarat, india |
| 49 | Track-1 | ICSEEGT2022 _T1_1107 | Assessment of fixed rack and 1–axis tracking crystalline silicon photovoltaic array on their ideal energy performance | Prakhar duggal , ravinder kumar tomar , vigneshwaran s., vegesna rohith varma , and vekhohu puro | Mr. Vigneshwaran s | Amity school of engineering and technology, amity university, noida, uttar pradesh, india |
| 50 | Track-2 | ICSEEGT2022 _T2_2114 | Trend analysis and forecasting of long-term temperature data to anticipate local warming: a case study of jawa timur, indonesia | Abdur rohman, ph.d, retno utami agung wiyono and fitriani | Dr. Abdur rohman | Department of environmental engineering , universitas jember, jawa timur, indonesia |
| 51 | Track-2 | ICSEEGT2022 _T2_2116 | Formulation of parking demand estimation model in transit oriented cbds: a review | Debasish das, debargha banerjee, dibyendu das, sharmistha bhowmik, ishita roy, tanmoy sarkhel, suhel raj, and pritam das | Mr. Dibyendu das | Jis college of engineering , kalyani, west bengal, india |
| 52 | Track-1 | ICSEEGT2022 _T1_1117 | Manufacturing of brick from medical waste (mw) | Debasish das, debargha banerjee, swarup rudra paul, shaswatika pal, jagriti das, archanava chandra, princu kumar singh, and sujoy adhikari | Mr. Archanava chandra | Jis college of engineering , kalyani, west bengal, india |

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| 53 | Track-3 | ICSEEGT2022 _T3_3118 | Corrosion analysis of rcc beam using simplified fem model | Yamuna bhagwat, gopinatha nayak, poornachandra pandit, harithakrishnan, and aishwarya lakshmi | Mrs. Yamuna bhagwat | Manipal institute of technology, manipal academy of higher education, manipal, karnataka, india |
| 54 | Track-2 | ICSEEGT2022 _T2_2121 | Delay models for signalised intersections with vehicle actuated controlled system in heterogeneous traffic conditions | Borigarla barhmaiah, a chandrasekar, tanala ramya, and s moses santhakumar4 | Mr. Borigarla barhmaiah | National institute of technology tiruchirapp alli, india |
| 55 | Track-2 | ICSEEGT2022 _T2_2125 | Strength behavior of expansive subgrade soil stabilized with coronus material | Sateesh kumar pisini, and swetha priya darshini thammadi | Mr. Sateesh kumar pisini | Fiji national university, suva, fiji |
| 56 | Track-3 | ICSEEGT2022 _T3_3127 | Review of open space rules and regulations and identification of specificities for plot-level open spaces to facilitate sustainable development: an indian case | Sameer gujar, amit deshmukh, and reshu gupta | Mr. Sameer gujar | Visvesvara ya national institute of technology |
| 57 | Track 1 | ICSEEGT2022 _T1_1129 | Biofuel production through algae route using solar assisted carbon capture plant | Meenakshi samartha, ravi kumar singh pippal, and vinod krishna sethi | Dr. V.k. sethi | Rkdf university, bhopal, india |
| 58 | Track-2 | ICSEEGT2022 _T2_2131 | Role of adr methods in environmental conflicts in the light of sustainable development | Jaffar alkhayer, narinder gupta, and chander mohan gupta | Mr. Jaffar alkhayer | Faculty of legal science, shoolini university, solan, himachal pradesh, india |
| 59 | Track-3 | ICSEEGT2022 _T3_3133 | Response spectrum analysis of a rc building based on complete quadratic combination (cqc) method | Debargha banerjee, debasish das , uddipta ghosh, dina debnath, santanu debnath, snehasish malakar, ratnadwipa das, sanjoy datta, and syed ealham hossain | Ms. Dina debnath | Jis college of engineering , kalyani, west bengal, india |
| 60 | Track-3 | ICSEEGT2022 _T3_3138 | Nanotechnology and building construction: towards effective stakeholder engagement | Swetha priya darshini thammadi, and sateesh kumar pisini | Ms. Swetha priya darshini thammadi | Fiji national university, suva, fiji |
| 61 | Track-1 | ICSEEGT2022 _T1_1140 | Clean drinking water solution for rural india: portable sip-up | Meraj ahmad, arti sharma, quadri s. Mujtaba, saurabh yadav, ritwik kulkarni, sandeep gupta, amrita k. Nighojkar, raj kumar satankar, meenu chhabra, ambesh dixit, and anand plappally | Mr. Meraj ahmad | Indian institute of technology, jodhpur, india |

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| 62 | Track-2 | ICSEEGT2022 _T2_2141 | Towards optimization of horizontal flow constructed wetlands (hfcws) design by employing machine learning on the secondary datasets | Saurabh singh, n m kulshreshtha, shubham goyal, u brighu, a n bezbaruah, and a b gupta | Mr. Saurabh singh | Malaviya national institute of technology jaipur, india |
| 63 | Track-2 | ICSEEGT2022 _T2_2142 | Analysis of blended concrete cubes under impact loading using ansys | Janhavi singh, and shilpa pal | Ms. Janhavi singh | Delhi technologic al university, new delhi, india |
| 64 | Track-2 | ICSEEGT2022 _T2_2149 | Soil erosion mapping using remote sensing and gis - a case study of rewa river watershed, naitasiri province, fiji | Swetha priya darshini thammadi, and sateesh kumar pisini | Ms. Swetha priya darshini thammadi | Fiji national university, suva, fiji |
| 65 | Track-3 | ICSEEGT2022 _T3_3152 | A novel fuzzy direct control of induction motor drive | Bharat gothania, r.k. kumawat, gaurav jain, and annu govind | Mr. Bharat gothania | Career point university, kota, india |
| 66 | Track-1 | ICSEEGT2022 _T1_1157 | Gis mapping for distribution of ground water quality in udaipur | Sangeeta choudhary, denis jangeed, prithvi raj rankawat, sweety tank, and nikhil sen | Dr. Sangeeta choudhary | Geetanjali institute of technical studies, udaipur, india |
| 67 | Track-3 | ICSEEGT2022 _T3_3159 | Numerical analysis of rcc beam using abaqus | A.hemamathi, binu sukumar, and r.b. hambrish guru chandrakant | Ms. A.hemamathi | R.m.k. engineering college, tamil nadu, india |
| 68 | Track-2 | ICSEEGT2022 _T2_2162 | Investigation into the compressive stress on lumber spine among tractor driver during different ride conditions | Chander prakash, lakhwinder pal singh, and ajay gupta | Mr. Chander prakash | Dr. B. R. Ambedkar national institute of technology jalandhar, punjab, india |
| 69 | Track-2 | ICSEEGT2022 _T2_2163 | Correlation study of physico-chemical parameters and water quality index around kodungaiyur dumping ground | Aishwarya r., faizuneesa a., hemamathi a., ramshankar p., and yuvraj m. | Mrs. Aishwarya r | R.m.k. engineering college, tamil nadu, india |
| 70 | Track-2 | ICSEEGT2022 _T2_2165 | Geo-statistical analysis of ground water fluctuations for sustainable management of groundwater resources within the chaliyar basin, southwest india | Mohd izharuddin ansari, l n thakral, and quamrul hassan | Mr. Mohd izharuddin ansari | Jamia millia islamia, jamia nagar, okhla, new delhi-110025, india |
| 71 | Track-2 | ICSEEGT2022 _T2_2166 | Environmental impact assessment of maize production in northern india | Rohit kumar, arvind bhardwaj, lakhwinder pal singh and gurraj singh | Mr. Rohit kumar | Department of industrial and production engineering, dr. B r ambedkar national institute of technology jalandhar, punjab, india-144027nit jalandhar |

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| 72 | Track-3 | ICSEEGT2022 _T3_3167 | A literature review on mechanical properties of waste pet bottle based fibre | Devendra kumar somwanshi, vijay prakash sharma, shikha sharma, and kalpit jain | Mr. Vijay prakash sharma | Manipal university jaipur, india |
| 73 | Track-3 | ICSEEGT2022 _T3_3168 | Compressive strength of waste pet bottle based fibre | Devendra kumar somwanshi, vijay prakash sharma, sikha sharma, kalpit jain | Mr. Vijay prakash sharma | Manipal university jaipur, india |
| 74 | Track-1 | ICSEEGT2022 _T1_1169 | Experimental and numerical investigation on strength behaviour of geogrid reinforced subgrade soil | Sateesh kumar pisini, swetha priya darshini thammadi, monish nadan, naadirah edward, and shaniza farnaz nisha | Mr. Sateesh kumar pisini | Fiji national university, suva, fiji |
| 75 | Track-1 | ICSEEGT2022 _T1_1171 | Optimization of renewable energy resource -a review | Vijay prakash sharma, devendra kumar somwanshi, kalpit jain, and raj kumar satankar | Mr. Vijay prakash sharma | Manipal university jaipur, india |
| 76 | Track-1 | ICSEEGT2022 _T1_1172 | A literature review on renewable energy resource and optimization | Vijay prakash sharma, devendra kumar somwanshi, kalpit jain, and raj kumar satankar | Mr. Vijay prakash sharma | Manipal university jaipur, india |
| 77 | Track-2 | ICSEEGT2022 _T2_2173 | Performance evalution of water treatment plant of kekri, rajasthan, india | Roop singh sinsinwar, and munna verma | Mr. Roop singh sinsinwar | Bhagwant university ajmer, rajasthan, india |
| 78 | Track-2 | ICSEEGT2022 _T2_2175 | An investigation of sick building syndrome (sbs) affecting health of occupants in western maharashtra, india. | Amol d pawar, anil agarwal, babalu rajput, and sudarshan d kore | Dr. Amol d pawar | National institute of construction management ( nicmar ) pune campus, pune, india |
| 79 | Track-1 | ICSEEGT2022 _T1_1177 | The uptake of environmental management system by small and medium enterprises (smes) in india | Hari prapan sharma, and kishore kumar | Dr. Hari prapan sharma | Gla university, mathura, india |
| 80 | Track-3 | ICSEEGT2022 _T3_3178 | Design and development of the divergent wind turbine | Himanshu rajput, anil gupta, harihar sah, manoj gattani, and raj kumar satankar | Mr.himanshu rajput | Poornima college of engineering , jaipur, india |
| 81 | Track-3 | ICSEEGT2022 _T3_3179 | Energy efficient buildings in india: key area and challenges | Preeti tarkar | Dr. Preeti tarkar | Gla university, mathura, india |
| 82 | Track-2 | ICSEEGT2022 _T2_2180 | Emission performance assessment of in-use diesel-driven cars | Abhinav pandey, rajeev kumar mishra, and govind pandey | Mr. Abhinav pandey | Delhi technological university, new delhi, india |
| 83 | Track-1 | ICSEEGT2022 _T1_1183 | Techno-economic assessment of lpg operated porous radiant burner based cook-stoves for commercial cooking applications | Sofia rani shaik, p muthukumar, pratul and chandra kalita | Mr. Sofia rani s[illegible] | Indian institute of technology guwahati, india |
| 84 | Track-1 | ICSEEGT2022 _T1_1082 | Eco-anxiety and environmental concern as predictors of eco-activism | Nishtha jain , [illegible] prashasti jain | [illegible] Nishtha jain | Manipal university jaipur, india |

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| 86 | | | The need for legislation on renewable energy for sustainable development in india | Aniket bhargava, and khyati kochhar | Khyati kochhar | Faculty of law, banasthali vidyapith village, banasthali, rajasthan, india |

## LIST OF ATTENDED CANDIDATES

| S N | Track | ID | Topic | Name | Presenter | Institute |
|---|---|---|---|---|---|---|
| 1 | Track-3 | ICSEEGT2022_T3_3002 | Quality assessment of composts from different organic sources | Parveen parihar, and rakesh choudhary | Ms. Parveen parihar | Bhartiya skill development university, jaipur, india |
| 2 | Track-2 | ICSEEGT2022_T2_2003 | Framework for freight movement in bangalore city, india | Seelam srikanth, syed omar ballari, and sala eswar | Dr. Seelam srikanth | Reva university, bengaluru, india |
| 3 | Track-2 | ICSEEGT2022_T2_2005 | Application of eco-friendly and smart materials in geotechnical engineering for subgrade stabilization: a review | Piyush v. Kolhe, and anant i. Dhatrak | Mr. Piyush v. Kolhe | Prof. Ram meghe institute of technology and research badnera, amravati, maharashtra , india |
| 4 | Track-1 | ICSEEGT2022_T1_1010 | Low frequency vibration energy harvester using compliant mechanism driven rosen-type piezoelectric transformer | Sanniva bhattacharjee, aryan kanu, arnab roy chowdhury, soumyadeep mondal, nilanjan chattaraj, and nirmal baran hui | Mr. Soumyadeep mondal | National institute of technology durgapur, india |
| 5 | Track-3 | ICSEEGT2022_T3_3011 | Relationship of shading devices and its effects on daylight in commercial buildings in pune. | Neha joshi, and pradnya nishad patki | Mrs. Neha joshi | Mksss's dr. B. N. College of architecture, pune, india |
| 6 | Track-2 | ICSEEGT2022_T2_2015 | Experimental investigation of direct injection diesel engine using waste plastic oil as fuel | Jatadhara g s, t k chandrashekhar, n r banapurmath, s b nagesh, and keerthi kumar n | Mr. Jatadhara g s | Siddaganga institute of technology, b h road, tumakuru, karnataka, india |
| 7 | Track-1 | ICSEEGT2022_T1_1026 | Soil dissolved organic carbon leaching characteristics of the coastal saline seepweed wetlands in the wuleidaowan national wetland | zhang yijie, zhang haotian, zhang yi[illegible] and tian xiujun | Ms. Zhang [illegible] | Department of environm[illegible] engineering, colleg[illegible] engineering, beijing jiaotong university |

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| | | | | | | , beijing, china |
| 8 | Track-2 | ICSEEGT2022_T2_2032 | Perpetual flexible pavement vs. Rigid pavement: an economic and environmental cost comparison | Rahul kumar, and sunil sharma | Mr. Rahul kumar | National institute of technology hamirpur, india |
| 9 | Track-2 | ICSEEGT2022_T2_2033 | Measuring the level of road safety through road safety audit and star rating method – a case study from himalayan expressway | Saurabh kumar s, and sunil sharma | Mr. Saurabh kumar s | National institute of technology hamirpur, hamirpur, india |
| 10 | Track-2 | ICSEEGT2022_T2_2034 | Standard operating procedure for assessment and rating of national highways based on highway efficiency | Agrita singh, and sunil sharma | Ms. Agrita singh | National institute of technology hamirpur, india |
| 11 | Track-2 | ICSEEGT2022_T2_2035 | Performance rating of national highway based on road user perspective-a case study of kalka-shimla highway | Pratik solanki, and sunil sharma | Mr. Pratik solanki | National institute of technoloh y hamirpur, india |
| 12 | Track-2 | ICSEEGT2022_T2_2036 | Psychological predictors of sustainable transportation behaviour: implications for low carbon economy and society | Bhavana arya, and shiromi chaturvedi | Dr. Bhavana arya | Manipal university jaipur, india |
| 13 | Track-2 | ICSEEGT2022_T2_2037 | Spring water management to ensure long term sustainability in north eastern regions of india | Prem ranjan, pankaj kumar pandey, vanita pandey, and pema tshering lepcha | Mr. Prem ranjan | North eastern regional institute of science and technology, nirjuli, india |
| 14 | Track-2 | ICSEEGT2022_T2_2041 | A study of cost comparison of flexible pavement using different soils | Bhupathi sridhar, kuchu jayasree, and m v s s sastri | Dr. M v s s sastri | Vasavi college of engineering (a), hyderabad, india |
| 15 | Track-1 | ICSEEGT2022_T1_1042 | Durability characteristics of recycled aggregates for physical and chemical properties of concrete | Rohit choudhary, satish jangid, ramdayal meena, and shailesh choudhary | Mr. Rohit choudhary | M.b.m. university jodhpur rajasthan, |

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| 16 | Track-2 | ICSEEGT2022 _T2_2044 | Modeling and optimization of the anaerobic digestion system for domestic wastewater treatment with the development of monitoring techniques | Rajshree mathur, and meena kumari sharma | Dr. Meena kumari sharma | Manipal university jaipur, india |
| 17 | Track-1 | ICSEEGT2022 _T1_1045 | Analysis of different buffer layers on cuo based solar cells using scaps-1d | Varun mishra, chandni tiwari, and rahul chauhan | Dr. Chandni tiwari | Graphic era (deemed to be university ) dehradun, india |
| 18 | Track-2 | ICSEEGT2022 _T2_2047 | Traffic count analysis during covid-19: case study of toll plazas under project highway along nagpur-jabalpur national highway (nh44) near nagpur, india | Kalpana n kawathekar (thakare), dr. Vilas k bakde | Ms. Kalpana n kawathekar (thakare) | kits, ramtek, dist nagpur, india |
| 19 | Track-2 | ICSEEGT2022 _T2_2050 | Prediction of rainfall using hybrid svm-hho model | Lipika moharana, abinash sahoo, and dillip kumar ghose | Lipika moharana | National institute of technolog y silchar, india |
| 20 | Track-3 | ICSEEGT2022 _T3_3051 | Impact assessment of citizen engagement and citizens' experience of services on service quality in smart cities in india | Vikrant dhenge, and gopi nimbarte | Mr. Vikrant dhenge | Visvesvar aya national institute of technolog y nagpur, india |
| 21 | Track-2 | ICSEEGT2022 _T2_2054 | Chambal river water quality assessment at kota metropolis through the irrigation water quality indices from 2018-2021 | Aparna sharma, kuldeep, and anil k. Mathur | Ms. Aparna sharma | University departme nt, rajasthan technical university , kota, india |
| 22 | Track-1 | ICSEEGT2022 _T1_1055 | Numerical investigation of concentrated solar central billboard with hexagonal tubes | Sanjay n havaldar, harsh malapur, and kaustubh kulkarni | Mr. Harsh malapur | Mit-world peace university , pune, india |
| 23 | Track-1 | ICSEEGT2022 _T1_1058 | COMPARISON OF MULTI LINEAR REGRESSION AND ARTIFICIAL NEURAL NETWORKS to predict the energy consumption of residential buildings | RAJAT NAINWAL, AND ANIKET SHARMA | MR. RAJAT NAINWAL | NATION AL INSTITUT E OF TECHNO LOGY HAMIRP UR, INDIA |
| 24 | Track-2 | ICSEEGT2022 _T2_2059 | Organic farming in the tropical, disaster-prone coasts: interventions, major challenges and a success story from sundarban biosphere reserve, india | Abhiroop chowdhury, aparna shankar iyer, santanu bhattacharyya, shaad ullah khan, and aliya naz | Dr. Aliya naz | Tagore society for rural developm ent, kolk |

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| 25 | Track-1 | ICSEEGT2022_T1_1060 | Sustainable energy business model and strategies for marketing of clean energy products in rural areas of india | Shiv sankar das, bijaya bijeta nayak, debashree debadatta behera, rita kumari sahu,sasmita sahu, and soumyaranjan giri | Dr. Shiv sankar das | Zenith school of management, zenith group of institutions, bhubaneswar, odisha, india |
| 26 | Track-1 | ICSEEGT2022_T1_1061 | Performance evaluation of the absorbing plate of a hybrid solar dryer for potato drying | Debashree debadatta behera, r.c. mohanty, a.m. mohanty, shiv sankar das, and bijaya bijeta nayak | Mrs. Debashree debadatta behera | Centurion university of technology and management, odisha, india |
| 27 | Track-1 | ICSEEGT2022_T1_1068 | Integrating digital mission and sustainable development goal-9 for building technologies: a study of navratna companies of india | Navita mahajan, vibha singh, navleen kaur, and astha gupta | Dr. Navita mahajan | Amity university, noida, india |
| 28 | Track-2 | ICSEEGT2022_T2_2070 | Four-year spatiotemporal distribution & analysis of pm2.5 and its precursor air pollutant $so_2$, $no_2$& nh3 and their impact on lst in bengaluru city, india | Gourav suthar, rajat prakash singhal, sumit khandelwal, nivedita kaul, vinod parmar, and abhey p singh | Mr. Gourav suthar | Malaviya national institute of technology jaipur, india |
| 29 | Track-2 | ICSEEGT2022_T2_2071 | Urban environmental challenges associated with dynamics of slum settlement | Rashmi kumari | Dr. Rashmi kumari | National institute of technology hamirpur, india |
| 30 | Track-1 | ICSEEGT2022_T1_1072 | Review on recycling of microplastics in cigarette butts | Mary christine george, and rupali pratik khadtar | Ms. Mary christine george | Anjuman-i-islam's abdul razzak kalsekar polytechnic, new panvel, navi mumbai, , india |
| 84 | Track 1 | ICSEEGT2022_T1_1072 | Review on recycling of microplastics in cigarette butts | Mary christine george, and rupali pratik khadtar | rupali pratik khadtar | Anjuman-i-islam's abdul razzak kalsekar polytechnic, new panvel, navi mumbai, , |
| 31 | Track-1 | ICSEEGT2022_T1_1074 | An experimental behavior on green concrete utilizing granite slurry waste (gsw) as partial substitute of cement | Sachin sharma, priyanka pandey, pooja gupta, abhay m. Shende, and rakesh bhandari | Mr. S[illegible] | [illegible]ilwara, india |

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| 32 | Track-2 | ICSEEGT2022 _T2_2076 | Energy, geopolitics and the dying arctic ice fields: an enviro- political perspective | a thangaraj, and a chowdhury | Mr. Abhilash thangaraj | Jindal school of international affairs, o.p. jindal global university , sonipat, haryana, india |
| 33 | Track-3 | ICSEEGT2022 _T3_3079 | Gender-friendly cities and the built environment raise a few concerns | asmita yadav, and rashmi kumari | Ms. Asmita yadav | National institute of technology hamirpur, india |
| 34 | Track-2 | ICSEEGT2022 _T2_2080 | Mapping groundwater potential zone and flood risk zone in the visakhapatnam district, india | p. Vamsi krishna prasad, m. Leela priyanka, r. Sarath, b. Raghupathi naidu, and t. Ravi | Mr. P. Vamsi krishna prasad | Vignan's institute of information technology, visakhapatnam, india |
| 35 | Track-1 | ICSEEGT2022 _T1_1081 | The need for legislation on renewable energy for sustainable development in india | aniket bhargava, and khyati kochhar | Mr. Aniket bhargava | Faculty of law, banasthali vidyapith village, banasthali , rajasthan, india |
| 36 | Track-1 | ICSEEGT2022 _T1_1082 | Eco-anxiety and environmental concern as predictors of eco-activism | nishtha jain , and prashasti jain | Dr. Prashasti jain | Manipal university jaipur, india |
| 37 | Track-1 | ICSEEGT2022 _T1_1084 | Effect of pozzolanic material on drying shrinkage characteristics of blended cementitious mortar | Nitesh balaji thikare, shalini yadav, and ranjit patil | Mr. Nitesh balaji thikare | Rabindranath tagore university , bhopal, india |
| 38 | Track-3 | ICSEEGT2022 _T3_3085 | Tainted wastewater remediation through inverted multimedia biofilter | amit m.kharwade, shalini yadav, ranjit patil , and sunil k sharma | Mr. Amit m.kharwade | Department of civil engineering, rabindranath tagore university , bhopal, india |
| 39 | Track-1 | ICSEEGT2022 _T1_1086 | Urban organic waste as a source of bioenergy for electricity generation in bhopal, madhya pradesh | nirjhar gupta, jitendra patel, nitesh gupta, and amit vishwakarma | Mr. Nirjhar gupta | University institute of technology (rgpv), bhopal, india |
| 40 | Track-1 | ICSEEGT2022 _T1_1088 | Strength and durability of concrete by partial replacement of sand by copper slag and cement by egg shell powder: a review | dhiraj naxine, and anit nag | Mr. Dhiraj naxine | G h [illegible] iversity , amr[illegible] |

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| 41 | Track-1 | ICSEEGT2022 _T1_1089 | Life cycle costing methodology for sustainable construction | mustafa soyab sadliwala, and nivedita.g.gogate | Mr. Mustafa soyab sadliwala | Mit world peace university kothrud, pune, india |
| 85 | Track 1 | ICSEEGT2022 _T1_1089 | Life cycle costing methodology for sustainable construction | mustafa soyab sadliwala, and nivedita.g.gogate | Nivedita.g.gogate | Mit world peace university pune, india |
| 42 | Track-1 | ICSEEGT2022 _T1_1090 | Utilization of silica fume and fly ash in cement and partial substitution of fine aggregate using quarry dust in concrete | sudhir kapgate, and anjul tomar | Mr.sudhir kapgate | G h raisoni university ,amravati, india |
| 43 | Track-1 | ICSEEGT2022 _T1_1095 | Approximate climate analysis for assessing the suitability of indian climate zones for hydroponic fodder applications | souryadeep basak, and aviruch bhatia | Mr. Souryadeep basak | Teri school of advanced studies, new, india |
| 44 | Track-2 | ICSEEGT2022 _T2_2097 | Assessment and identification of drought prone zone in a low laying area by ahp and mif method: a gis based study | nameirakpam momo singh, and thiyam tamphasana devi | Mr. Nameirakpam momo singh | National institute of technolog y manipur, india |
| 45 | Track-1 | ICSEEGT2022 _T1_1098 | Sustainable rural development through renewable energy technologies: identification of potential methods to increase rural incomes | amitabh patnaik, pallavi kudal, sunny dawar, and prince dawar | Dr. Sunny dawar | Manipal university jaipur, rajasthan, india |
| 46 | Track 2 | ICSEEGT2022 _T2_2101 | Transport infrastructure investment: a comparative analysis between china, russia and india | banga raju , preeti aneja, and biswajeet mishra | Ms. Preeti aneja | University of petroleum and energy studies, dehradun, india |
| 47 | Track-2 | ICSEEGT2022 _T2_2104 | Application of circular economy in wastewater treatment using biochar based adsorbent derived from sewage sludge | pooja panchappa kenchannavar, and anupama surenjan | Ms. Pooja panchappa kenchannavar | National institute of technolog y karnataka, surtahkal, india |
| 48 | Track-1 | ICSEEGT2022 _T1_1105 | Sustainable energy efficient green campuses: a systematic literature review and bibliometric analysis | chintan pandya, saurabh prajapati, and rupam gupta | Mr. Chintan pandya | Anant national university , ahmedaba d, gujarat, india |
| 49 | Track-1 | ICSEEGT2022 _T1_1107 | Assessment of fixed rack and 1–axis tracking crystalline silicon photovoltaic array on their ideal energy performance | prakhar duggal , ravinder kumar tomar , vigneshwaran [illegible], vegesna rohith varma , and vekhohu [illegible] | Mr. Vigneshw[illegible] | Amity school of [illegible] in g and techno[illegible] [illegible]versity , noida, uttar pradesh, |

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| | | | | | | india |
| 50 | Track-2 | ICSEEGT2022 _T2_2114 | Trend analysis and forecasting of long-term temperature data to anticipate local warming: a case study of jawa timur, indonesia | abdur rohman, ph.d, retno utami agung wiyono and fitriani | Dr. Abdur rohman | Department of environmental engineering, universitas jember, jawa timur, indonesia |
| 51 | Track-2 | ICSEEGT2022 _T2_2116 | Formulation of parking demand estimation model in transit oriented cbds: a review | Debasish das, debargha banerjee, dibyendu das, sharmistha bhowmik, ishita roy, tanmoy sarkhel, suhel raj, and pritam das | Mr. Dibyendu das | Jis college of engineering, kalyani, west bengal, india |
| 52 | Track-1 | ICSEEGT2022 _T1_1117 | Manufacturing of brick from medical waste (mw) | Debasish das, debargha banerjee, swarup rudra paul, shaswatika pal, jagriti das, archanava chandra, princu kumar singh, and sujoy adhikari | Mr. Archanava chandra | Jis college of engineering, kalyani, west bengal, india |
| 53 | Track-3 | ICSEEGT2022 _T3_3118 | Corrosion analysis of rcc beam using simplified fem model | yamuna bhagwat, gopinatha nayak, poornachandra pandit, harithakrishnan, and aishwarya lakshmi | Mrs. Yamuna bhagwat | Manipal institute of technology, manipal academy of higher education, manipal, karnataka, india |
| 54 | Track-2 | ICSEEGT2022 _T2_2121 | Delay models for signalised intersections with vehicle actuated controlled system in heterogeneous traffic conditions | borigarla barhmaiah, a chandrasekar, tanala ramya, and s moses santhakumar4 | Mr. Borigarla barhmaiah | National institute of technology tiruchirappalli, india |
| 55 | Track-2 | ICSEEGT2022 _T2_2125 | Strength behavior of expansive subgrade soil stabilized with coronus material | sateesh kumar pisini, and swetha priya darshini thammadi | Mr. Sateesh kumar pisini | Fiji national university, suva, fiji |
| 56 | Track-3 | ICSEEGT2022 _T3_3127 | Review of open space rules and regulations and identification of specificities for plot-level open spaces to facilitate sustainable development: an indian case | sameer gujar, amit deshmukh, and reshu gupta | Mr. Sameer gujar | Visvesvaraya national institute of technology |
| 57 | Track 1 | ICSEEGT2022 _T1_1129 | Biofuel production through algae route using solar assisted carbon capture plant | Meenakshi samantha, ravi kumar singh pippal, and vi[illegible] krishna sethi | [illegible] | [illegible]versity, bhopal, india |

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| 58 | Track-2 | ICSEEGT2022 _T2_2131 | Role of adr methods in environmental conflicts in the light of sustainable development | jaffar alkhayer, narinder gupta, and chander mohan gupta | Mr. Jaffar alkhayer | Faculty of legal science, shoolini university , solan, himachal pradesh, india |
| 59 | Track-3 | ICSEEGT2022 _T3_3133 | Response spectrum analysis of a rc building based on complete quadratic combination (cqc) method | debargha banerjee, debasish das , uddipta ghosh, dina debnath, santanu debnath, snehasish malakar, ratnadwipa das, sanjoy datta, and syed ealham hossain | Ms. Dina debnath | Jis college of engineering, kalyani, west bengal, india |
| 60 | Track-3 | ICSEEGT2022 _T3_3138 | Nanotechnology and building construction: towards effective stakeholder engagement | swetha priya darshini thammadi, and sateesh kumar pisini | Ms. Swetha priya darshini thammadi | Fiji national university , suva, fiji |
| 61 | Track-1 | ICSEEGT2022 _T1_1140 | Clean drinking water solution for rural india: portable sip-up | meraj ahmad, arti sharma, quadri s. Mujtaba, saurabh yadav, ritwik kulkarni, sandeep gupta, amrita k. Nighojkar, raj kumar satankar, meenu chhabra, ambesh dixit, and anand plappally | Mr. Meraj ahmad | Indian institute of technology, jodhpur, india |
| 62 | Track-2 | ICSEEGT2022 _T2_2141 | Towards optimization of horizontal flow constructed wetlands (hfcws) design by employing machine learning on the secondary datasets | saurabh singh, n m kulshreshtha, shubham goyal, u brighu, a n bezbaruah, and a b gupta | Mr. Saurabh singh | Malaviya national institute of technology jaipur, india |
| 63 | Track-2 | ICSEEGT2022 _T2_2142 | Analysis of blended concrete cubes under impact loading using ansys | janhavi singh, and shilpa pal | Ms. Janhavi singh | Delhi technological university , new delhi, india |
| 64 | Track-2 | ICSEEGT2022 _T2_2149 | Soil erosion mapping using remote sensing and gis - a case study of rewa river watershed, naitasiri province, fiji | swetha priya darshini thammadi, and sateesh kumar pisini | Ms. Swetha priya darshini thammadi | Fiji national university , suva, fiji |
| 65 | Track-3 | ICSEEGT2022 _T3_3152 | A novel fuzzy direct control of induction motor drive | bharat gothania, r.k. kumawat, gaurav jain, and annu govind | Mr. Bharat gothania | Career point university , kota, india |
| 66 | Track-1 | ICSEEGT2022 _T1_1157 | Gis mapping for distribution of ground water quality in udaipur | sangeeta choudhary, denis jangeed, prithvi raj rankawat, sw tank, and nikhil sen | [illegible] choudh[illegible] | Geetanjali [illegible] technical [illegible]pur, india |

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| 67 | Track-3 | ICSEEGT2022 _T3_3159 | Numerical analysis of rcc beam using abaqus | a.hemamathi, binu sukumar, and r.b. hambrish guru chandrakant | Ms. A.hemamathi | R.m.k. engineering college, tamil nadu, india |
| 68 | Track-2 | ICSEEGT2022 _T2_2162 | Investigation into the compressive stress on lumber spine among tractor driver during different ride conditions | Chander prakash, lakhwinder pal singh, and ajay gupta | Mr. Chander prakash | Dr. B. R. Ambedkar national institute of technology jalandhar, punjab, india |
| 69 | Track-2 | ICSEEGT2022 _T2_2163 | Correlation study of physico-chemical parameters and water quality index around kodungaiyur dumping ground | Aishwarya r., faizuneesa a., hemamathi a., ramshankar p., and yuvraj m. | Mrs. Aishwarya r | R.m.k. engineering college, tamil nadu, india |
| 70 | Track-2 | ICSEEGT2022 _T2_2165 | Geo-statistical analysis of ground water fluctuations for sustainable management of groundwater resources within the chaliyar basin, southwest india | mohd izharuddin ansari, l n thakral, and quamrul hassan | Mr. Mohd izharuddin ansari | Jamia millia islamia, jamia nagar, okhla, new delhi-110025, india |
| 71 | Track-2 | ICSEEGT2022 _T2_2166 | Environmental impact assessment of maize production in northern india | Rohit kumar, arvind bhardwaj, lakhwinder pal singh and gurraj singh | Mr. Rohit kumar | Department of industrial and production engineering, dr. B r ambedkar national institute of technology, jalandhar, punjab, india-144027nit jalandhar |
| 72 | Track-3 | ICSEEGT2022 _T3_3167 | A literature review on mechanical properties of waste pet bottle based fibre | Devendra kumar somwanshi, vijay prakash sharma, shikha sharma, and kalpit jain | Mr. Vijay prakash sharma | Manipal university jaipur, india |
| 73 | Track-3 | ICSEEGT2022 _T3_3168 | Compressive strength of waste pet bottle based fibre | Devendra kumar somwanshi, vijay prakash sharma, sikha sharma, kalpit jain | Mr. Vijay prakash sharma | Manipal university jaipur, india |
| 74 | Track-1 | ICSEEGT2022 _T1_1169 | Experimental and numerical investigation on strength behaviour of geogrid reinforced subgrade soil | sateesh kumar pisini, swetha priya darshini thammadi, monish nadan, naadirah edward, and shaniza farnaz nisha | Mr. Sateesh kumar pisini | Fiji national university, suva, fiji |

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| 75 | Track-1 | ICSEEGT2022 _T1_1171 | Optimization of renewable energy resource -a review | vijay prakash sharma, devendra kumar somwanshi, kalpit jain, and raj kumar satankar | Mr. Vijay prakash sharma | Manipal university jaipur, india |
| 76 | Track-1 | ICSEEGT2022 _T1_1172 | A literature review on renewable energy resource and optimization | Vijay prakash sharma, devendra kumar somwanshi, kalpit jain, and raj kumar satankar | Mr. Vijay prakash sharma | Manipal university jaipur, india |
| 77 | Track-2 | ICSEEGT2022 _T2_2173 | Performance evalution of water treatment plant of kekri, rajasthan, india | roop singh sinsinwar, and munna verma | Mr. Roop singh sinsinwar | Bhagwant university ajmer, rajasthan, india |
| 78 | Track-2 | ICSEEGT2022 _T2_2175 | An investigation of sick building syndrome (sbs) affecting health of occupants in western maharashtra, india. | amol d pawar, anil agarwal, babalu rajput, and sudarshan d kore | Dr. Amol d pawar | National institute of construction management ( nicmar ) pune campus, pune, india |
| 79 | Track-1 | ICSEEGT2022 _T1_1177 | The uptake of environmental management system by small and medium enterprises (smes) in india | hari prapan sharma, and kishore kumar | Dr. Hari prapan sharma | Gla university , mathura, india |
| 80 | Track-3 | ICSEEGT2022 _T3_3178 | Design and development of the divergent wind turbine | Himanshu rajput, anil gupta, harihar sah, manoj gattani, and raj kumar satankar | Mr.himanshu rajput | Poornima college of engineering, jaipur, india |
| 81 | Track-3 | ICSEEGT2022 _T3_3179 | Energy efficient buildings in india: key area and challenges | preeti tarkar | Dr. Preeti tarkar | Gla university , mathura, india |
| 82 | Track-2 | ICSEEGT2022 _T2_2180 | Emission performance assessment of in-use diesel-driven cars | abhinav pandey, rajeev kumar mishra, and govind pandey | Mr. Abhinav pandey | Delhi technological university , new delhi, india |
| 83 | Track-1 | ICSEEGT2022 _T1_1183 | Techno-economic assessment of lpg operated porous radiant burner based cook-stoves for commercial cooking applications | sofia rani shaik, p muthukumar, pratul and chandra kalita | Ms. Sofia rani shaik | Indian institute of technology guwahati, india |
| 84 | Track-1 | ICSEEGT2022 _T1_1082 | Eco-anxiety and environmental concern as predictors of eco-activism | nishtha jain , and prashasti jain | Ms. Nishtha jain | Manipal university jaipur, india |
| 86 | | | The need for legislation on renewable energy for sustainable development in india | Aniket bhargava, and khyati kochhar | Khyati kochhar | Faculty of law, banasthali vidyapith banasthali [illegible], india |

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Director, CoE (AME), Adama Science & Technology University Adama, Ethiopia

VALEDICTORY SESSION

Day & Date : Saturday, June 25, 2022 • Time: 02:30 PM to 03.15 PM (IST)

Prof. (Dr.) Mahesh M. Bundele
Director & Principal, PCE, Jaipur, India
General Chair, ICSEEGT 2022

Ar. Rahul Singhi
Director, Poornima Group, Jaipur, India
Patron, ICSEEGT 2022

Mr. Pankaj Dhemla
Vice Principal, PCE, Jaipur, India
Organizing Chair, ICSEEGT 2022

Organizing Chair, ICSEEGT 2022

Prof. (Dr.) Narayan Lal Jain
HOD, ME, PCE, Jaipur, India

Dr. Pran Nath Dadhich
HOD, Civil, PCE, Jaipur, India

ORGANISING SECRETARY, ICSEEGT 2022

Dr. Raj Kumar Satankar
ICSEEGT 2022

Dr. Pooja Gupta
ICSEEGT 2022

Conference Mode: **Offline:** CG-05, PCE Campus • **Virtual:** MS Teams

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Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

**FEEDBACK ANALYSIS:**

2. The organization of the conference was?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

3. Technical Sessions were informative and managed well.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

4. How do you rate Keynote Speaker's talk? *

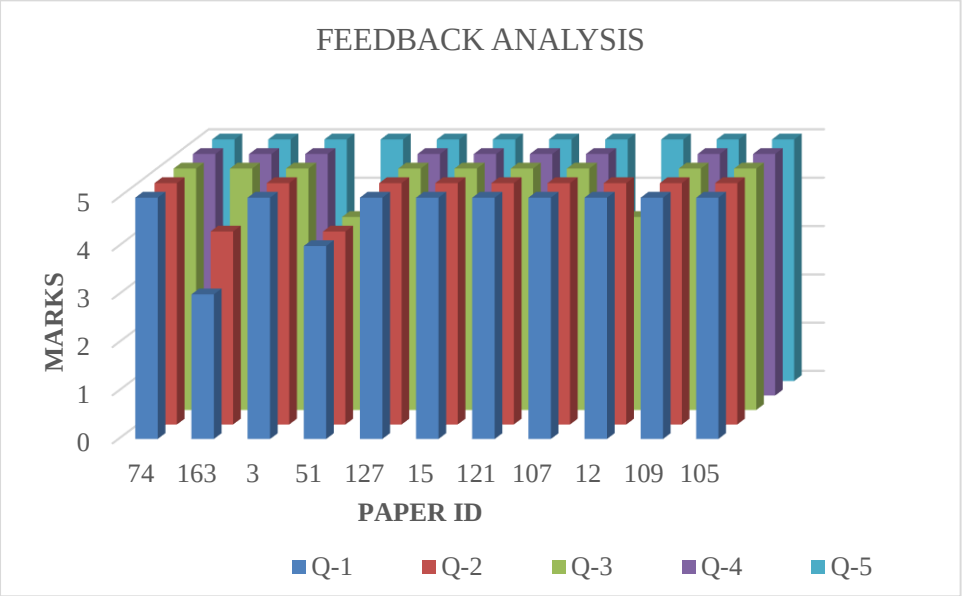
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

5. Knowledge sharing during the conference? *

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

6. Timely Information sharing with participants, and responses from the organizers

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |




**SWOT ANALYSIS:** Nil

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**BUDGET & ACTUALS:**

| S. NO. | EXPENDITURE | RATE | QUANTITY | AMOUNT |
|---|---|---|---|---|
| 1 | Session Chair Honorarium | | | 15000 |
| 2 | Best Paper Award | | | 10750 |
| 3 | Paper Publication Fee (@ 80 Dollar) | 6386 | 83 | 530038 |
| 4 | Souvenir Print | 4000 | 3 | 12000 |
| 5 | Inaugural Expenditure | | | |
| 6 | Other Expenditure | | | |
| | | **TOTAL EXPENDITUTRE** | | **578538** |

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POORNIMA
COLLEGE OF ENGINEERING

Promoted by Shanti Education Society, Affiliated to Rajasthan Technical University & Approved by AICTE

# CONFERENCE REPORT

## Third International Conference on Artificial Intelligence: Advances and Applications-2022 (ICAIAA-2022)

**TITLE AND DURATION:** Third International Conference on "Artificial Intelligence: Advances and Applications, ICAIAA-2022" (April 23-24, 2022).

**SPONSORS:** RTU TEQIP-III.

**SUPPORTERS:**Rajasthan Technical University (RTU), Kota.

**ORGANIZING PARTNERS:** Poornima College of Engineering, Jaipur and Rajasthan Technical University, Kota in association with Soft Computing Research Society (SCRS)

**PUBLISHER(S):** Springer

**THEMES/TRACKS:**

**Track-1-** Artificial Intelligence

**Track-2-** Intelligent Sensor, Devices & Applications

## OBJECTIVES:

Poornima College of Engineering, Jaipur and Rajasthan Technical University Kota in association with Soft Computing Research Society (SCRS) jointly organized the 3rd International Conference on Artificial Intelligence: Advances and Applications (ICAIAA-2022) in Virtual Format during April 23-24, 2022.

**ICAIAA-2022 (International Conference on Artificial Intelligence: Advances and Applications-2022)** is a two-day conference which aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Engineering Applications of Artificial Intelligence. It also provides a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns with practical challenges encountered and solutions adopted in the fields of Engineering Applications of Artificial Intelligence. This conference covers research works carried out by various students

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such as bachelor, master and doctoral scholars,faculty and industry persons in the area of Artificial Intelligence, Machine Learning, and Deep Learning applications in Healthcare, Agriculture, Business, and Security etc. It will also cover research in core concepts of Computer Networks, Intelligent System design and deployment, Real time systems, WSN, Sensors and Sensor nodes, SDN, NFV etc. Each book chapter shall emphasize on specific subdomains of AI and Deep Learning. It will be useful for students, faculty and industry working on AI applications. AI is an emerging technology that shall be used almost all applications / technologies/ systems in one or other form. Thus, the conference provides opportunities for the delegates to exchange new ideas and application experiences face to face, to establish business or research relations and to find global partners for future collaboration.

## EXPECTED OUTCOMES:

The expected outcomes from the Conference are:

- A toolkit for implementation
- Learning and knowledge exchange among Conference participants through interdisciplinary discussions.
- A series of documented case studies, video interviews, information briefs and other materials for Artificial Intelligence.
- A Conference report, including lessons from the International Decade for Advancement and Application in the field of Artificial Intelligence.

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**BROCHURE/POSTER/LEAFLET/FLYER:**

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# 3rd International Conference on Artificial Intelligence: Advances and Applications-2022 (ICAIAA-2022)

**April 23-24, 2022**

In Association with Springer

Organized by POORNIMA COLLEGE OF ENGINEERING & SCRS

## WELCOME TO ICAIAA-2022

The Conference on Artificial Intelligence: Advances and Applications-2022 is the third International Conference being organized with publication support of Springer. It is being jointly organized by Poornima College of Engineering, Jaipur, and Soft Computing Research Society. The objective of the conference is to bring together researchers from academia, government agencies, research laboratories and the corporate sector from all over the world to present their research works carried out in Artificial Intelligence domain. Artificial Intelligence research is leading to evolve in the area of Machine Learning, Deep Learning applications in Healthcare, Agriculture, Business and Security etc. It will also cover research in core concepts of Computer Networks, Intelligent System design and deployment, Real time systems, WSN, Sensors and Sensor nodes, SDN, NFV etc. It will be useful for students, faculty and industry working on AI applications. AI is an emerging technology that shall be used almost all applications / technologies/ systems in one or other form.

## ICAIAA-2022 COMMITTEES

### PATRON

**Ar. Rahul Singhi,** Director, Poornima Group, Jaipur, India

### GENERAL CHAIRS

**Mahesh Bundele,** Principal & Director, PCE, Jaipur
**Garima Mathur,** PCE, Jaipur, India
**Ashish Kumar Tripathi,** MNIT, jaipur
**Marcin Paprzycki,** Polish Academy of Sciences, Poland

### ORGANIZING CHAIRS

**Kusum Kumari Bharti,** IIITDM, Jabalpur, India
**Harish Sharma,** RTU Kota, India
**Pankaj Dhemla,** Vice-Principal PCE, Jaipur, India

### PROGRAM CHAIRS

**Ritu Sharma,** MNIT Jaipur, India
**S. D. Purohit,** Rajasthan Technical University, Kota, India
**Prashant Singh Rana,** Thapar University, Patiala, India

### ADVISORY COMMITTEE

**Atulya K. Nagar,** Liverpool Hope University, UK
**Nooritawati Md Tahir**
University Technology MARA (UiTM), Malaysia
**Aboul Ella Hassanien,** Cairo University, Egypt
**K. S. Nisar,** Riyadh, Saudi Arabia
**Rajesh kumar Singh,** University of Pisa, Italy
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**Rana Khudhair Abbas Ahmed**
Alneelain University, Khartoum, Sudan
**Nagendra Prasad Pathak,** IIT Roorkee
**Aniruddha Chandra,** NIT Durgapur
**Jagdish Chand Bansal,** South Asian University, New Delhi
**Lyla B.Das,** NIT Calicut
**Nilanjan Dey,** JIS University, Kolkata
**Preetam Kumar,** IIT, Patna
**Rahul Pandya,** IIT Dharwad
**Rajveean Chandel,** NIT Hamirpur
**R. P. Yadav,** MNIT Jaipur
**Vimal Bhatia,** IIT Indore

### REGISTRATION CHAIRS

**Mukesh Saraswat,** Jaypee Institute, Noida
**Anila Dhingra,** PCE, Jaipur, India
**Sanjeev Yadav,** GECW, Ajmer

### PUBLICITY CHAIRS

**Sandeep Kumar,** CHRIST University, Bangalore, India
**Payal Bansal,** PCE, Jaipur, India
**Deepak Bhatia,** Rajasthan Technical University, Kota, India

### SESSION MANAGEMENT COMMITTEE

**Tarun Mishra,** PCE, Jaipur, India
**Durgesh Kumar,** PCE, Jaipur, India
**Manish Sharma,** PCE, Jaipur, India
**Amit Ku Jain, PCE,** Jaipur, India
**Manisha Kumawat,** PCE, Jaipur, India
**Shuchi Dave,** PCE, Jaipur, India

## CALL FOR PAPERS

Prospective authors from academia as well as Industry are invited to submit their full papers in Main Conference ICAIAA- 2022, which have not been yet submitted/ published and that illustrate research, surveying works, and industrial applications in artificial intelligence domain describing significant innovation and advances in following broad areas, but not limited to:

### Track-I Artificial Intelligence

- Agent-Based Systems
- Bioinformatics and Computational Biology
- Artificial Life
- Collective Intelligence
- Differential Evolution
- Evolutionary Scheduling
- Machine Learning
- Ant Colony Optimization
- Artificial Intelligence In Modeling And Simulation
- Artificial Immune Systems
- Computer Vision And Speech Understanding
- Evolutionary Design
- Expert Systems
- Deep Learning
- Approximate Reasoning
- Natural Language Processing
- Brain-Machine Interfaces
- Data Mining
- Neural Network Theory and Architectures
- Human–Computer Interaction
- Nature Inspired Algorithm

### Track-2 Intelligent Sensor, Devices & Applications

- Automatic Control
- Sensors in Automobile
- Fuzzy Systems For Robotics
- Intelligent Database Systems
- Sensor Modeling And Identification
- Molecular And Quantum Computing
- Robotics And Related Fields
- Web Intelligence Applications And Search
- Intelligent System Architectures
- Health Care Applications
- Network Intelligence
- Routing Protocol in WSN
- Natural Language Processing
- CAD Design & Testing
- Computational Theories Of Learning
- Intelligent Sensor
- Information Retrieval
- Mechatronics
- VANET
- Energy Optimization of Wireless Devices
- Agriculture Applications
- Disaster Management
- Variable Bio-Sensors
- Coverage Problem in WSN
- Sensors for Medical Health Application
- Hybrid Intelligent Systems
- Multi-Agent Systems
- Environmental/ Earth Sensing
- Pervasive Computing And Ambient Intelligence
- Synthesizing Controllers
- Industrial Monitoring
- Security and Privacy Data Mining
- Business intelligence

### Oral Presentation

The author / presenter shall prepare 15 minutes presentation about the research paper contribution including Objective, Justification, Methodology, Results, and Conclusion as per template here. There will be 3-5 minutes query time. Presentation schedule will be displayed well before time.

### Important Dates

| | | |
|---|---|---|
| Last Date of Paper Submission | : | February 25, 2022 |
| Acceptance Notification | : | March 31, 2022 |
| Camera Ready Paper | : | April 10, 2021 |
| Last Date of Registration | : | April 15, 2022 |

### CONTACT PERSONS

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Mobile: +91-9828999440

**Dr. Garima Mathur**
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**Dr. Ashish Kumar Tripathi**
Email: ashish.cse@mnit.ac.in
Mobile: +91-9999865120

### Registration Fees

| Author Category | Early Bird Registration India | Early Bird Registration Outside India |
|---|---|---|
| Regular Author | 5000 INR/- | 120 USD |
| Regular Author (Existing SCRS Members) | 4000 INR/- | Not Applicable |
| Listener (Non-Author/Co- Author/ General Participants) | 1500 INR | 50 USD |
| Listener (Existing SCRS Members) (Non-Author/Co- Author/ General Participants) | 1000 INR | 40 USD |

**Last Date: 15 April 2022**

### PAPER SUBMISSION

All the papers should be prepared as per author guidelines. The manuscript written should be thoroughly checked for grammatical or typographical errors before submission. Authors should ensure that the similarity score of their research paper is not above 15 %. Manuscripts having similarity score more than 15 % shall not be processed. All the review manuscripts should be submitted in PDF format without authors name and affiliations using Easy Chair Conference Management Systems written Springer Template in Word (A4) or in Latex. However the names of all authors should be registered on easy chair while submission. Maximum number of page allowed will be 08 (Eight).

Website: **https://www.icaiaa22.scrs.in/**

Paper submission Link : **https://easychair.org/conferences/?conf=icaiaa22**

**Conference Venue : POORNIMA COLLEGE OF ENGINEERING, ISI-6 RIICO Institutional Area, Sitapura, JAIPUR – 302022 (Raj.), INDIA**

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## RESPONSE (SUBMISSION/ACCEPTANCE/PRESENTATION):

In ICAIAA-2022, total 300 papers received across the world consented and reviewed. 110 papers were accepted after a rigorous review procedure, making it very selective. 90 papers wereregistered. And out of which 70 papers were presented in two tracks.

| | Track1 | Track2 | Total |
|---|---|---|---|
| **Total No. of Papers Submitted** | 154 | 146 | 300 |
| **Total No. of Papers Accepted** | 68 | 42 | 110 |
| **Total No. of Papers Registered** | 53 | 37 | 90 |
| **Total No. of Papers Presented** | 38 | 32 | 70 |

## PROGRAM OUTLINE:

**(23-24th April 2022)**

**Program Schedule**

**Day – 23, April 2022**

| | | |
|---|---|---|
| | **Opening Ceremony and Keynote Talk** | 13:00 – 14:45 |
| **OC** | Opening Ceremony | 13:00 – 14:00 |
| **K1** | Data Generation using Modelling and Simulation For Machine Learning<br>**Speaker: Prashant Singh Rana**, Thapar Institute of Engg & Tech, Patiala, Punjab, India | 14:00 – 14:45 |
| | **TS01: Artificial Intelligence** | 16:00 – 17:30 |
| **0238** | Sri Raaghav N U, Aathikrishna S K, Anbumani T and Subbulakshmi B<br>*Online Proctoring System* | |
| **0677** | Kaviyameena D, Kavitha D, Uma Maheswari B and Sujatha R.<br>*Application of Machine Learning Models to Improve the Accuracy of Earnings Management Prediction* | |
| **2538** | Deepika Vodnala, Shravya Jadhav, Konagari Vishnupriya and Vemuri Rohit<br>*Machine Learning-Based Tool to Classify Online Toxic Comments* | |
| **0486** | Tarunim Sharma, Dr. Shalini Bhaskar, Dr. Aman Jatain and Dr. Kavita Pabreja<br>*Literature Review: A Comparative Study of Software Defect Prediction Techniques* | |
| **7081** | Prachi Rajarapollu, Aditya Borse, Megharaj Sonawane, Hrishikesh Sonawane and Ashish Mali<br>*System Development to Analyze Recruitment Process and Eligibility Criteria Using Machine Learning Algorithms* | |
| **7373** | Laxmi Rajput and Sanjay Kumar<br>*Spherical fuzzy parameterized soft set based multi-criteria decision-making method* | |
| **7603** | S. Vijayashaarathi and S. Nithya Kalyani<br>*Enhanced Error Correction Algorithm for Streaming High Definition Video over Multihomed Wireless Networks (MWN)* | |
| **6813** | Payal Bansal and Pallavi Sapkale<br>*Sentimental Segregation for Social Media Using Lexicon Technology* | |
| | **TS02: Intelligent Sensor, Devices & Application** | |

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| **5832** | Himanshi Chaudhary, Sakshi Gujral and Ankita Verma<br>*Swarm Intelligence Based Drones: Opportunities & Future Aspects* |
| **9073** | Disha Sharma, Dharmendra Vaishnav, Divyanshu Joshi, Gopal Krishan Sharma and Dharmendra Trivedi<br>*A REVIEW: Development of smart agriculture using IOT, agriculture robots and wireless sensory network* |
| **7191** | Shivoy Pandey, Samrat Mehta, Sachin Kumar Sahu and Ankit Sharma<br>*Broadband SIW Cavity Backed High Gain Slot Antenna* |
| **4414** | Sandeep Pratap Narayan Mishra, Sarwang Patel, Vidya Sagar Singh and Ruchi Agrawal<br>*Frequency reconfigurable C Shape substrate integrated waveguide antenna for cognitive radio application* |
| **6054** | Rugved Sanjay Chavan, Gaurav Gaurav and Nitesh Pradhan<br>*Advance Plant Health Monitoring and Forecasting System Using Edge-Fog-Cloud Computing and LSTM Networks* |
| **8422** | Sajid Ansari, Md Imran, Shahab Saquib Sohail and Piyush Kumar Gupta<br>*Collaborative Filtering based Top-n Ranked Recommender System: An Implementation and Comparison Methodology* |
| **8889** | Venelin Todorov and Ivan Dimov<br>*An Optimal Monte Carlo Approach related to Multidimensional Artificial Intelligence* |
| **8817** | Takalani Orifha Mufamadi and Takalani Orifha Mufamadi<br>*Crop Recommendation System using Machine Learning Algorithms and Soil Attributes Data* |
| **TS03: Computer Vision** | 16:00 – 17:30 |
| **5860** | Dipika Malhotra and Satinder Kaur<br>*Recognition Of CAPTCHA Characters Using Machine Learning Algorithms* |
| **5053** | P Venkata Lavanya, C Venkata Narasimhulu and K Satya Prasad<br>*Image Denoising using DT-CWT combined with ANN and Grey wolf Optimization Algorithm* |
| **3289** | Rohit Sartandel, Mahendra Choudhary, Anish Arun and Leena Ladge<br>*Crop Recommendation System and Plant Disease Classification using Machine Learning for Precision Agriculture* |
| **4909** | Jagdish Kumar and Apash Roy<br>*Handwritten Text Recognition for Regional Languages of Indian Subcontinent* |
| **4258** | Olimpia Borgohain, Meghna Dasgupta, Pramod Kumar, Samiur Rahman and Saurabh Sutradhar<br>*Recognition of Handwritten Assamese Characters* |

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| **3155** | Cynthia Sherin B and Kayalvizhi Jayavel<br>*Effective Vehicle Classification and Re-Identification on Stanford Cars Dataset using Convolutional Neural Networks* |
| **2976** | Kedar Kharde, Siddhesh Bhere, Siddhesh Gadge, Rohit Jadhav and Indu Dokare<br>*Recognition of Indian Sign Language Characters using Convolutional Neural Network* |
| **TS 04: Big Data Analytics** | 16:00 – 17:30 |
| **5453** | Sushma Iliger and Mario Pinto<br>*Comparative Study of Rainfall Prediction Modeling Techniques : Case Study on Karapur, India* |
| **5337** | Sangeetha S, Sangeetha B, Raja Kumar I, Shevannth R, Krishna Prasath S and Mohammed Rafi M<br>*Fake Review Detection Using Deep Learning* |
| **2129** | Nowshith Parveen N, Kavitha D, Uma Maheswari B and Sujatha R<br>*Assessment of firm's performance by employing text mining techniques* |
| **0668** | Parimal Kumar, Ayesha Farooq and Rishikesha T. Krishnan<br>*An Empirical Study to Identify Critical Factors based on which Investors make decision for funding in the context of Indian Startup Ecosystem* |
| **2819** | Sujatha R, Uma Maheswari B, Kavitha D and Subash A R<br>*Predictive Model with Twitter data for predicting the Price Volatility of Cryptocurrencies using Machine Learning Algorithms* |
| **3430** | Bhavana Bhagat and Dr. Shital Dande<br>*A Literature Review on Sentiment Analysis using Machine Learning in Education Domain* |
| **7858** | Anchal Pokharana, Krishan Kant Sharma and Samiksha Sharma<br>*The Analytics of Big Data & Hadoop Architecture: A Literature Review* |
| **7977** | Paola Santana-Morales, Alberto F. Merchán, Alba Márquez-Rodríguez and Antonio J. Tallón-Ballesteros<br>*Feature ranking for feature sorting and feature selection: FR4(FS)^2* |
| **TS 05: Emerging Technology** | 16:[illegible] – [illegible] |
| **2934** | Shahana Chandrasekaran, Vignesh S and Susa[illegible]na M[illegible]<br>*FOREST FIRE ALERT SYSTEM* |
| **6030** | Antara Sengupta, Sreeya Ghosh and Pabitra P[illegible]<br>*Analysis of Changes Occurring in C[illegible]ositions due to [illegible]ons Through the Cellular Automata Transition Rules* |
| **5244** | Anjali Bobra and Dr. Bhavesh Patel<br>*Energy Optimization In Data Centers F[illegible]* |

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| **8585** | Tejas Dhopavkar, Omkar Ghagare, Onkar Bhatlawande and Sujata Khedkar<br>*Emotional AI Enabled Interview Aid* |
| **7701** | Saurav Telge, Ranjan Bala Jain, Ryan Rodricks, Adarsh Singh and Mrunmayee Waingankar<br>*Tumordc.AI: A Comprehensive Deep Learning-based Brain Tumor Detection and Classification system* |
| **5731** | S M Annapurna, Sunil Rajora, Yoginder Kumar, Sai Krishna V and Navjot Kumar<br>*FTIR based characterization and classification of various Indian monofloral honey samples* |
| **2368** | Aastha Budhiraja and Kamlesh Sharma<br>*Decisions Prediction Techniques using Language Processing and Learning Algorithms* |
| **6276** | Dr.N N.Senthamarai<br>*Optimization of Resource Management for workload allocation in Cloud Computing* |
| **1341** | Kirti Pandey and C K Jha<br>*Comparison of Different Swarm Based Nature Inspired Algorithm for solution of Optimization Problem* |
| **8024** | Mpho Mendy Nefale and Ritesh Ajoodha<br>*Using numerous biographical and enrolling observations to predict student performance* |
| **TS 07: Intelligent Sensor, Devices & Application** | 11:00 – 12:30 |
| **1450** | Chaladi S Ganga Bhavani, Dr N Bhanu Prasad and Dr. D Ravi Kishore<br>*A Novel Interleaved High-Voltage Gain Boost Converter for Solar PV* |
| **9514** | Jahanvi Singh, Pranita Ranade and Tanmoy Goswami<br>*Augmented Reality based smart Mobile Application to make ASD children accustomed to daily challenges* |
| **5588** | Manipriya Sankaranarayanan, Madhav Aggarwal and Mala C<br>*Semi-Automatic Vehicle Detection System for Road Traffic Management* |
| **8242** | Akanksha Dawande, Uday Chourasia and Priyanka Dixit<br>*Music Generation And Composition Using Machine Learning* |
| **6184** | Iosun Stephen Shima, Mustapha Lawal Abdulrahman and Abdulsalam Yau Gital<br>*A Review on Deep Learning Algorithms for Real Time Detection of Multiple Vehicle Based Classes: Challenges and Open Opportunities* |

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|---|---|---|
| **5815** | Emanuele Lindo Secco<br>*A Surveillance Mobile Robot based on Low-Cost Embedded Computers* | |
| **6671** | Mu'Azu Aminu Aliyu, Souley Boukari, Abdullahi Gamsha Madaki and Mustapha Lawal Abdurrahman<br>*TOWARDS A BETTER MODEL FOR THE SEMATIC SEGMENTATION OF REMOTE SENSING IMAGERY* | |
| **1179** | Manikandan R<br>*Evolutionary Algorithms for Marine dynamical systems:Towards sustainable renewable energy harvesting from Offshore environment* | |
| **TS 08: Computer Vision** | | 11:00 – 12:30 |
| **7408** | Sajan Kar<br>*A Deep Learning CNN based approach to the Problem of Crypto-Currency Prediction.* | |
| **8697** | Deepika Vodnala, Konkathi Shreya, Maduru Sandhya and Cholleti Varsha<br>*Skin Cancer Detection Using Convolutional Neural Networks and InceptionResNetV2* | |
| **3946** | Revathi S A, Dr. B Sathish Babu and Dr. Subramanya K N<br>*Deep Learning Approach for Segmenting and Classifying Knee Osteoarthritis using MR Images* | |
| **5054** | Salma Itagi, Likhith Sr and Salma Itagi<br>*Automated detection of Multi Class Lung diseases using Deep Learning with the help of X-ray Chest Images* | |
| **2567** | Asha J Vithayathil and A Sreekumar<br>*Pixel Based Image Encryption Approaches: A Review* | |
| **8249** | Nidhi Panchal, Garima Iyer, Pranav Pandya and Shruti Dodani<br>*Tumor Visualization Model for Determining Pathway in Radiotherapy* | |
| **5190** | A.H.M. Zadidul Karim, Md. Badeuzzamal Sarker, Md. Rafiqul Alam Rejon, Md. Saimun Islam, Rafatul Alam Fahima and Md. Sazal Miah<br>*Classification of Electrocardiogram Using Color Images with Pixel Method by Deep CNN* | |
| **6090** | Tasneem Ahmed, Nashra Javed, Mohammad Faisal and Halima Sadia<br>*A Framework for Smart Agriculture System to Monitor the Crop Stress and Drought Stress Using Sentinel-2 Satellite Image* | |
| **TS 09: Emerging Technology** | | 11:00 – 12:30 |
| **7918** | Utkarsh Pandey, Anshumaan Pathak, Surajit Mondal and Kaushik Ghosh | |

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|---|---|---|
| | *SIMULATION OF DENSITY BASED TRAFFIC CONTROL SYSTEM USING PROTEUS 7.1 PROFESSIONAL* | |
| **8726** | Sunil Rajora, S M Annapurna, Yoginder Kumar, Sai Krishna V and Navjot Kumar<br>*Development of Thermocycler for On-site Detection of Meat Authenticity and Microbial contamination* | |
| **7215** | Maheen Ashraf, Syeda Fatima, Misbah Fatma, Sidratul Muntaha, Umme Rooman, Shahab Saquib Sohail and Ahmad Sarosh<br>*Private browsing does not affect Google personalization: An experimental evaluation* | |
| **8153** | Jey Shree Lakshmi J, Subalakshmi J, Joyslin Janet J, Vigneshwaran B and Sivapalanirajan M<br>*Deep learning-based condition monitoring of insulator in overhead power distribution lines using Enhanced Cat Swarm Optimization* | |
| **9856** | Abubakar Saddiq Mohammed, Isiaka Olukayode Mosudi and Suleiman Zubair<br>*Performance Evaluation of Secured Containerization for Edge Computing in 5G Communication Network* | |
| **6523** | Loong Chuen Lee, Nur Fatin Syuhada Binti Roslee and Hukil Sino<br>*Evaluating Morphometric Feature Variability of Handwritten Numerals among Malaysian Malays using Self-Organizing Maps* | |
| **6216** | Chiulan Yeh and Fu-Yuan Li<br>*A Study of Computer Drawing Used in Menswear Design* | |
| **Keynote Talk, Award Announcements and Valedictory Function** | | 13:00 – 14:15 |
| **K2** | Developing AI Models for Solving Real-World Problems<br>**Speaker: Mohammad Shorif** [illegible]<br>Jahangirnagar University, Bangladesh | 13:00 – [illegible] |
| **Cc** | Award Announcements and Valedictory Function | [illegible] |

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## INAUGURAL SESSION:

CONFERENCE REPORT
RTU TEQIP-III Sponsored
3rd International Conference on
**Artificial Intelligence: Advances and Applications**
**ICAIAA-2022-(23-24 April 2022)**
**Saturday, April 23, 2022**

**Venue:** Online ICAIAA Conference Hall (Online) **Time**: 12:30 pm to 02.00 pm

| S. No | Activity | Duration | Time |
|---|---|---|---|
| 1. | Reporting and Registration of Delegates –Online Portal & Corresponding Track links | 30 Min | 12.30 pm-01.00 pm |
| 2. | **Ganesh Vandana** | 04 Min | 01:00 pm-01:04 pm |
| 3. | Welcome of Dignitaries by the anchors<br>A. **Prof. Dheeraj Sanghi,** Vice Chancellor, JKLU **(Chief Guest)**<br>B. **Dr. Marcin Paprzycki,** Polish Academy of Sciences, Warsaw, Poland **(Guest of honour)**<br>C. **Dr. Jagdish Chandra Bansal,** General Secretary, SCRS, India<br>D. **Dr. Mahesh Bundele,** Director, PCE & General Chair ICAIAA 2022<br>E. **Dr. Ashish Kumar Tripathi**, MNIT, Jaipur & General Chair ICAIAA 2022<br>F. **Dr. Harish Sharma,** Organizing Chair ICAIAA 2022<br>G. **Deepak Bhatia**, Publicity Chair ICAIAA 2022<br>H. **Ar. Rahul Singhi,** Director, Poornima Group<br>I. **Dr. Garima Mathur,** General Chair ICAIAA 2022 | 01 Min | 01:04 pm-01:05 pm |
| 4. | A. **Felicitation of Chief Guest Prof. Dheeraj Sanghi,** Vice Chancellor, JKLU by **Ar. Rahul Singhi,** Director, Poornima Group<br>B. **Felicitation of Guest of Honour Dr. Marcin Paprzycki,** Polish Academy of Sciences, Warsaw, Poland **by Dr. Mahesh Bundele, Director, PCE** | 08 Min | 01:05 pm-01:13 pm |
| 5. | About the Conference by **Dr. Ashish Kumar Tripathi,** MNIT, Jaipur & General Chair ICAIAA 2022 | 05 Min | 01.13 pm-01.18 pm |
| 6. | Release of Conference Souvenir & Proceeding – Online by Dignitaries and Track Chairs | 02 Min | 01.18 pm-01.20 pm |
| 7. | Address by General Chair ICAIAA 2022 **Dr. Mahesh Bundele,** Director, PCE & General Chair ICAIAA 2022 | 05 Min | 01.20 pm-01.25 pm |
| 8. | Introduction & Address by **Ar. Rahul Singhi,** Director, Poornima Group. | 05 Min | 01.25 pm-01.30 pm |
| 9. | Introduction & Address by **Dr. Jagdish Chandra Bansal,** General Secretary, SCRS, India | 05 Min | 01.30 pm-01.35 pm |
| 10. | Introduction of **Guest of Honour Dr. Marcin Paprzycki,** Polish Academy of Sciences, Warsaw, Poland **Keynote Address** | 10 Min | 01.35 pm-01.45 pm |
| 11. | Introduction & Address by **Chief Guest Prof. Dheeraj Sanghi,** Vice Chancellor, JKLU | 10 Min | 01.45 pm-01.55 pm |
| 12. | Vote of Thanks by **Dr. Garima Mathur,** General Chair ICAIAA 2022 | 03 Min | 01.55 pm-01.58 pm |
| 13. | **Group Photograph -Virtual** | 02 Min | 01.58 pm-02.00 pm |

## DAY 1 Saturday Inaugural Session

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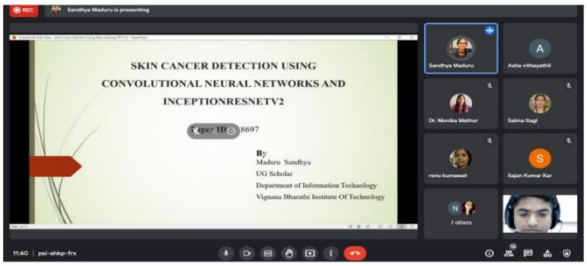
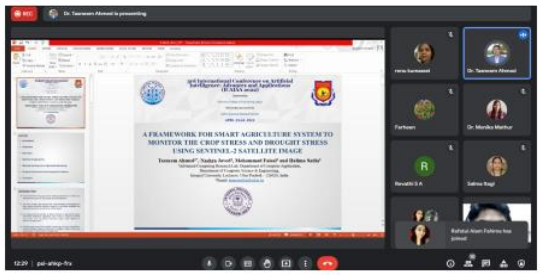
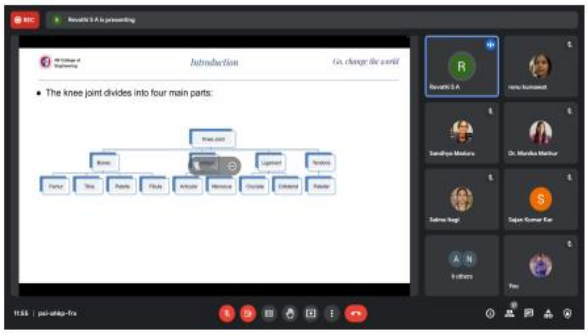
## KEYNOTE SPEAKERS:

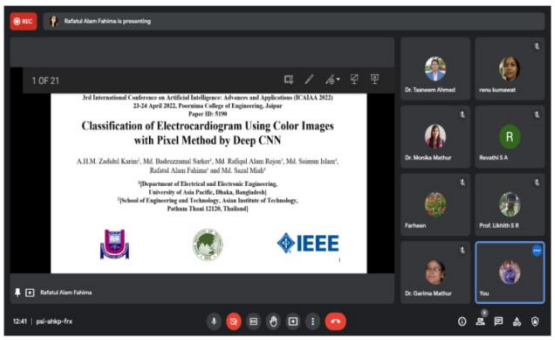
- Prashant Singh Rana,Thapar Institute ofEngg& Tech, Patiala, Punjab, India
- Mohammad Shorif Uddin,Jahangirnagar University, Bangladesh

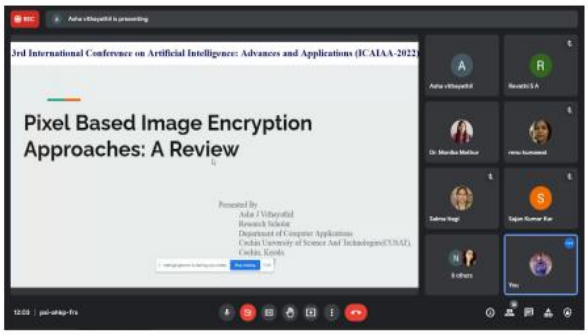
## GLIMPSES OF PRESENTATIONS:

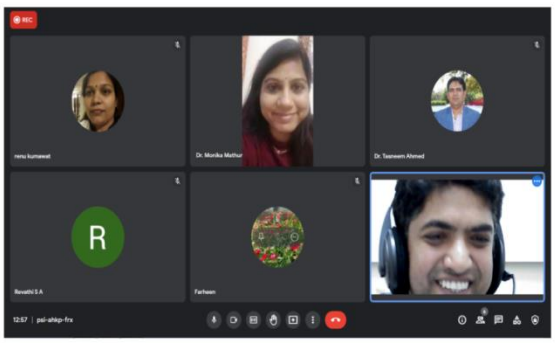






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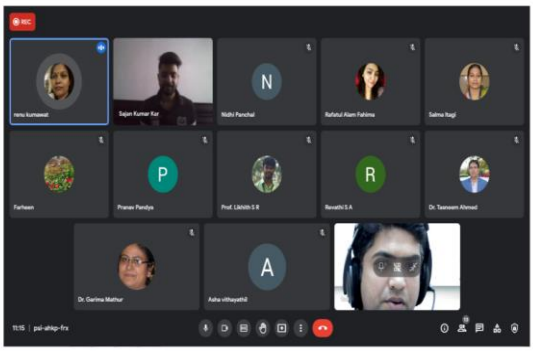

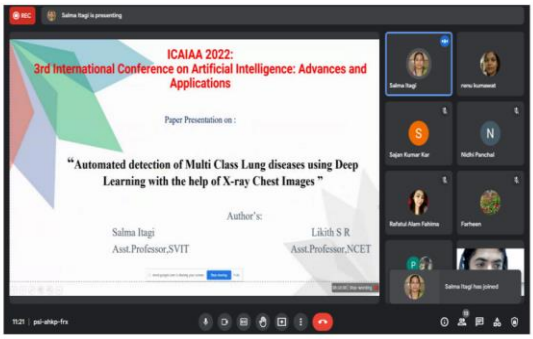

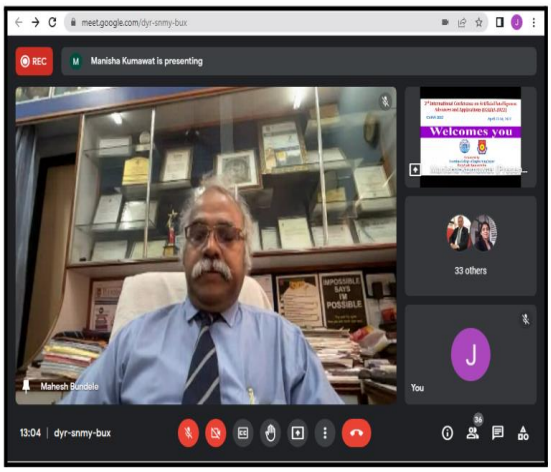


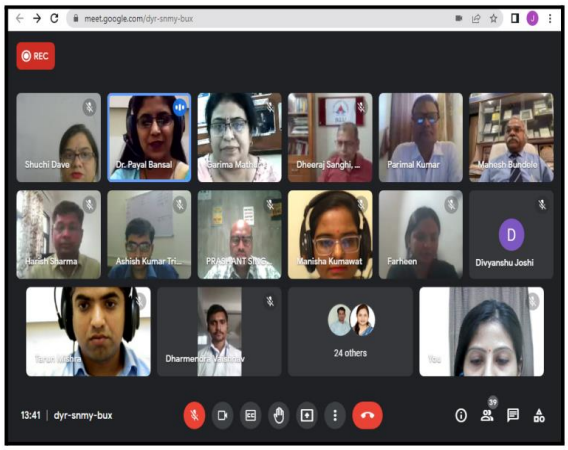


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## VALEDICTORY SESSION:

CONFERENCE REPORT
RTU TEQIP-III Sponsored
3rd International Conference on
**Artificial Intelligence: Advances and Applications**
**ICAIAA-2022-(23-24 April 2022)**
**Sunday- 24th April 2022**
**DAY 2 Valedictory Session**

Venue: Online ICAIAA Conference Hall (Google meet) Time: 01:45 pm to 02:15 pm

| S. No | Activity | Duration | Time |
|---|---|---|---|
| 1. | Reporting of Participants | 15 Min | 01:30 pm – 01:45 pm |
| 2. | Arrival of Dignitaries<br>A. **Prof. Mohammad Shorif Uddin,** Jahangirnagar University, Bangladesh – **Chief Guest**<br>B. **Dr. Jagdish Chandra Bansal,** General Secretary, Soft Computing Research Society<br>C. **Dr. Mahesh Bundele,** Director, PCE, General Chair ICAIAA 2022<br>D. **Dr. Ashish Kumar Tripathi,** MNIT, Jaipur, General Chair ICAIAA 2022<br>E. **Dr. Harish Sharma,** Organizing Chair ICAIAA 2022<br>F. **Dr. Narayan Lal Jain,** Vice Principal, PCE, Jaipur<br>G. **Dr. Garima Mathur,** General Chair ICAIAA 2022 | 02 Min | 01:45 pm – 01:47 pm |
| 3 | **Felicitation of Chief Guest Dr. Jagdish Chandra Bansal,** General Secretary, Soft Computing Research Society, by **Dr. Mahesh Bundele,** Director, PCE, General Chair ICAIAA 2022 | 01 Min | 01:47 pm – 01:48 pm |
| 4 | Report on Conference by **Dr. Garima Mathur,** General Chair ICAIAA 2022 | 02 Min | 01:48 pm – 01:50 pm |
| 5. | Participants Feedback | 05 Min | 01:50 pm – 01:55 pm |
| 6. | E-Certificates Distribution at the hands of **Chief Guest** | 02 Min | 01:55 pm – 01:57 pm |
| 7. | Address by **Dr. Mahesh Bundele,** Director, PCE, General Chair ICAIAA 2022 | 05 Min | 01:57 pm – 02:02 pm |
| 8. | Address by **Chief Guest Mohammad Shorif Uddin,** Jahangirnagar University, Bangladesh | 10 Min | 02:02 pm – 02:12 pm |
| 9. | Vote of Thanks by **Dr. Shuchi Dave,** PCE, Jaipur | 02 Min | 02:12 pm – 02:14 pm |

## FEEDBACK ANALYSIS:

| | Effective use of Time | Effectiveness of Theoretical Session | Course Content Planning and Organization | Effectiveness of Sessions |
|---|---|---|---|---|
| **Strongly Agree** | 35 | 24 | 30 | 29 |
| **Agree** | 10 | 12 | 15 | 11 |
| **Neutral** | 5 | 4 | 3 | 2 |
| **Disagree** | 1 | 1 | [illegible] | [illegible] |
| **Strongly Disagree** | 0 | 0 | 0 | [illegible] |

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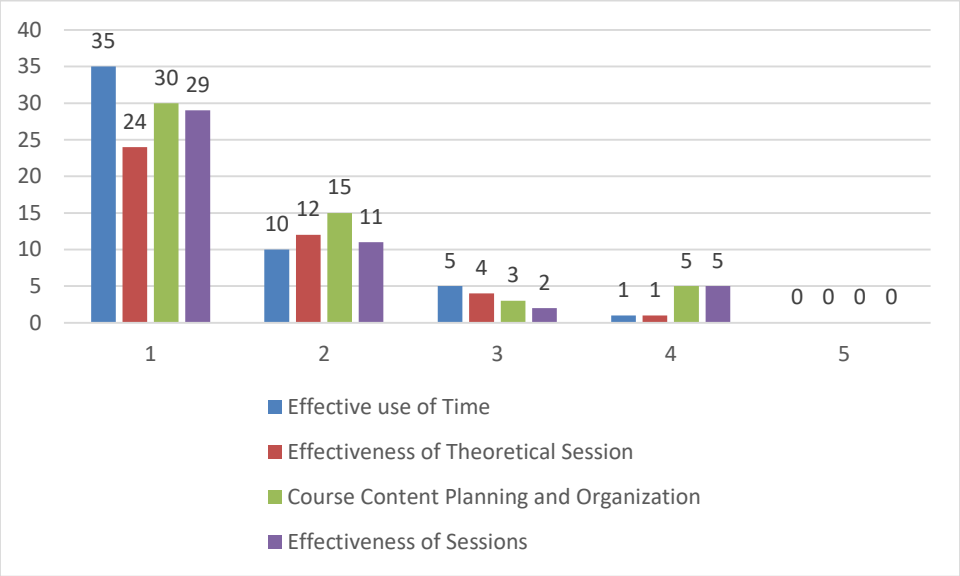
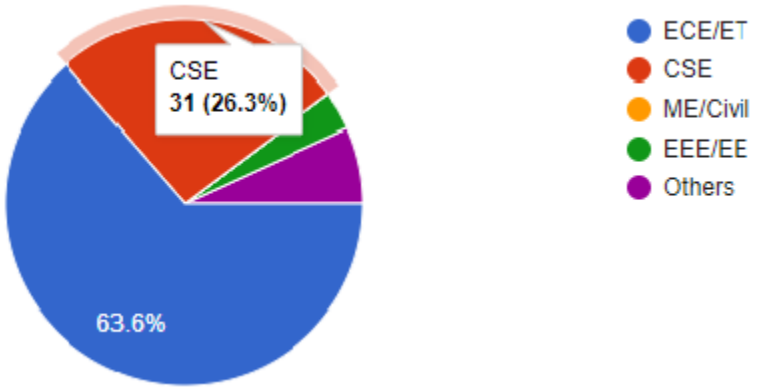
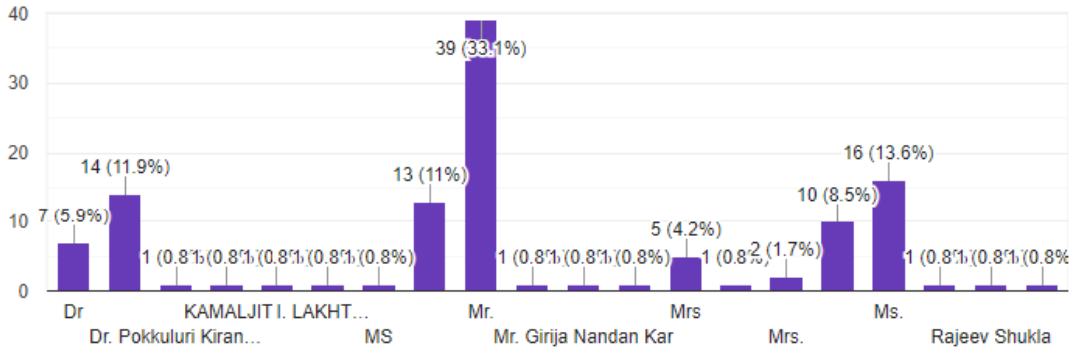



## SWOT ANALYSIS:

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# CONFERENCEREPORT

- **TITLEANDDURATION:**6th edition of IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE-2021) held during 01-03 December, 2021.

- **SPONSORS:**ICRAIE 2021 was technically sponsored by IEEE Poland Section Chapter, IEEE Computational Intelligence Society (CIS) Chapter.

- **SUPPORTERS:**Supported by IEEE Rajasthan Subsection.

- **ORGANIZING PARTNERS:**ICRAIE-2021, was jointly organized by The Faculty of Computer and Mathematical Sciences, University Teknologi MARA, Kedah Branch, Malaysia, IEEE IE/IA Malaysia,and Poornima College of Engineering, Jaipur, Rajasthan, India.

- **PUBLISHER(S):**IEEE

- **ISBN/PARTNO./INDEXINGAGENCY:**IEEE Xplore Digital Library.

- **THEMES / TRACKS:**

- **Track 1:** Computer Science & Engineering / Information Technology.

- **Track 2:** Electronics & Communication Engineering.

- **Track 3:** Electrical Engineering.

- **OBJECTIVES:**

The Faculty of Computer and Mathematical Sciences, University Teknologi MARA, Kedah Branch, Malaysia, IEEE IE/IA Malaysia Joint Chapter with the collaboration of Poornima College of Engineering, Jaipur, Rajasthan, India team has put in an effort for making the Sixth International Conference on Recent Advances and Innovations in Engineering (ICRAIE 2021) in Virtual Mode with the theme 'Synergizing Efforts, Expanding Horizons' a reality. As per the objective, it could bring together Academicians, Researchers, Industry experts in areas of Computer Science Engineering/Information Technology, Electronics & Communication Engineering, and Electrical Engineering for the dissemination of original research, new innovations, and ideas at an international platform.

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## EXPECTEDOUTCOMES:

ICRAIE 2021 was technically sponsored by the IEEE Poland Section Chapter, IEEE Computational Intelligence Society (CIS) Chapter, and the co-organizers from the Faculty of Computer and Mathematical Sciences, UiTM Perlis Branch and School of Electrical Engineering, UiTM Pulau Pinang Branch.A target of 100 papers for the three tracks Computer Science & Information Technology, Electronics & Communication Engineering, and Electrical Engineering.

## LEARNING OUTCOMES:

**CO1:** To appropriate agreement to promote and encourage the youth to select for Engineering education.

**CO2:** To produce quality Engineers for the bright future of our country.

**CO3:** Opportunity to learn, Discuss & interact with intellectuals all over the world.

## MAPPINGSWITHPOANDPSO

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO1 | - | - | - | - | - | 3 | - | - | - | - | - | - | - | 1 | 1 |
| CO2 | - | - | - | - | - | - | - | - | 3 | - | - | - | - | - | 1 |
| CO3 | | | | | | | | | 3 | 2 | | 1 | | | |

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¨ **BROCHURE/POSTER/LEAFLET/ FLYER:**

# RECENT ADVANCES AND INNOVATIONS IN ENGINEERING

## (ICRAIE - 2021)

**I E E E C O N F E R E N C E R E C O R D # 5 2 9 0 0**

## Technically Sponsored by:

IEEE COMPUTER SOCIETY
Poland Section Chapter

IEEE Computational Intelligence Society

## Co-Organizer:

UNIVERSITI TEKNOLOGI MARA
Cawangan Perlis
Kampus Arau
Faculty of Computer and Mathematical Sciences,
UiTM Perlis Branch

UNIVERSITI TEKNOLOGI MARA
Cawangan Pulau Pinang
Kampus Permatang Pauh
School of Electrical Engineering,
UiTM Pulau Pinang Branch

UNIVERSITI TEKNOLOGI MARA
Cawangan Kedah
Kampus Sungai Petani
Faculty of Computer and Mathematical Sciences,
UiTM Kedah Branch

## Organized by:

IEEE
IEEE IE/IA Malaysia Joint Chapter

Poornima College of Engineering

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## RESPONSE(SUBMISSION/ACCEPTANCE/ PRESENTATION):

A totalof 160 reviewers across the world consented to and reviewed the papers. 97 papers were accepted after a rigorous review procedure, making it very selective. 91 registered and presented papers were distributed in a total of 29 Oral Sessions in virtual mode during December 1-3, 2021. A totalof 200 doctoral students and professionals attended all the sessions including registered participants and local attendees.

## SUMMARY / CATEGORIZATION OF PARTICIPANTS:

The Faculty of Computer and Mathematical Sciences, University Teknologi MARA, Kedah Branch, Malaysia, IEEE IE/IA Malaysia Joint Chapter with the collaboration of Poornima College of Engineering, Jaipur, Rajasthan, India team has put in an effort for making the Sixth International Conference on Recent Advances and Innovations in Engineering (ICRAIE 2021) in Virtual Mode with the theme 'Synergizing Efforts, Expanding Horizons' a reality. As per the objective, it could bring together Academicians, Researchers, and Industry Experts in the areas of Computer Science Engineering/Information Technology, Electronics & Communication Engineering, and Electrical Engineering for the dissemination of original research, new innovations, and ideas at an international platform.

ICRAIE 2021 was technically sponsored by the IEEE Poland Section Chapter, IEEE Computational Intelligence Society (CIS) Chapter, and the co-organizers from the Faculty of Computer and Mathematical Sciences, UiTM Perlis Branch and School of Electrical Engineering, UiTM Pulau Pinang Branch.

A target of 100 papers for the three tracks Computer Science & Information Technology, Electronics & Communication Engineering, and Electrical Engineering. EDAS conference management system has been used. The enthusiastic response was received all around – 298 full manuscripts were uploaded on EDAs from 8 countries. Total of 160 reviewers across the world consented to and reviewed the papers. 97 papers were accepted after a rigorous review procedure, making it very selective. 91 registered and presented papers were distributed in a total of 29 Oral Sessions in virtual mode during December 1-3, 2021. A totalof 200 doctoral students and professionals attended all the sessions including registered participants and local attendees. International participants from various countries - India, Sri Lanka, Indonesia, Vietnam, Bangladesh, Algeria& United States of America have also presented their research work.

Following is the analysis of Papers submitted, accepted, and presented in IEEE ICRAIE-2021.

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## PAPER STATISTICS - ALL TRACKS

| | Track 1 CSE/IT | Track 2 ECE | Track 3 EE | Total |
|---|---|---|---|---|
| **Total No. of Papers Submitted** | 183 | 48 | 67 | **298** |
| **Total No. of Papers Accepted** | 61 | 12 | 24 | **97** |
| **Total No. of Papers Registered** | 57 | 12 | 24 | **93** |
| **Total No. of Papers Presented** | **57** | **12** | **22** | **91** |

ICRAIE 2021 Parallel Session Links

| No | Room | Link |
|---|---|---|
| 1 | 1A | https://meet.google.com/khz-gsvo-iwb |
| 2 | 1B | https://meet.google.com/ddj-vmev-vde |
| 3 | 1C | https://meet.google.com/tqo-xuyy-apn |
| 4 | 1D | https://meet.google.com/scw-iwfs-kgm |
| 5 | 1E | https://meet.google.com/bxy-fktp-dsd |
| 6 | 2A | https://meet.google.com/woo-wfcc-gmu |
| 7 | 2B | https://meet.google.com/pqv-riwt-uvz |
| 8 | 2C | https://meet.google.com/hjm-ywcw-iwp |
| 9 | 2D | https://meet.google.com/dgc-zxgq-wxg |
| 10 | 2E | https://meet.google.com/jzm-sjwh-kmc |
| 11 | 3A | https://meet.google.com/rzp-grzz-usm |
| 12 | 3B | https://meet.google.com/kmb-oenv-rqx |
| 13 | 3C | https://meet.google.com/zgg-ixqw-euw |
| 14 | 4A | https://meet.google.com/vut-jppu-kbm |
| 15 | 4B | https://meet.google.com/dni-xvss-yvi |
| 16 | 4C | https://meet.google.com/eag-ttqc-qyw |
| 17 | 4D | https://meet.google.com/vnu-vdgh-bmd |
| 18 | 5A | https://meet.google.com/rbh-egpd-fbe |
| 19 | 5B | https://meet.google.com/tbw-ciqq-yux |
| 20 | 5C | https://meet.google.com/pks-sfua-njc |
| 21 | 5D | https://meet.google.com/dya-isvh-bpe |
| 22 | 5E | https://meet.google.com/xgm-ciix-ypw |
| 23 | 6A | https://meet.google.com/izb-kaoo-ecd |
| 24 | 6B | https://meet.google.com/ysm-feih-omj |
| 25 | 6C | https://meet.google.com/jei-dmde-whz |
| 26 | 6D | https://meet.google.com/ska-wwdd-ydx |
| 27 | 6E | https://meet.google.com/izp-vytg-mhq |

Prof. Dr. Mohamad Abdullah Hemdi, the Rector of UiTM Kedah expressed his greatest gratitude to everyone in the Official Opening Ceremony of the 6th International Conference on Recent Advances and Innovations in Engineering (ICRAIE) 2021.

Dr. Mahesh Bundele welcome all VIPs and participant to the conference and is glad about the combined efforts by Poornima College of Engineering, Jaipur along with University Teknologi MARA (UiTM) Kedah Malaysia, IEEE IE/IA Joint Chapter as financial Co-Sponsor and IEEE Malaysia Section, IEEE Poland Section & IEEE CIS Poland Chapter as Technical Sponsors are jointly organizing 6th IEEE International Conference (Virtual Mode) on Recent Advances and Innovations in Engineering-ICRAIE 2021 during 1-3 December, 2021.

An opening talk for ICRAIE2021 was delivered by Prof. Zuhaina Zakaria from IEEE Malaysia Section and was formerly the chair of the IEEE Malaysia Section from 2015 -2016. She was also the founder for IEEE Malaysia Section-Women in Engineering Affinity Group which was formed in July 2007.

Plenary talk 2 is conveyed by Dr. Azlan Mohd Zain, a Professor at the School of Computing, Faculty of Engineering, and University Teknologi Malaysia (UTM). Dr. Azlan obtained a Master of Science (Productivity and Quality Improvement) from University Kebangsaan

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Malaysia (UKM) and received Ph.D. in Computer Science from UTM in 2010. Currently, he is a Director of the UTM Big Data Research Centre.

After the conference, full papers were submitted to the IEEE Xplore Digital Library for publishing and indexing. Moreover, the Proceedings and Communication Papers of the ICRAIE-2021 Conference (in their final version) were posted at the IEEE Explore. It should be stressed that only papers presented at the conference were published in either form (the ICRAIE conference series strictly adheres to the "IEEE No-show Policy").

## PROGRAMOUTLINE:

6th INTERNATIONAL CONFERENCE AND WORKSHOPS ON RECENT ADVANCES AND INNOVATIONS IN ENGINEERING

*SYNERGISING EFFORTS, EXPANDING HORIZONS*

(IEEE Conference Record #52900 )

1 - 3 December 2021

ICRAIE 2021

Faculty of Computer and Mathematical Sciences, UiTM Kedah Branch, Kedah, Malaysia

Poornima College of Engineering Jaipur Rajasthan, India

| Conference Schedule | | | | | |
|---|---|---|---|---|---|
| **Wednesday, Day 1: 1st December 2021** | | | | | |
| 08:00 am – 10:15 am | Welcome Reception and Registration Opens | | | | |
| 10:15 am – 11:15 am | **Plenary Talk 1** | | | | |
| | Title : Big Data and AI for Smarter Electrical Power Systems<br>Speaker : Prof. Dr. Zuhaina Zakaria<br>IEEE Power and Energy Society, Malaysia | | | | |
| 11:15 am – 11:30 am | **Refreshment** | | | | |
| 11:30 am – 12:30 pm | **Plenary Talk 2** | | | | |
| | Title : Big Data Visualisation - Challenge and Tools<br>Speaker : Prof. Dr. Azlan Mohd Zain<br>Director, UTM Big Data Centre,<br>Universiti Teknologi Malaysia, Malaysia | | | | |
| 12:30 pm – 02:00 pm | **Lunch Break** | | | | |
| 02:00 pm – 03:00 pm | **Parallel Session 1** | | | | |
| | Track I (CS/IT) | | | | |
| | Room 1A | Room 1B | Room 1C | Room 1D | Room 1E |
| 03:00 pm – 04:00 pm | **Plenary Talk 3** | | | | |
| | Title : Semantic Interoperability for IoT<br>Speaker : Dr. Wieslaw Pawlowski<br>Department of Mathematics, Physics and Informatics,<br>University of Gdansk, Poland | | | | |
| 04:00 pm – 05:00 pm | **Parallel Session 2** | | | | |
| | Track I (CS/IT) | | | | |
| | Room 2A | Room 2B | Room 2C | Room 2D | Room 2E |
| 05:00 pm | **End of 1st Day** | | | | |

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# Conference Schedule

## Thursday, Day 2: 2nd December 2021

| | | | | | |
|---|---|---|---|---|---|
| 09:00 am – 10:00 am | **Parallel Session 3** | | | | |
| | Track I (CS/IT) & Track II (ECE) | | | | |
| | Room 3A | Room 3B | Room 3C | Room 3D | Room 3E |
| 10:00 am – 10:45 am | **Plenary Talk 4**<br>Title : Artificial Intelligence and Data Science for Innovation Product Development<br>Speaker : Dr. Afnizanfaizal Abdullah<br>Synapse Innovation Sdn. Bhd. | | | | |
| 10:45 am – 11:00 am | Refreshment | | | | |
| 11:00 am – 11:30 am | **Opening Ceremony**<br>*Welcoming Speech*<br>Dr. Shamsul Jamel Elias<br>Chair of ICRAIE 2021, UiTM Kedah Branch, Kedah, Malaysia<br>*Appreciation Speech*<br>Dr Vishwanath Sinha<br>Chairperson, FIEEE<br>Dr. Mahesh Bundele<br>Principal & Director, Poornima College of Engineering, Jaipur, India<br>Ar Rahul Singhi<br>Director, Poornima College of Engineering, Jaipur, India<br>*Officiating Speech*<br>Prof. Dr. Mohamad Abdullah Hemdi<br>Rector UiTM Kedah Branch, Kedah, Malaysia<br>*Montage* | | | | |
| 11:30 am – 12:30 pm | **Keynote Address Session I**<br>Title : Digital Transformation: The Emergence of Digital Intelligence<br>Speaker : Prof. Ts. Dr. Haryani Haron<br>Dean, Faculty of Computer and Mathematical Sciences, UiTM Shah Alam, Malaysia | | | | |
| 12:30 pm – 2:00 pm | Lunch Break | | | | |

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| 02:00 pm – 03:00 pm | **Parallel Session 4** | | | | |
| | **Track II (ECE) & Track III (EE)** | | | | |
| | **Room 4A** | **Room 4B** | **Room 4C** | **Room 4D** | **Room 4E** |
| 03:30 pm – 04:00 pm | **Keynote Address Session II** | | | | |
| | **Title** : **Introduction to Reinforcement Learning**<br>**Speaker** : **Assoc. Prof. Dr. Maria Ganzha**<br>**Warsaw University of Technology, Poland** | | | | |
| 04:00 pm – 05:00 pm | **Parallel Session 5** | | | | |
| | **Track III (EE)** | | | | |
| | **Room 5A** | **Room 5B** | **Room 5C** | **Room 5D** | **Room 5E** |
| 5:00 pm | **End of 2nd Day** | | | | |
| **Conference Schedule** | | | | | |
| **Friday, Day 3: 3rd December, 2021** | | | | | |
| 09:00 am – 10:00 am | **Parallel Session 6** | | | | |
| | **Track 1 (CS/IT)** | | | | |
| | **Room 6A** | **Room 6B** | **Room 6C** | **Room 6D** | **Room 6E** |
| 10:00 am – 10:15 am | **Refreshment** | | | | |
| 10:15 am – 11:15 am | **Keynote Address Session III** | | | | |
| | **Title** : **Data Science Trends**<br>**Speaker** : **Mohammad Shazri Bin Shahrir**<br>**Principal Data Scientist, Vettons Sdn. Bhd.** | | | | |
| 11:15 am - 11:30 am | **Award Announcement & Closing Ceremony** | | | | |
| | ***Guest of Honour***<br>**Prof. Dr. Nooritawati Md Tahir**<br>**IEEE Industrial Electronic / Industry Applications Malaysia Joint Chapter** | | | | |
| 11:30 am | **End of Event** | | | | |

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## KEYNOTE SPEAKERS:

- **Dr. Haryani Haron:** Dean, Faculty of Computer and Mathematical Sciences, UiTM (Topic: Digital Transformation: The Emergence of Digital Intelligence)

- **Assoc. Prof. Dr. Maria Ganzha:** Warsaw University of Technology (Warsaw, Poland)(Topic: Introduction to Reinforcement Learning)

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- **Mohammad Shazri Bin Shahrir:** Principal Data Scientist, Vettons (Topic : Data Science Trends)
- **Dr. Marcin Papryzski**: Warsaw Management University(Topic: Data Science Trends)

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## PLENARY TALK SPEAKERS:

- **Professor Dr. Zuhaina Zakaria:** IEEE Power and Energy Society, Malaysia

(Topic: Big Data and AI for Smarter Electrical Power Systems)

- **Professor Dr. Azlan Mohd Zain:**Director, UTM Big Data Centre, University Teknologi Malaysia (Topic: Big Data Visualisation - Challenges and Tools )

- **Dr. Wieslaw Pawlowski:**Department of Mathematics, Physics, and Informatics, University of Gdansk (Topic: Semantic Interoperability for IoT)

- **Dr. Afnizanfaizal Abdullah:** Technology Specialist in AI, Big Data & Cloud Computing, Synapse Innovation Sdn. Bhd.(Topic: Artificial Intelligence and Data Science for Innovation Product Development)

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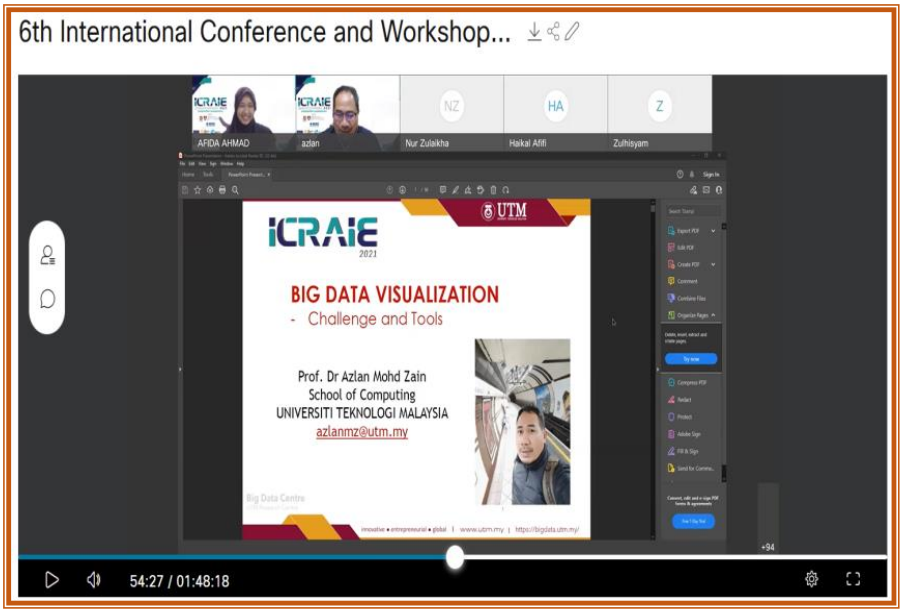
## GLIMPSESOFPRESENTATIONS

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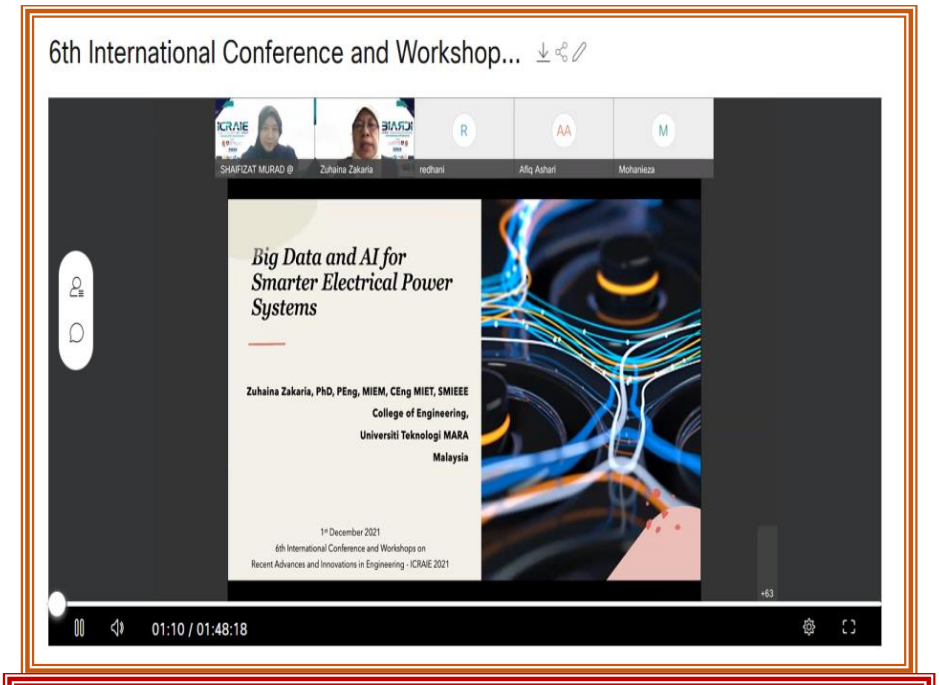


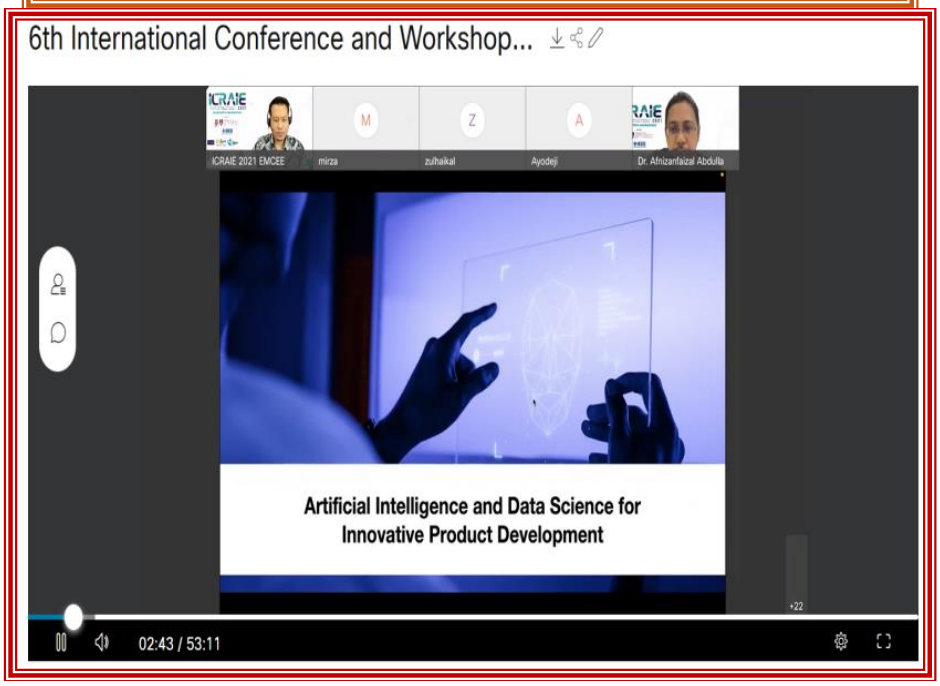


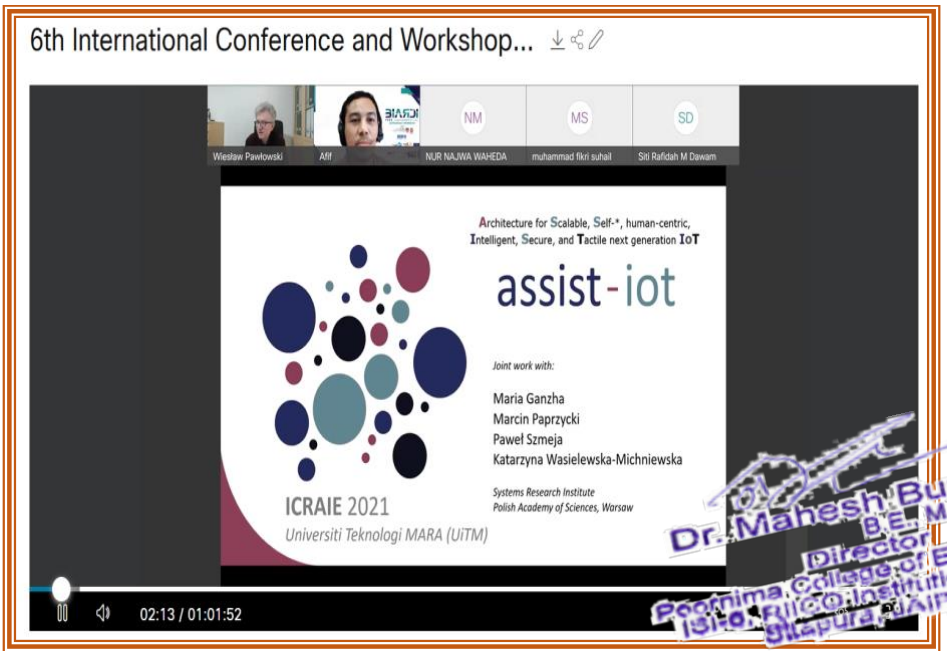


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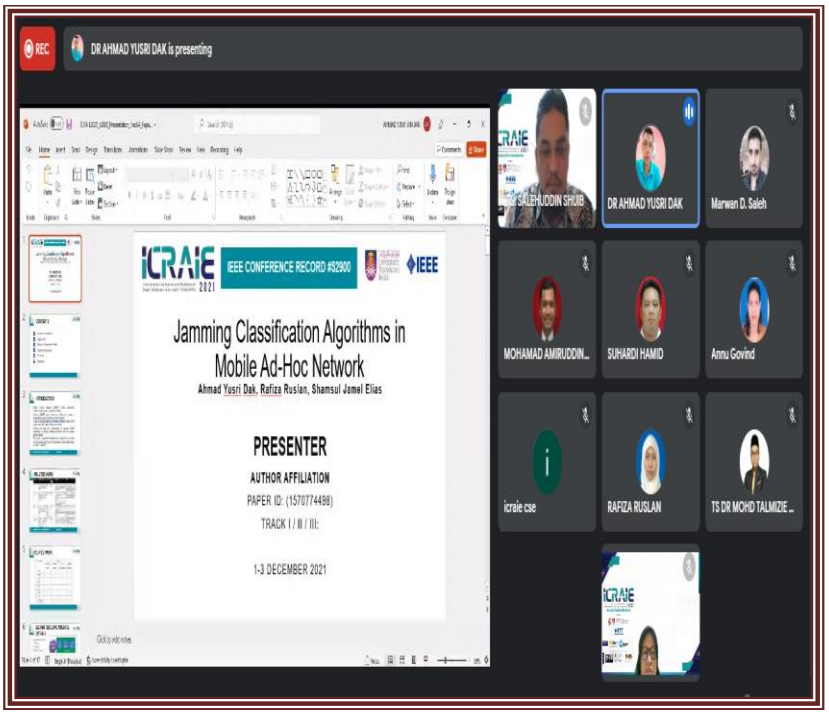
REC
DR AHMAD YUSRI DAK is presenting
ICRAIE 2021
IEEE CONFERENCE RECORD #52900
IEEE
Jamming Classification Algorithms in Mobile Ad-Hoc Network
Ahmad Yusri Dak, Rafiza Ruslan, Shamsul Jamel Elias
PRESENTER
AUTHOR AFFILIATION
PAPER ID: (1570774498)
TRACK I / II / III:
1-3 DECEMBER 2021
TS. SALEHUDDIN SHUIB
DR AHMAD YUSRI DAK
Marwan D. Saleh
MOHAMAD AMIRUDDIN...
SUHARDI HAMID
Annu Govind
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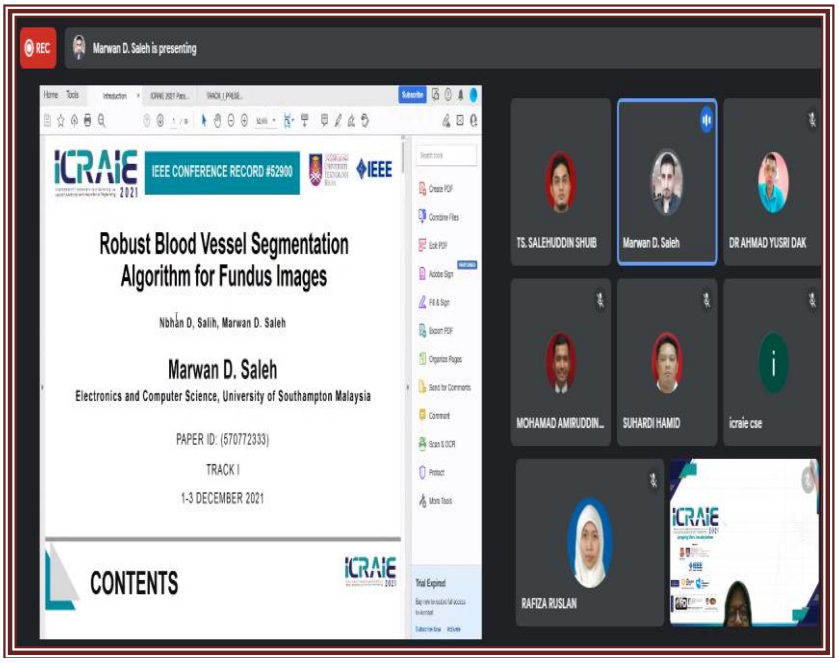
RAFIZA RUSLAN
TS DR MOHD TALMIZIE ...


REC
Marwan D. Saleh is presenting
ICRAIE 2021
IEEE CONFERENCE RECORD #52900
IEEE
Robust Blood Vessel Segmentation Algorithm for Fundus Images
Nibhan D. Salih, Marwan D. Saleh
Marwan D. Saleh
Electronics and Computer Science, University of Southampton Malaysia
PAPER ID: (570772333)
TRACK I
1-3 DECEMBER 2021
CONTENTS
TS. SALEHUDDIN SHUIB
Marwan D. Saleh
DR AHMAD YUSRI DAK
MOHAMAD AMIRUDDIN...
SUHARDI HAMID
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RAFIZA RUSLAN

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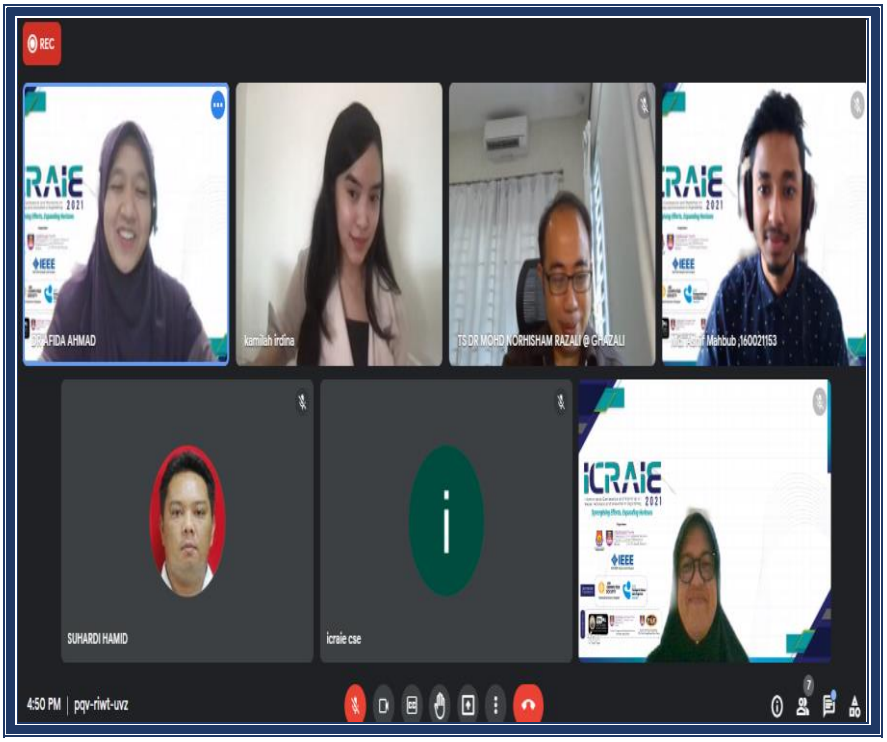


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**Group Photograph**

## VALEDICTORYSESSION:

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**6th IEEE International Conference**
**On**
**Recent Advances and Innovations in Engineering - 2021**
**(ICRAIE-2021)**
**IEEE Conference Record # 52900**
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***Valedictory Session***
**Friday, December 3, 2021**
**Venue: Online ICRAIE Conference Hall (Zoom)**
**Time**: 11.15 am to 11.30 am

| S. No | Activity | Duration | Time |
|---|---|---|---|
| 1. | Reporting and Registration of Delegates –On Zoom link | 55 Min | 10:15 am-11:10 am |
| 2. | **Arrival of dignitaries**<br>A. **Prof.Dr. Noorativati Mohd. Tahir**, Industry Applications IEEE Malaysia Joint Chapter- **Guest of Honour**<br>B. **Ar. Rahul Singhi**, Director Poornima Group<br>C. **Dr. Mahesh Bundele**, General Co-Chair, ICRAIE<br>D. **Mr. Pankaj Dhemla**, Vice Principal, PCE<br>E. **Dr. Surendra Yadav**, Track Chair –ICRAIE 2021<br>F. **Dr. Garima Mathur** Track Chair-ICRAIE 2021<br>G. **Dr. Virendra Sangtani** Track Chair-ICRAIE 2021 | 05 Min | 11:10 am-11:15 pm |
| 3. | **Felicitation of Guest of Honour Noorativati Mohd. Tahir**, Industry Applications IEEE Malaysia Joint Chapter- **Guest of Honour Ar. Rahul Singhi**, Director, Poornima Group | 02 Min | 11:15 am-11:17 am |
| 4. | Welcome Address, by **Ar. Rahul Singhi**, Director Poornima Group | 02 Min | 11:17 am-11:19 am |
| 5. | Report by Track Chair CSE- **Dr. Surendra Yadav** | 02 Min | 11:19 am-11:21 am |
| 6. | Report by Track Chair ECE- **Dr. Garima Mathur** | 02 Min | 11:21 am-11:23 am |
| 7. | Report by Track Chair EE- **Dr. Virendra Sangtani** | 02Min | 11:23 am-11:25 am |
| 8. | Participant's Feedback -Online | 02Min | 11:25 am-11:27 am |
| 9. | e-Certificate distribution at the hands of **Guest of honour** | 02 Min | 11:27 am-11:29 am |
| 10. | Vote of Thanks by **Dr.Garima Mathur** Track Chair EC | 01 Min | 11:29 am-11:30 am |
| 11. | **Group Photograph** -Virtual | | |

Lastly the Conference came to an end with a Valedictory Function. Mr. Singhi opening speech by thanking and congratulating the organizers by bringing together all delegations and participants from all over the world. He is delighted upon collaboration between Poornima College of Engineering, Jaipur along with University Teknologi Mara (UiTM), Kedah, Malaysia, IEEE IE/IA Joint Chapter as financial Co-Sponsor and IEEE Malaysia Section, IEEE Poland Section & IEEE CIS Poland Chapter as Technical Sponsors are jointly organizing the 6th IEEE International Conference on Recent Advances and Innovations in Engineering from December 1 to 3, 2021 in virtual mode. He expressed his hope for these three days of conferences will provide a common platform for everyone to share their knowledge and experience. Again, in the closing speech, he congratulates the organizers for choosing an appropriate theme at an appropriate time and meticulously planning all sessions to achieve the objectives of this conference. He also expressed concern and support for all the members of the IEEE community including teachers and their families who are affected by the pandemic

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LISTOFATTEN
DEES

| NO. | PAPERID | AUTHORS | PAPERTITLE | ATTENDEE |
|---|---|---|---|---|
| **1** | 1570725489 | ***Ahmad Yusri Dak***, Rafiza Ruslan, ShamsulJamelElis<br>*Universiti Teknologi MARA, Perlis Branch,Malaysia* | Jamming Classification Algorithms in Mobile Ad-HocNetwork | ***Ahmad YusriDak*** |
| **2** | 1570737110 | ***Mohd Fakhri Mat Saad***, Ari WibisonoListyo Nugro, Rajermani Thinakaran,MohammadBaijed<br>*INTIInternationalUniversity,Malaysia* | A Review of Artificial Intelligence Based Platform in HumanResource RecruitmentProcess | ***Mohd FakhriMatSaad*** |
| **3** | 1570740184 | ***Haikal Afifi Ahmad Shaberi***, Ahmad AsriAbd Samat, Abdullah Nasif Afifi BinAbdullah, Saodah Omar, Abdul MalekSaidina Omar<br>*Universiti Teknologi MARA,* | Verilog HDL Implementation of Single-Phase Inverter forUninterruptiblePower Supply(UPS) | ***Haikal Afifi Ahmad Shaberi*** |

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| | | *PenangBranch,Malaysia* | | |
| **4** | 1570740190 | Muhammad Naqiuddin Mansor, ***AhmadAsriAbdSamat***,AimiIdz wanTajudin, | Self Tuning of PI Controller for Speed Control of DC MotorbyUsingFuzzy Logic | ***AhmadAsriAbdSamat*** |
| | | Saiful Firdaus Abd Shukor, KamarualazharDaud *Universiti Teknologi MARA, PenangBranch,Malaysia* | | |
| **5** | 1570740554 | ***BrynaYiiNgieng***,NabihahAhmad *Universiti Tun Hussein Onn Malaysia,Malaysia* | Development of Compact Automated Home SystemControllerUsingASIC DesignFlow | ***BrynaYiiNgieng*** |
| **6** | 1570741461 | ***Aliza Abdul Latif***, Zaihisma Che Cob,Sulfeeza Mohd Drus, Rina Md Anwar,HusniMohdRadzi *UniversitiTenagaNasional,Malaysia* | UnderstandingDepressionDetectionUsingSocialMedia | ***AlizaAbdulLatif*** |
| **7** | 1570742112 | ***Saodah Omar***, Muhammad Hafizal NaimAbd Razak, Ahmad Asri Abd Samat,SamihahAbdullah,Kamar ulazharDaud *Universiti Teknologi MARA, PenangBranch,Malaysia* | Analysing the Impact of Distribution Generation forDistributionSystem | ***SaodahOmar*** |

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| **8** | 1570745086 | ***Matthew Khoo***, Nabihah Ahmad, YuzmanYusoff,Hasmayadi Abdul-Majid<br>*Universiti Tun Hussein Onn Malaysia,Malaysia* | Design of a 14-Bit Hybrid DAC for High ResolutionApplicationsin SAR ADCs | ***MatthewKhoo*** |
| **9** | 1570745382 | ***Alya Geogiana Buja***, Maheran Katan,Nasreen Miza Nasrijal, Sharifah FaigahSyedAlwi,TanGek Siang<br>Universiti Teknologi MARA, MelakaBranch,Malaysia | Into the Look: Security Issues, Crypto-Hygiene, and FutureDirection of Blockchain and Cryptocurrency for Beginners inMalaysia | ***AlyaGeogianaBuja*** |
| **10** | 1570745805 | Mohammad Amirul Adika, ***Aimi IdzwanTajudin***, Ahmad Asri Abd Samat, SaifulFirdausAbdShukor,Kamar ulazharDaud<br>*Universiti Teknologi MARA, PenangBranch,Malaysia* | Design an Optimal PI Controller Using Artificial Bee ColonyAlgorithmforBuckConverter | ***AimiIdzwanTajudin*** |
| **11** | 1570747851 | ***Intan Rahayu Ibrahim***, Mohd Najib MohdHussain, Ahmad Asri Abd Samat, EmeliaNoorsal,AhmadMalikiOm ar<br>*Universiti Teknologi MARA, PenangBranch,Malaysia* | Modified Hybrid Optimization of Selective HarmonicEliminationTechnique for5-LevelH-Bridge Inverter | ***IntanRahayuIbrahim*** |
| **12** | 1570748504 | ***Nur Ameerah Abdul Halim***, Ajune WanisIsmail<br>*UniversitiTeknologiMalaysia,Malaysia* | Raycasting Method Using Hand Gesture for Target SelectionontheOccludedObject inHandheldAugmentedReality | ***NurAmeerahAbdulHalim*** |

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| **13** | 1570752292 | ***Mustafa Zuhaer Nayef***, MuhammadImranAhmad, SaidAmirulAnwar<br>*UniversitiMalaysiaPerlis,Malaysia* | Face Recognition Based on Fusion of Multiple Masks LocalFeature SetsUsingWaveletTransform | ***MustafaZuhaerNayef*** |
| **14** | 1570756633 | Nurliyana Abd Mutalib, AminurrashidNoordin, Nadzrie Mohamood, MohdSyafiq Mispan, ***Norlezah Hashim***, EliyanaRuslan, Dayanasari Abdul Hadi, ShamsulFakhar Abd Gani, Madiha Zahari, MohdFarriz Fahar, Lai Len Fatt, Hau Yong Kyan,WangChoonSeang<br>*Universiti Teknikal Malaysia Melaka,Malaysia* | Design and Implementation of Graphical User Interface forInterfaceBoardComponent Testing | ***NorlezahHashim*** |
| **15** | 1570757331 | ***Megat Muazzam***, Zuraini Zainol, MohdHazaliMohamedHalip<br>*UniversitiTeknologiMARA,Malaysia* | Mitigating Malware Threats at Small Medium Enterprise(SME)Organisation: AReview andFramework | ***MegatMuazzam*** |
| **16** | 1570757611 | ***Syahrul Nizam Samsudin***, Bulan Abdullah,NoriahYusoff<br>*UniversitiTeknologiMARA,Malaysia* | Big Data Model of Customer Satisfaction and ServiceExperience(CSSE)forAutomotiveAftersalesServices | ***SyahrulNizamSamsudin*** |
| **17** | 1570758163 | ***Hashiroh Hussain***, NorshuhadaShiratuddin<br>*Institute Teacher Education (IPG)DarulamanCampus,Malaysia* | Enhancing Compellingness of Digital StorytellingApplicationsWith Digital Tools | ***HashirohHussain*** |

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| **18** | 1570758855 | ***Saffa Raihan Zainal Abidin***, Siti FadzilahMat Noor, Noraidah Sahari@Ashaari,NurulHusnaMahadzir,AbdulHalim Ali<br>*Universiti Teknologi MARA, Kedah Branch,Malaysia* | Preliminary Validation of Serious Game Model ElementsCompatible With Brain-Based Learning Using DelphiTechnique | ***SaffaRaihanZainalAbidin*** |
| **19** | 1570758864 | ***Mohammad Haziq Ishak***; Mohd SyafiqMispan, Yan Chiew Wong, MuhammadRaihaanKamaruddin,Mikhail Korobkov<br>*Universiti Teknikal Malaysia Melaka,Malaysia* | FPGA-Based Obfuscated Delay PUF for SecurityEnhancementAgainstML-Attack | ***MohammadHaziqIshak*** |
| **20** | 1570758870 | ***Tajul Rosli Razak***, Nazifa Adila KhairolFaizi, Mohammad Hafiz Ismail, ShukorSanim Mohd Fauzi, Ray Adderley JMGining<br>*UniversitiTeknologiMARA,PerlisBranch* | Towards Capturing Mango Grading From Human Experts - AComprehensive User Study | ***TajulRosliRazak***, |
| **21** | 1570759609 | ***Kamilah Irdina Mohd Fadilah***, AngelaSiew Hoong Lee, Zuraini Zainol, MansoorEbrahim<br>*SunwayUniversity,Malaysia* | Covid-19EffectonUndergraduateComputingStudents'Performance atHigher Education:PilotStudy | ***Kamilah Irdina MohdFadilah*** |
| **22** | 1570762644 | ***Zainal Hisham Che Soh***, Liyana BalqisMohd Zamri, Siti Noraini Sulaiman, SyahrulAfzal Che Abdullah, Saiful Zaimy YahayaandMohammadNizamIbrahim<br>*UniversitiTeknologiMARA,Malaysia* | Cold Chain Management System via Low Power Wide AreaNetwork andIoT | ***ZainalHishamCheSoh*** |

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| **23** | 1570763108 | Mohamad Shah Sabri, Kamarulazhar Daud,***Wan Salha Saidon***, Nurul Huda Ishak,AhmadAsriAbdSamat,SitiSalwaMat Isa<br>*Universiti Teknologi MARA, PenangBranch,Malaysia* | Feed Forward Neural Network Approach for VoltageTransientsIdentificationandClassification | ***WanSalhaSaidon*** |
| **24** | 1570763212 | Anthony Roston Anak Tarip,***Kamarulazhar Daud***, Ahmad Puad Ismail,Aimi Idzwan Tajudin, Saodah Omar, MohdNajibMohdHussain<br>*Universiti Teknologi MARA, PenangBranch,Malaysia* | Multilayer Perceptron Neural Network Approach forVoltage SagsDetectionandClassification | ***KamarulazharDaud*** |
| **25** | 1570763592 | ***Syahirah Azizan, Rozita Ismail***, AslinaBaharum,NurulHidayahMatZain<br>UniversitiTenagaNasional,Malaysia | Exploring the Factors That Influence the Success ofDigitalizationin anOrganization's ITDepartment | ***Syahirah Azizan,Rozita Ismail*** |
| **26** | 1570763633 | ***Anis Amilah Shari***, Shafaf Ibrahim, ImranMohammad Sofi, Mohd Rahmat MohdNoordin, Asma Shazwani Shari,MuhammadFaqihMohdFadzil<br>*Universiti Teknologi MARA, MelakaBranch,Malaysia* | The Usability of Mobile Application for Interior Design viaAugmentedReality | ***AnisAmilahShari*** |
| **27** | 1570764216 | ***Siti Solehah Md Ramli***, Nur Diana ShahiraRosli, Nurul Huda Ishak, Nur FadhilahJamaludin, Abdul Malek Saidina Omar, NurDarinaAhmad<br>*Universiti Teknologi MARA, PenangBranch,Malaysia* | Development of Apps Software for Designing High VoltageAC Substation Grounding System With Different Shapes ofGridWithor WithoutRods | ***SitiSolehahMdRamli*** |

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| **28** | 1570764300 | Zainab Othman, Nur Nabilah Abu Mansor,NurFarhaniAzmi,NurulHidayahMat Zain, | SnakeSpeciesIdentificationUsingDigitalImage Processing | ***KhairulAdilahAhmad*** |
| | | Khyrina Airin Fariza Abu Samah,IsmassabahIsmai,***KhairulAdilahAhmad***<br>*Universiti Teknologi MARA, Kedah Branch,Malaysia* | | |
| **29** | 1570764355 | ***Zainal Hisham Che Soh***, MohammadAfwan Bin Mohd Daud, Mohd HanapiahAbdullah, Muhamad Syazwan MohamadSarudin, Rosheila Darus, KamarulazharDaud<br>*UniversitiTeknologiMARA,Malaysia* | Smart Cigarettes Smoke Detection System and Alert via IoTCloud | ***ZainalHishamCheSoh*** |
| **30** | 1570765635 | *Norizan Mat Diah, Mohd Lajim MohdJahim,* ***Noor Aini Mohd Roslan****, ZaidahIbrahim,Azizi Abdullah*<br>*UniversitiTeknologiMARA,Malaysia* | Development of Mobile Application for Plant DiseaseRecognitionUsingConvolutionalNeuralNetworkMethod | ***NoorAiniMohdRoslan*** |
| **31** | 1570765696 | ***Mohamad Amiruddin Mohamad***, MohdTalmizieAmron, Nur HidayahMdNoh<br>*Universiti Teknologi MARA, TerangganuBranch,Malaysia* | Assessing the Acceptance of E-Learning via TechnologyAcceptanceModel(TAM) | ***Mohamad AmiruddinMohamad*** |
| **32** | 1570766217 | ***Mohd Najib Mohd Salleh***, Kashif HussainTalpur,Syahizul AmriDzulkifli<br>*Universiti Tun Hussein Onn Malalaysia,Malaysia* | Optimising Margin in Weighted Support Vector MachinesforFloodProblem | ***MohdNajibMohdSalleh*** |

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| **33** | 1570766357 | Samsul Setumin, Muhamad Amirul HazimMohd Hamidi ***Mohd Hussaini Abbas***, AdiIzhar Che Ani, Mohamed Mydin M. AbdulKader<br>*Universiti Teknologi MARA, PenangBranch,Malaysia* | Characterizing Global Hand-Crafted Feature Descriptors forSketch-BasedImageRetrieval | ***Mohd HussainiAbbas*** |
| **34** | 1570766387 | ***Saifuddin Mohd,*** Puteri Nor EllyzaNohuddin<br>Malaysian Administrative Modernisationand Management *Planning Unit(MAMPU),Malaysia* | A Framework of Procurement Analytics for Fraud CoalitionPredictioninMalaysia | ***SaifuddinMohd*** |
| **35** | 1570766660 | ***Hawa Mohd Ekhsan***, Mohamad Arif AsrafZainudin,Jiwa Noris Hamid<br>*Universiti Teknologi MARA, Perlis Branch,Malaysia* | MobileAppforWalletTrackingUsingGPSTracke r | ***HawaMohdEkhsan*** |
| **36** | 1570766732 | ***Farah Aiman Ahmad Shahrien***, ZunairahHajiMurat,Ros ShilawaniS.Abdul Kadir<br>*UniversitiTeknologiMARA,Malaysia* | Preliminary Study: The Electromagnetics Radiation (EMR)FromEpipremnum AureumUsingFrequencyDetector | ***Farah Aiman AhmadShahrien*** |
| **37** | 1570766909 | ***FairuzShohaimay***,EddieShahrilIsmail<br>UniversitiKebangsaanMalaysia,Malaysia | Efficient Password Mutual Authentication Scheme WithSessionKey Agreement UsingSmartCard | ***FairuzShohaimay*** |
| **38** | 1570767046 | ***Iqbal Haziq Jamal***, Che Ani Adi Izhar, A.S.Fauzilan,M.I.FMaruzuki,Z.Hussain, M.F.A.Rahman<br>*Universiti Teknologi MARA, PenangBranch,Malaysia* | SystematicLiteratureReview:HumanGaitCyc leModelUsingImage-TemporalFeature | ***IqbalHaziqJamal*** |

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| **39** | 1570767252 | Siti Nur Afifa Hamidi, ***Abdul Malek SaidinaOmar***, Mohamad Adha Mohamad Idin,Ahmad Asri Abd Samat, Siti Solehah MdRamli,MuhammadKhusairiOsman<br>*Universiti Teknologi MARA, PenangBranch,Malaysia* | Streetlight System Information Modelling and ManagementforEnergy Reduction | ***AbdulMalekSaidinaOmar*** |
| **40** | 1570767349 | Azlan Bin Abdul Aziz, Intan Nur HafawatiBt Adam, Jamaluddin Bin Jasmis, ShamsulJamelBinElias,***ShaifizatBtMansor***<br>*Universiti Teknologi MARA, Kedah Branch,Malaysia* | N-Gain and System Usability Scale Analysis on Game BasedLearningforAdult Learners | ***ShaifizatBtMansor*** |
| **41** | 1570767725 | ***MinakshiBoruah***,RanjitaDas<br>*National Institute Of Technology,Mizoram,India* | Identification of DNA Motif Using Likelihood and AttentionBasedPoolingMethodin theGRU Framework | ***MinakshiBoruah*** |
| **42** | 1570767799 | MirzaMuntasirNishat,***Md. AshifMahbub***, Ashik Ahmed, Md Abdullah AlMamun<br>*Islamic University of Technology (IUT),Bangladesh* | Performance Assessment of Machine Learning Classifiers inDetecting Psychological Impact of Postgraduate StudentsDue toCovid-19 | ***Md.AshifMahbub*** |
| **43** | 1570768255 | ***Fatin Fatihatul Ashyikin Kamaruzaman***,Che Ani Adi Izhar, A.S. Fauzilan, SamsulSetumin,Z.Hussain,M.F.Abdullah<br>*Universiti Teknologi MARA, PenangBranch,Malaysia* | Systematic Literature Review: Recognition of Human GaitCycleUsingMachineLearningApproach | ***Fatin Fatihatul AshyikinKamaruzaman*** |
| **44** | 1570768514 | ***Suwarna Shete***, Pranjal Jog, R. K.Kumawat,D.K.Palwalia<br>*CareerPointUniversity,Kota,India.* | Battery Management System for SOC Estimation of Lithium-IonBatteryin Electric Vehicle:AReview | ***SuwarnaShete*** |

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| **45** | 1570768521 | ***Pranjal Jog***, Suwarna Shete, R. K.Kumawat,D.K.Palwalia<br>*Career Point University, Kota Rajasthan ,India* | ElectricVehicleChargingStationInfrastructure: AReview | ***PranjalJog*** |
| **46** | 1570768873 | Heryanto, ***Rezi Delfianti***, Ardyono Priyadi,AdiSoeprijanto<br>*Institut Teknologi Sepuluh Nopember,Indonesia* | Optimization of DG Placement in Real Distribution Systemas A Solution for Increasing the Quality of the System UsingGAAlgorithms | ***ReziDelfianti*** |
| **47** | 1570769315 | ***RanjitKumarBindal***,PrateekShrivastava<br>*ChandigarhUniversityGharuan,India* | Arithmetic Distance Relay Computation And UtilizationUsingSingleCircuitWirefor400KVBusSubstations | ***RanjitKumarBindal*** |
| **48** | 1570769374 | ***Salehuddin Abd Latif***, Uswah Khairuddin,Anis SalwaMohdKhairuddin<br>*UniversitiTeknologiMalaysia,Malaysia* | Development of Machine Vision System for Riverine DebrisCounting | ***SalehuddinAbdLatif*** |
| **49** | 1570769687 | Windhya Rankothge, Narmada Gamage,***Haritha Dewwiman***, Tharani Ariyawansa,AhamedSuhailandBhanuSenevirathne<br>*Sri Lanka Institute of InformationTechnology(SLIIT),Sri Lanka* | Network Traffic Prediction for a Software Defined NetworkBasedVirtualized NetworkFunctionsPlatform | ***HarithaDewwiman*** |
| **50** | 1570770027 | ***Mohd Norhisham Razali***, Ana SalwaShafie, Rozita Hanapi<br>*Universiti Teknologi MARA SarawakBranch,Malaysia* | Performance Evaluation of Masked Face Recognition UsingDeep Learning for Covid-19 Standard of Procedure (SOP)ComplianceMonitoring | ***MohdNorhishamRazali*** |

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| **51** | 1570771499 | ***Virendra Sharma***, Kavita Rawat, GauravJain, Nishant Agrawal, Shaaz Rizvi, PrabhatKumar<br>*Arya College of Engineering & IT Jaipur,India* | Hybrid SPV & Fuel-Cell Power Optimization by BatteryStorage System for Utility Network Load With & WithoutGrid | ***VirendraSharma*** |
| **52** | 1570771528 | ***Bhuvnesh Rathor***, Anamika Kumari, AjitSingh Rajawat, Vishvendra Singh Punia,Gaurav Jain, Vandana Agrawal<br>*RajasthanTechnicalUniversityKota,India* | Robust Control Techniques for Four-Area System With DFIGSystem | ***BhuvneshRathor*** |
| **53** | 1570771755 | ***Annu Govind***, Vijay Kumar Tayal, PrakashKumar,Rakesh KumarKumawat<br>*Amity University, Uttar Pradesh, Noida,India* | Phase Synchronization Control Techniques Under AdverseGridConditions UsingShunt ActivePowerFilter | ***AnnuGovind*** |
| **54** | 1570771814 | ***Siti Zulaiha Ahmad***, Arifah Fasha RosmaniandNur AmmarahMohammadNazri<br>*Universiti Teknologi MARA, Perlis Branch,Malaysia* | A Game-Based Learning Approach Using InteractiveMultimedia to Learn Fraction (Mathematics) AmongPrimary School Children | ***SitiZulaihaAhmad*** |
| **55** | 1570771896 | ***Pravin M. Sonawane***, Pankaj Gakhar,Tarun Varshney, Neeraj Kumar Garg,KuldeepJayaswal,GauravJain<br>*RajasthanTechnicalUniversityKota,India* | Optimal Allocation of Distributed Generator Placement: AnOptimalApproachtoEnhance theReliabilityofMicro-Grid | ***PravinM.Sonawane*** |
| **56** | 1570771908 | ***Virendra Sharma***, Jayesh Verma, PravinSonwane, Harsh Sharma, Aditya Gupta,PrabhatKumar<br>*AryaCollege ofEngineering& IT,India* | Power Management and Voltage Regulation of Self-Governed Hybrid RE-Source Microgrid System forDistributionLoad | ***VirendraSharma*** |

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| **58** | 1570772126 | ***Pankaj Verma***, Nitish Katal, Gaurav Jain,KuldeepJayaswal<br>*RajasthanTechnicalUniversity,India* | Global Maximum Power Point Tracking Methods for Multi-Peak Power Versus Voltage Curve of Photovoltaics: AReview | ***PankajVerma*** |
| **59** | 1570772333 | NbhanD Salih,***MarwanDSaleh***<br>*MultimediaUniversity,Malaysia* | RobustBloodVesselSegmentationAlgorithmforFundusImages | ***MarwanDSaleh*** |
| **60** | 1570772459 | | A Double-Ended Scheme for Fault Detection and Phase-Type Classification in Fixed Series CompensatedTransmissionLineDuringDistorted Signals | ***GauravKapoor*** |
| | | ***Gaurav Kapoor***, Pankaj Gakhar, PankajVerma, Pravin Sonwane, Kesari Singh,Bhuvnesh Rathore<br>*RajasthanTechnicalUniversityKota,India* | | |
| **61** | 1570772798 | ***Mohebbanaaz***, Y.Padma Sai, L.V.RajaniKumari<br>*VNR Vignana Jyothi Institute ofEngineeringandTechnology,India* | Automated Detection of Cardiac Arrhythmia UsingRecurrentNeuralNetworks | ***Mohebbanaaz*** |
| **62** | 1570772826 | ***Durga R***,PoovammalE<br>*SRM Institute of Science and Technology,India* | FederatedLearningModelforHealthchainSystem | ***Durga R*** |

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| **63** | 1570773197 | ***Nurhafizan Che Nah***, Wan NurshazelinWanShahidan<br>*Universiti Teknologi MARA, Perlis Branch,Malaysia* | Learning Success Factor in Open Distance Learning (ODL)MethodUsingFuzzy AHP | ***NurhafizanCheNah*** |
| **64** | 1570773340 | ***Yani Athmane Bennai***, Samira Yessad,LouizaBouailloucheMedjkoune<br>*UniversityofBejaia,Algeria* | Link Stability Based Routing Protocol for Highway ScenariosinVehicularNetworks | ***YaniAthmaneBennai*** |
| **65** | 1570773633 | ***Ahmed Samir Badawi,*** Mohamed Ouda,AlharethZyoud,SitiHajarYusoff<br>*International Islamic University Malaysia,Malaysia* | Maximum Power Point Tracking Controller Technique UsingPermitMagnetSynchronous Generator | ***AhmedSamirBadawi*** |
| **66** | 1570773970 | ***Zainura Idrus***, Fatin S. Rusli, ZanariahIdrus, Muhammad Aqil Mohd Nazri, AdelAl-zebari,NoorHasnitaAbdulTalib<br>*UniversitiTeknologiMARA,Malaysia* | SwamPlot:DataRedistributioninNon-RandomTechnique | ***ZainuraIdrus*** |
| **67** | 1570774052 | ***SaimanQuazi***,SarhanMusa<br>*PrairieViewA&MUniversity,USA* | Image Classification and Semantic Segmentation With DeepLearning | ***SaimanQuazi*** |
| **68** | 1570774062 | ***KehindeGilbert***,SarhanM.Musa<br>*PrairieViewA&MUniversity,USA* | PerformanceMeasurementofOpenShortestPathFirstProtocolWith FailureRecovery in IP | ***KehindeGilbert*** |
| **69** | 1570774434 | TR . Kalai Lakshmi, Kaja Bantha Navas R,Sharmila Parveen. S, ***Yogesh.M***, ***DeepanEdwardDasan.M***,HariHaraSudan.P<br>*Sathyabama Institute of Science andTechnology,India* | An Empirical Study on Industry 4.0 Future Practices in IndianMSMEs | ***Yogesh.M, Deepan Edward Dasan.M*** |

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| **70** | 1570774501 | Romiza Md Nor, ***Muhammad AzamMuhammadKamal***,HuzaifahAH amid<br>*UniversitiTeknologiMalaysia,Malaysia* | Monitoring Idling Car Gas Leakage and Notification viaMobileWithEco-Feedback | ***Muhammad AzamMuhammadKamal*** |
| **71** | 1570774661 | ***AyodejiOlanite***,SarhanM.Musa<br>*PrairieViewA&MUniversity,USA* | Power Dissipation of Adiabatic Logic Circuit for FinFET andMOSFETTransistors | ***AyodejiOlanite*** |
| **72** | 1570774705 | ***Intan Maizura Arzimi,*** Mohd Naz'riMahrin, Surya Sumarni Hussein, NurAzaliah Abu Bakar, Noor Hafizah Hassan,SuriayatiChuprat<br>*UniversitiTeknologiMalaysia,Malaysia* | Metamodel for Enterprise Architecture: A SystematicLiteratureReview | ***IntanMaizuraArzimi*** |
| **73** | 1570774706 | ***Pavethra M***,MUmadevi<br>*SRM Institute of Science and Technology,India* | DeepLearningApproachesfor ImageDehazing | ***Pavethra M*** |
| **74** | 1570774746 | ***Sharifah Nadiyah Razali***, Khyrina AirinFariza Abu Samah, Mohd Hafiez Ahmad,Lala SeptemRiza | IoT Based Accident Detection and Tracking System WithTelegram andSMSNotifications | ***SharifahNadiyahRazali*** |
| | | *KolejKomunitiSelandar,Malaysia* | | |
| **75** | 1570774786 | Windhya Rankothge, Narmada Gamage,***Ahamed Suhail***, Tharani Ariyawansa,HarithaDewwiman,BhanuSenevirathne<br>*Sri Lanka Institute of InformationTechnology(SLIIT),SriLanka* | A Deep Learning Model Optimized With Genetic AlgorithmsforResource AllocationofVirtualized NetworkFunctions | ***AhamedSuhail*** |

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| **76** | 1570775067 | ***Nurul Fazleen Binti Abdul Rahim***, AdamWong Yoon Khang, Aslinda Hassan,Shamsul Jamel Elias, Johar AkbarMohamatGani, JamaluddinJasmis<br>*Universiti Teknikal Malaysia Melaka,Malaysia* | Channel Congestion Control in VANET for Safety and Non-SafetyCommunication: AReview | ***NurulFazleenBintiAbdulRahim*** |
| **77** | 1570775115 | ***Ahmed Samir Badawi,*** Mohamed Ouda,AlharethZyoud,SitiHajarYusoff<br>*International Islamic University Malaysia,Malaysia* | The Simplest Estimation Method of Weibull ProbabilityDistributionParameters | ***AhmedSamirBadawi*** |
| **78** | 1570775134 | ***Nguyen Hoang Khoi Tran***, Vinh-HaoNguyen<br>*Ho Chi Minh City University of Technology,VNU-HCM,Vietnam* | An EKF-Based Fusion of Visual-Inertial Odometry and GPSforGlobal RobotPoseEstimation | ***NguyenHoangKhoiTran*** |
| **79** | 1570775490 | ***Nor Aina Aliza Ya'kob***, Rohani SMohamed Farook, Aznor Hanah AbdulHalim,MohdFairuzMuhammadFadzil,Mohamad Rizal Abdul Rejab, ShamsulJamelElias<br>*UniversitiMalaysiaPerlis,Malaysia* | Motion Detection System for Recognition of Early Sign ofDepression | ***NorAinaAliza Ya'kob*** |
| **80** | 1570775493 | ***Aznor Hanah***, Rohani S Mohamed Farook,MohamadRizalAbdulRejab,MohdFairuz | Cross-LayerOptimizationforVANETCityScenarioUsingTaguchiMechanism | ***AznorHanah*** |
| | | Muhamad Fadzil, Shamsul Jamel Elias, SitiRafidahMuhamatDawam<br>*UniversitiMalaysiaPerlis,Malaysia* | | |

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| **81** | 1570775674 | ***Jyoti Prakash Vengurlekar***; Ayush Saxena;RishavDash<br><br>*RamraoAdikInstituteofTechnology,India* | Estimation of Simulated Particles in Magnetron Using ImgeColorDetection | ***JyotiPrakashVengurlekar*** |
| **82** | 1570775792 | ***Tan Shi An***, Suzi Iryanti Fadilah, PanteaKeikhosrokiani,NurHanaSamsudin<br><br>*UniversitiSainsMalaysia,Malaysia* | Exploring the Business Intelligence Efficiency inOrganizationsAmongEmployeesinPenang, Malaysia | ***TanShiAn*** |
| **83** | 1570775814 | Windhya Rankothge, Narmada Gamage,***Tharani Ariyawansa***, Ahamed Suhail,HarithaDewwiman,BhanuSenevirathne<br><br>*Sri Lanka Institute of InformationTechnology(SLIIT),Sri iLanka* | NetEye: Network Monitoring for a Software DefinedNetworkBasedVirtualizedNetworkFunctionsPlatform | ***TharaniAriyawansa*** |
| **84** | 1570776146 | Chandimal Jayawardena, Shyam Reyal,Kekirideniya K.R, ***Wijayawardhana G.H.T***,Rupasinghe D.G.I.U,LakrangaS.Y.R.M<br><br>*Sri Lanka Institute of InformationTechnology(SLIIT),Sri iLanka* | AIBased SmartLibraryManagementSystem | ***WijayawardhanaG.H.T*** |
| **85** | 1570776167 | ***Mohd Ali Mat Nong,*** Juraina Md Yusof,Rosiah Osman, Roslina Mohd Sidek, SuzilaSabil<br><br>*UniversitiPutraMalaysia,Malaysia* | Motorcycle Image Evaluation by Contrast StretchingMethod | ***MohaA*** |

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| **86** | 1570778277 | ***PoonamRajendra Gohad***,SajidullahKhan<br>*SandipUniversity,India* | Diagnosis of Leaf Health Using Grape Leaf Thermal ImagingandConvolutional NeuralNetworks | ***PoonamRajendraGohad*** |
| **87** | 1570778293 | Setyawan P. Sakti, ***Heru Nurwarsito***, DidikSuprayogo, Cahyo Prayogo, Awang SatyaKusuma<br>*UniversityofBrawijaya,Indonesia* | Automation of CNC Machinery in Improving Quality andProduction Speed of Agricultural Product ProcessingMachineryComponents | ***HeruNurwarsito*** |
| **88** | 1570778696 | MdYushalifyMisro,***AfidaAhmad***<br>*Universiti Teknologi MARA, Kedah Branch,Malaysia* | Preserving Monotonicity of Ball Curve andIt'sCurvatureProfile | ***AfidaAhmad*** |
| **89** | 1570778728 | ***Nurul Husna Mahadzir***, Ahmad AfifAhmarofi, Siti Nurbaya Ismail; Nor HafizahAbdul Razak, Jasmin Ilyani Ahmad, AfidaAhmad<br>*Universiti Teknologi MARA, Kedah Branch,Malaysia* | EDU_INSIGHTS: The Analytic Tools to Assess Students'SatisfactionLevel inOpenandDistanceLearning(ODL) | ***NurulHusna Mahadzir*** |
| **90** | 1570779424 | ***Mazura Mat Din***, Noor Rasidah Ali, TanizaTajuddin, Siti Rafidah Muhamat Dawam,ShaifizatMansor<br>*Universiti Teknologi MARA, Kedah Branch,Malaysia* | Mobile Application for Malaysian Diabetes DietaryMonitoringSystem(My-DDMS) | ***MazuraMatDin*** |

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| **91** | 1570779481 | ***Ahmad Afif Ahmarofi***, Zetty AinKamaruzzaman, Hamirahanim AbdulRahman, Khairil Azman Masri, NadirahAbdul Rahim, S.Sarifah Radiah Shariff,ZanariahIdrus, SitiNurbaya Ismail | Development of A Computer Simulation on Road PricingStrategy to Reduce Congestion and Carbon DioxideEmission:ASystemDynamics Approach | ***AhmadAfifAhmarofi*** |
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| **145** | | NURNAZIFAMDHASANI | FACULTYMEMBER | UiTMKedah |
| **146** | | MOHDZHAFRIMOHDZUKHI | FACULTYMEMBER | UiTMKedah |
| **147** | | ABDULMALEKSAIDINA OMAR | DR | Faculty Member UiTMPe[illegible] |
| **148** | | NURULHUDAISHAK | DR | Faculty Member UiTMKedah |

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| **149** | | KAMARULAZHARDAUD | DR | Faculty Member UiTMPenang |
| **150** | | NURDARINA AHMAD | DR | Faculty Member UiTMPenang |
| **151** | | AHMAD ASRIABD SAMAT | DR | Faculty Member UiTMPenang |
| **152** | | AIMIIDZWANTAJUDIN | DR | Faculty Member UiTMPenang |
| **153** | | MUHAMMADNABILFIKRIJAMALUDDIN | DR | FacultyMemberUiTMPerlis |
| **154** | | LATIFAHMOHAMED | DR | FacultyMemberUiTMPerlis |
| **155** | | MOHAMMADHAFIZISMAIL | DR | FacultyMemberUiTMPerlis |
| **156** | | TAJULROSLIRAZAK | DR | FacultyMemberUiTMPerlis |
| **157** | | SITIZULAIHAAHMAD | TS DR | FacultyMemberUiTMPerlis |
| **158** | | AZNOORAOSMAN | DR | FacultyMemberUiTMPerlis |
| **159** | | AINISYUHADAMDZAIN | DR | Faculty member, UNIMAPPerlis |
| **160** | | NURADYANIMOHD AFFENDI | DR | Faculty member, UNIMAPPerlis |
| **161** | | WANZUKI AZMAN WANMUHAMAD | DR | Faculty member, UNIMAPPerlis |
| **162** | | WANNURSURYANIFIRUZWANARIFFIN | DR | Faculty member, UNIMAPPerlis |
| **163** | | ZULKIFLIHUSIN | DR | Faculty member, UNIMAPPerlis |

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|---|---|---|---|---|
| **164** | | ALYAGEOGIANABUJA | DR | Faculty member, UiTMMelaka |
| **165** | | BALKIAHMOKHTAR | DR | FacultyMemberUiTMPerlis |
| **166** | | NORAYANTICHEJAN | DR | FacultyMemberUiTMPerlis |
| **167** | | NURFATIHAHFAUZI | DR | FacultyMemberUiTMPerlis |
| **168** | | AZWATI AZMIN | DR | FacultyMemberUiTMPerlis |

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|---|---|---|---|---|
| **169** | | KHAIRUL ANWAR SEDEK | DR | Faculty Member UiTM Perlis |
| **170** | | SAODAH OMAR | DR | Faculty Member UiTM Perlis |
| **171** | | MUHAMMAD ZULHAIKAL BIN ZURAIDI | STUDENT | FSKM UITM KEDAH |
| **172** | | MUHAMMAD SYAFIQ AIMAN BIN MOHD FUAD | STUDENT | FSKM UITM KEDAH |
| **173** | | AIMIE HAZWANIE BINTI HISYA | STUDENT | FSKM UITM KEDAH |
| **174** | | NUR FARISHA IDAYU BINTI MOHD ZAMRI | STUDENT | FSKM UITM KEDAH |
| **175** | | KHAIRUNNISA AUNI BINTI MOHD SIDIK | STUDENT | FSKM UITM KEDAH |
| **176** | | NURUL SYAZWINA BINTI ZAMRI | STUDENT | FSKM UITM KEDAH |
| **177** | | IESMA DANIAL BIN NORDIN | STUDENT | FSKM UITM KEDAH |
| **178** | | MUHAMMAD ALIF HAKIMI BIN KHIRUL ANUAR | STUDENT | FSKM UITM KEDAH |
| **179** | | ADHAM BIN NAZRI | STUDENT | FSKM UITM KEDAH |
| **180** | | MUHAMMAD AKMAL BIN ROSDI | STUDENT | FSKM UITM KEDAH |
| **181** | | HAFIY NAWFAL BIN MOHAMAD MAHADZIR | STUDENT | FSKM UITM KEDAH |
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| **183** | | MUHAMMAD IRFAN DANIAL BIN HAFIZAN | STUDENT | FSKM UITM KEDAH |
| **184** | | NURUL BATRISYIA HAZWANI BINTI MOHD TAUFEK | STUDENT | FSKM UITM KEDAH |

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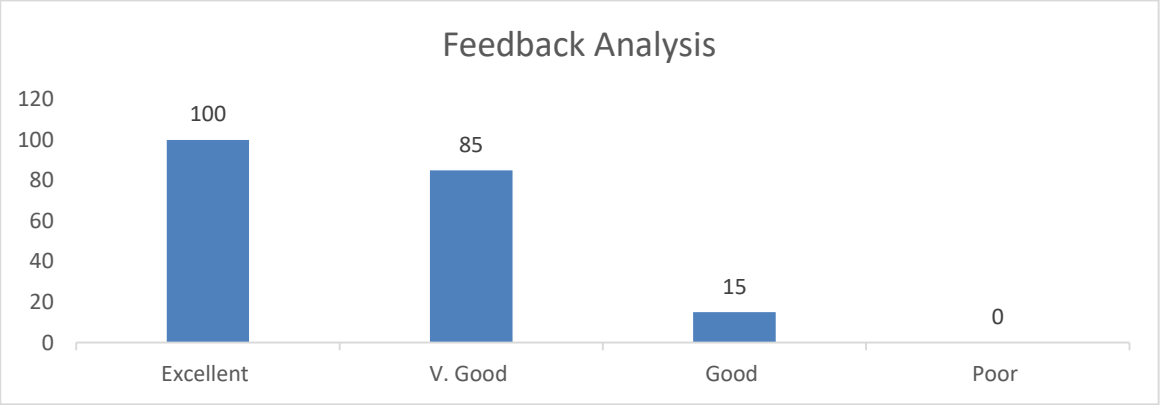
## FEEDBACKANALYSIS:

Written feedback was collected from each participant during each session. Oral feedback and views shared by the participants revealed that the conference has successfully fulfilled the objectives of the conference set forth. All the participants in their oral feedback have given positive remarks in all respects and shown their satisfaction over all the arrangements except about the time management.

- **The analysis is presented below;**

| | Attributes | Comments | No. Of Comments |
|---|---|---|---|
| Program | How was the seminar? | Excellent | 100 |
| | | V. Good | 85 |
| | | Good | 15 |
| | | Poor | 0 |




## SWOT ANALYSIS:

The primary goal of such conferences is to promote research and developmental activities in recent advances in engineering and allied areas. Another goal is to promote scientific information inter change between researchers, developers, engineers, students, and practitioners working in and around the world.

## Strengths of the Conference:

- Experienced event team.
- Excellent PR.
- High motivation level.
- Usage of the right event marketing tools.
- Good market share, strong brand name.
- Many social media followers.

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## Weakness of Conference:

- The number of Quality papers was less than expected
- Expenditure

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Promoted by Shanti Education Society, Affiliated to Rajasthan Technical University & Approved by AICTE

# CONFERENCEREPORT

## Second International Conferenceon Artificial Intelligence: Advances andApplications (ICAIAA-2021)

**TITLEANDDURATION:**Second International Conference on Artificial Intelligence Advances and Applications (ICAIAA-2021) March 27-28, 2021.

**SPONSORS:**RTU TEQIP-III.

**SUPPORTERS:**Rajasthan Technical University (RTU), Kota.

**ORGANIZING PARTNERS:**ICAIAA-2021 was jointly organized by Poornima College of Engineering, Jaipur and Rajasthan Technical University, Kota in association with Soft Computing Research Society (SCRS)

**PUBLISHER(S):**Springer

## THEMES/TRACKS:

**Track-1** Artificial Intelligence

**Track-2** Intelligent Sensor, Devices & Applications

## OBJECTIVES:

The objective of the conference is to bring together researchers from academia, government agencies, research laboratories and the corporate sector from all over the world to present their research works carried out in Artificial Intelligence domain. On 27th March Conference was inaugurated by Chief Guest **Prof. R.A. Gupta, Hon'ble Vice Chancellor, Rajasthan Technical University, Kota,** Guest of Honor **Dr. MarcinPaprzycki,** Polish Academy of Science, Warsaw, Poland and **Dr. DhirendraMathur**, RTU (ATU) TEQIP-III Coordinator, Dr. Harish Sharma, Associate Professor, RTU Kota, Organizing Secretary ICAIAA 2021, **Dr. MukeshSaraswat,** Associate Prof., Jaypee Institute of Technology, Noida, **Dr. MahendraLalwani,** Associate Prof., RTU, Kota, **Dr. Nilanjan Dey,** Assistant Professor, Techno India College of Technology, Kolkata, **Ar.Rahul singhi**, Director, Poornima **Group** and **Dr. Mahesh M. Bundeles, Director, PCE,** General Chair ICAIAA 2021, **Mr. PankajDhemla**, Vice Principal, PCE, **Dr. GarimaMathur,** Convenor ICAIAA 2021. In this

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Conference 298 papers from 33 different countries submitted their research articles. 97 papers are accepted for the publication and presentation during the conference. 80 papers are registered in the conference. 16 Parallel Technical Sessions are scheduled. 04 Keynote talks will be delivered by the eminent speakers **KatarzynaWasielewska-Michniewska**, Systems Research Institute, Polish Academy of Sciences,

Dr. **NilanjanDey,** JIS University, Kolkata, Dr. **PrashantJamwal,** Nazarbayev University (NU), Astana, Kazakhstan, **Dr. Montaz Ali,** University of the Witwatersrand, Johannesburg, South Africa. Speakers shared their thoughts that Artificial Intelligence research is leading to evolve in the area of Machine Learning, Deep Learning applications in Healthcare, Agriculture, Business and Security etc. AI is an emerging technology that shall be used almost all applications / technologies/ systems in one or other form.

## EXPECTEDOUTCOMES:

The expected outcomes from the Conference are:

- A toolkit for implementation
- Learning and knowledge exchange among Conference participants through interdisciplinary discussions.
- A series of documented case studies, video interviews, information briefs and other materials for Artificial Intelligence.
- A Conference report, including lessons from the International Decade for Advancement and Application in the field of Artificial Intelligence.

## BROCHURE/POSTER/LEAFLET/FLYER:

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# 2nd International Conference on Artificial Intelligence: Advances and Applications-2021 (ICAIAA-2021)

**March 27-28, 2021**

In Association with Springer

**RAJASTHAN TECHNICAL UNIVERSITY, KOTA**

TEQIP-III
Technical Education Quality Improvement Programme

## ICAIAA-2021 COMMITTEES

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**Nirmala Sharma,**
Rajasthan Technical University, Kota, India
**Payal Bansal,** PCE, Jaipur, India
**Sanjay Bhargav,** PCE, Jaipur, India

## CALL FOR PAPERS

**Prospective authors from academia as well as Industry are invited to submit their full papers in Main Conference ICAIAA- 2021, which have not been yet submitted / published and that illustrate research, surveying works, and industrial applications in artificial intelligence domain describing significant innovation and advances in following broad areas, but not limited to:**

### Track-I Artificial Intelligence

- Agent-Based Systems
- Bioinformatics and Computational Biology
- Artificial Life
- Collective Intelligence
- Differential Evolution
- Evolutionary Scheduling
- Machine Learning
- Ant Colony Optimization
- Artificial Intelligence In Modeling And Simulation
- Artificial Immune Systems
- Computer Vision And Speech Understanding
- Evolutionary Design
- Expert Systems
- Deep Learning
- Approximate Reasoning
- Natural Language Processing
- Brain-Machine Interfaces
- Data Mining
- Neural Network Theory and Architectures
- Human–Computer Interaction
- Nature Inspired Algorithm

### Track-2 Intelligent Sensor, Devices & Applications

- Automatic Control
- Sensors in Automobile
- Fuzzy Systems For Robotics
- Intelligent Database Systems
- Sensor Modeling And Identification
- Molecular And Quantum Computing
- Robotics And Related Fields
- Web Intelligence Applications And Search
- Intelligent System Architectures
- Health Care Applications
- Network Intelligence
- Routing Protocol in WSN
- Natural Language Processing
- CAD Design & Testing
- Computational Theories Of Learning
- Intelligent Sensor
- Information Retrieval
- Mechatronics
- VANET
- Energy Optimization of Wireless Devices
- Agriculture Applications
- Disaster Management
- Variable Bio-Sensors
- Coverage Problem in WSN
- Sensors for Medical Health Application
- Hybrid Intelligent Systems
- Multi-Agent Systems
- Environmental/ Earth Sensing
- Pervasive Computing And Ambient Intelligence
- Synthesizing Controllers
- Industrial Monitoring
- Security and Privacy Data Mining
- Business intelligence

### Oral Presentation

**The author / presenter shall prepare 15 minutes presentation about the research paper contribution including Objective, Justification, Methodology, Results, and Conclusion as per template here. There will be 3-5 minutes query time. Presentation schedule will be displayed well before time.**

### Important Dates

| | | |
|---|---|---|
| Last Date of Paper Submission | : | January 25, 2021 |
| Acceptance Notification | : | February 25, 2021 |
| Camera Ready Paper | : | March 5, 2021 |
| Last Date of Registration | : | March 10, 2021 |

### Registration Fees

| Category | Fee | |
|---|---|---|
| RTU & BTU Faculty & Students (All the authors should be from RTU & BTU affiliated colleges) | 100% Fee Waiver | |
| | India | Outside India |
| Regular Author Academician | 5000 INR/- | 100 USD |
| Regular Author Student (PG) | 4000 INR/- | 80 USD |
| Regular Author Student (UG) | 3000 INR/- | 60 USD |
| RTU & BTU Faculty & Students Attendee / Co Author (First Author is from RTU & BTU affiliated colleges & co Authors are from non RTU Organization) | 60 % of Respective Category | 60 % of Respective Category |

### CONTACT:


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**Dr. Garima Mathur**
Email: drg.mathur@poornima.org
Mobile: +91-9829393517


### PAPER SUBMISSION

**All the papers should be prepared as per author guidelines. The manuscript written should be thoroughly checked for grammatical or typographical errors before submission. Authors should ensure that the similarity score of their research paper is not above 15 %. Manuscripts having similarity score more than 15 % shall not be processed. All the review manuscripts should be submitted in PDF format without authors name and affiliations using Easy Chair Conference Management Systems written Springer Template in Word (A4) or in Latex. However the names of all authors should be registered on easy chair while submission. Maximum number of page allowed will be 08 (Eight).**

Website: **https://www.icaiaa21.scrs.in/**
Paper submission Link : **https://easychair.org/conferences/?conf=icaiaa21**

### Organized by

**Rajasthan Technical University, Kota**
**Poornima College of Engineering, Jaipur**
**Soft Computing Research Society**

### Conference Venue

**POORNIMA COLLEGE OF ENGINEERING**
**ISI-6 RIICO Institutional Area, Sitapura, JAIPUR – 302022 (Raj.), INDIA**

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## RESPONSE(SUBMISSION/ACCEPTANCE/PRESENTATION):

In ICAIAA-2021, total 298 papers are received across the world consented and reviewed the papers. 62 papers were accepted after a rigorous review procedure, making it very selective. 54 papers are registered, Out of which 45 papers are presented in the conference.

| | Track1 | Track2 | Total |
|---|---|---|---|
| **Total No. of Papers Submitted** | 175 | 123 | 298 |
| **Total No. of Papers Accepted** | 33 | 29 | 62 |
| **Total No. of Papers Registered** | 29 | 25 | 54 |
| **Total No. of Papers Presented** | 26 | 20 | 46 |

## PROGRAMOUTLINE:

| | | |
|---|---|---|
| | Opening Ceremony | 13:00 – 14:00 |
| | Keynote Talks | 14:00 – 15:30 |
| K1 | Second rise of semantics in the era of next-generation system architectures<br>Speaker: KatarzynaWasielewska-Michniewska, Systems Research Institute, Polish Academy of Sciences | 14:00 – 14:45 |
| K2 | …<br>Speaker: NilanjanDey, JIS University, Kolkata, India | 14:45 – 15:30 |
| | TS01: Artificial Intelligence | 16:00 – 17:00 |
| 35 | AN EFFICIENT HIDS SYSTEM USING MACHINE LEARNING ALGORITHM AND EVIDENCE THEORY<br>*Surbhi Solanki, Chetan Gupta, Dr. KalpanaRai and Dr. MinalSaxena* | |
| 42 | Self-supervised Learningfor COVID 19 – An Envision to Salvage Model<br>*Anjali Jivani, HetalBhavsar and KshitijGupte* | |
| 58 | FORECAST OF COVID CASES USING DEEP LEARNING ALGORITHM<br>*NidumoluVijayaAnand and Gunturi Chandra Mouli* | |
| 112 | Multi-Agent Intrusion Detection System using Sparse PSO K-Mean Clustering and Deep Learning<br>*Tanushri Jain and Chetan Gupta* | |
| 131 | Malware Classification based on Various Machine Learning Techniques<br>*VinayGautam* | |
| | TS02: Intelligent Sensor, Devices & Application | 16:00 – 17:00 |
| 89 | A Quick and Single-Ended Scheme for Fault Detection and | |

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| | Classification on Transmission Line<br>*Gaurav Kapoor* | |
| 103 | Privacy Preserving Dynamic Task Scheduling For Autonomous Vehicles<br>*Muthurajkumar S, Ajay Karthikeyan C, Pradeep K and Hariharan A* | |
| 118 | Artificial Intelligence enabled IoT Based Smart Blood Banking System<br>*MuthuKumaran E, Velmurugan K, Venkumar P, AmuthaGuka D and Divya V* | |
| 149 | Reliability enhancement in harmony with prudent coding for flight critical embedded automatic control software<br>*Shobha S. Prabhu and H.L. Shashirekha* | |
| 155 | Multi-Location Faults in Transmission Lines: Detection and Classification<br>*Gaurav Kapoor* | |
| | TS03: Computer Vision | 16:00 – 17:00 |
| 25 | Detecting depressive online user behavior during global pandemic by fusing LSTM and CNN Models<br>*BhuvaneswariAnbalagan and Jayanthi R R* | |
| 30 | SIMPLIFYING AND OPTIMIZING THE CONVOLUTION ENCODING ALGORITHM IN ERROR CONTROL CODES<br>*Constance Amannah* | |
| 63 | Deep Model for Robust Tomato Disease Detection on Low-Resolution Leaf Images<br>*SiddhantBaldota, Rubal Sharma, NimishaKhaitan and Poovammal E* | |
| 83 | A Novel Entropy-Based FCM Algorithm Using Inverse Fuzzy Membership Framework and Uncertainty Measure for Segmentation of Brain MR Images<br>*Madhumita Ray, NabanitaMahata and JamunaKanta Sing* | |
| 193 | RADAR TARGET RECOGNITION AND CLASSIFICATION USING SUPERVISED MACHINE LEARNING APPRAOCHES<br>*JaganMohana Rao Pathina and Rajesh Kumar P* | |
| | TS04: Big Data Analytics | 16:00 – 17:00 |
| 121 | An Attention-based Medical NER in the Bengali Language<br>*Tanvir Islam, SakilaMahbinZinat, ShamimaSukhi, Zakir Hossain Zamil, AynurNahar and M. F. Mridha* | |
| 146 | Semantic Similarity Extraction on Corpora Using Natural Language Processing Techniques and Text Analytics Algorithms<br>*Nisha Varghese and Punithavalli M* | |
| 147 | Introduction of PMI-SO Integrated with Predictive and Lexicon Based Features to Detect Cyberbullying in Bangla Text Using Machine Learning<br>*Md. Tofael Ahmed, Maqsudur Rahman, ShafayetNur, Dr. Azm Islam and Dr. Dipankar Das* | |
| 148 | Modeling and Simulation of Supply Chain System in Stochastic Environment: A Simple Case Study for Periodic Review Policy Using Python<br>*Arun Kumar Mishra* | |
| 152 | Graph based data analysis in Big Data Computing Environment: An investigation of Flight Network Datasets<br>*Naishadh Mehta, AnandRuparelia, JaiprakashVerma and Manoj Kumar* | |

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| | *Khinchi* | |
| | TS05: Artificial Intelligence | 16:00 – 17:00 |
| 139 | Predicting Survivability in Oral Cancer (OC) Patients<br>*Diksha Sharma, NeelamGoel and Vivek Kumar Garg* | |
| 158 | Particle Swarm Optimization with Weighted Extreme Learning Machine for Software Change Prediction<br>*Ruchika Malhotra, Deepti Aggarwal and PriyaGarg* | |
| 174 | Application of Machine Learning for Heart Disease Prediction<br>*Mohsin Qureshi and NilimaWarke* | |
| 207 | ESTIMATION OF REFLECTION COEFFICIENT OF QUARTER CIRCLE BREAKWATER USING ARTIFICIAL NEURAL NETWORK<br>*Shankara Krishna A, Vishwanath Mane and Subba Rao* | |
| 214 | Hybrid CNN – LSTM for Traffic Flow Forecasting<br>*Rajalakshmi V and Ganesh Vaidyanathan S* | |
| | TS06: Artificial Intelligence | 17:30 – 18:45 |
| 276 | Flood Hazard Mapping of Kuttanaad Region, Kerala<br>*JayatiVijaywargiya and Rama Rao Nidamanuri* | |
| 177 | A Divisive Hierarchical Clustering Algorithm to Find Clusters with Smaller Diameter to Cardinality Ratio<br>*SadmanSadeedOmee and Md. Saidur Rahman* | |
| 242 | A conceptual framework based on conversational agents for the early detection of cognitive impairment<br>*Moises Ruben Pacheco Lorenzo, Sonia Maria Valladares Rodriguez, Luis EulogioAnidoRifon and Manuel Jose Fernandez Iglesias* | |
| 254 | Multi Objectives for TCSC Placement using Self-Adaptive Firefly Algorithm<br>*SelvarauRanganathan, PalanivelPanjamoorthy and EllappanVenugopal* | |
| 284 | Navigation App for People with Disabilities Through Store Accessibility Assessment<br>*Christine Guo, Lawrence Han, Vicky Tang and Hao Tang* | |
| 298 | Optimization of Fractional Order PID Controller(FOPID)Using Cuckoo Search<br>*TarunVarshney, VikassinghBhadoria, PravinSonwane and Nitin Singh* | |
| | TS07: Intelligent Sensor, Devices & Application | 17:30 – 18:30 |
| 163 | Impact of Overall Service Quality and Technology Factors on Intention to Use the Internet of Things (IoT) at Bescom<br>*Kavitha Desai, Mahalakshmi S, Sivaretinamohan R and MacherlaBhagyalakshmi* | |
| 186 | Design of AMC based Metasurface Loaded Slot Antenna for Wideband RCS Reduction and Gain Improvement<br>*Ankit Sharma, Animesh Chandra, Deepak Kumar, HimanshuPrajapat, Madan Kumar Sharma, Hridesh Kumar Verma and Aniket Chauhan* | |
| 192 | A Novel Hybrid ASO-NM Algorithm and Its Application to Autonomous Cruise Control System<br>*DavutIzci and SerdarEkinci* | |
| 197 | On the use of Machine Learning for Soil Carbon Mapping<br>*VikashRameshar, Wesley Doorsamy and Babu Paul* | |
| 279 | Forest Fire Damage and Recovery Assessment | |

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| | *JayatiVijaywargiya and Rama Rao Nidamanuri* | |
| | TS08: Computer Vision | 17:30 – 18:30 |
| 111 | A Method of Micro Pixel Similarity for Lung Cancer Diagnosis using Adaboost<br>*Vaishnaw Kale* | |
| 115 | Application of hybrid of ACO-BP in Convolution Neural Network for effective Classification<br>*Suruchi Chawla* | |
| 141 | FACE RECOGNITION AND MOBILE LOCATION DATA FOR CLASS ATTENDANCE MONITORING<br>*Francis Somba, Simon Mwendia and Ezekiel Kuria* | |
| 157 | Early Epilepsy Seizure Prediction using CNN<br>*Aditya Karmokar, Chris David, Shaun Jacob and RupaliDeshmukh* | |
| 161 | Advanced identification of Alzheimer's disease from brain MRI images using Convolution Neural Network<br>*SoniyaLalwani, Rajesh Kumar, NehaRajawat, Bharat Singh Hada and MayankMeghawat* | |
| | TS09: Big Data Analytics | 17:30 – 18:30 |
| 164 | Transformer Deep Learning Model for Bangla-English Machine Translation<br>*Argha Chandra Dhar, Arna Roy, Md. Ahsan Habib, M. A. H. Akhand and N. Siddique* | |
| 176 | Time Series analysis and Forecasting on crime data<br>*Vimala Devi J and DrKavitha K S* | |
| 201 | Distributed Association Mining for discovering interesting rules for Tours and Travel Company<br>*ManojSethi and Rajni Jindal* | |
| 218 | An application of OB-MFO for Optimal Bidding Strategy in Pay-as-bid auction environment<br>*Pooja Jain and AkashSaxena* | |
| 285 | Wearable fall-detection using deep embedded clustering algorithm<br>*JothiRamasamy* | |

## INAUGURALSESSION:

Dr. Mahesh Bundele
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Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

RTU TEQIP-III Sponsored
2nd International Conference on
*Artificial Intelligence: Advances and Applications*
**ICAIAA-2021-(27-28 March 2021)**
**Organized by:**
Poornima College of Engineering, Jaipur and Rajasthan Technical University, Kota
in association with Soft Computing Research Society (SCRS)
*Inaugural Session*
**Saturday, March 27, 2021**

**Venue:** Online ICAIAA Conference Hall (Webex) **Time:** 12:30 pm to 01.50 pm

| S. No | Activity | Duration | Time |
|---|---|---|---|
| 1. | Reporting and Registration of Delegates –On Webex & Corresponding Track links | 10 Min | 12.30 pm-12.40 pm |
| 2. | Gathering of Audience in the hall | 5 Min | 12.40 pm-12.45 pm |
| 3. | **Arrival of Guests & Group Photograph of Dignitaries** | 05 Min | 12.45 pm-12.50 pm |
| 4. | Welcome of Dignitaries by the anchors & **Ganesh Vandana** | 05 Min | 12:50 pm-12:55 pm |
| 5. | Request the dignitaries for lighting of lamp (Parallel Saraswati Vandana Audio)<br>A. **Prof. R. A. Gupta,** Chief Patron and Hon'ble Vice-Chancellor RTU, Kota **(Chief Guest)**<br>B. **Dr. Marcin Paprzycki,** Polish Academy of Science, Warsaw, Poland **(Guest of honour)**<br>C. **Dr. Dhirendra Mathur,** RTU (ATU) TEQIP-III Coordinator<br>D. **Dr. Harish Sharma,** Associate Professor, RTU Kota, Organizing Secretary ICAIAA 2021<br>E. **Dr. Jagdish Chandra Bansal,** Associate Prof., South Asian University, New Delhi<br>F. **Dr. Mahendra Lalwani,** Associate Prof., Department of Electrical Engineering, RTU, Kota<br>G. **Dr. Nilanjan Dey,** Assistant Professor (Senior Grade) Department of IT, Techno India College of Technology, Kolkata<br>H. **Ar. Rahul Singhi,** Director, Poornima Group<br>I. **Dr. Mahesh Bundele,** Principal & Director, PCE, General Chair ICAIAA 2021<br>J. **Mr. Pakaj Dhemla,** Vice Principal, PCE<br>K. **Dr. Garima Mathur,** Organizing Secretary ICAIAA 2021 | 05 Min | 12:55 pm-01:00 pm |
| 6. | A. **Felicitation of Chief Guest Prof. R. A. Gupta,** Chief Patron and Hon'ble Vice-Chancellor RTU Kota, by **Ar. Rahul Singhi,** Director, Poornima Group<br>B. **Felicitation of Guest of Honour Dr. Marcin Paprzycki,** Polish Academy of Science, Warsaw, Poland **by Dr. Mahesh Bundele, Director, PCE**<br>C. **Felicitation of Guest of Honour Dr. Dhirendra Mathur,** RTU (ATU) TEQIP-III Coordinator **by Mr. Pankaj Dhemla, Vice Principal, PCE** | 05 Min | 01:00 pm-01:05 pm |
| 7. | Address by General Chair ICAIAA 2021 **Dr. Mahesh Bundele,** Director, PCE | 05 Min | 01.05 pm-01.10 pm |
| 8. | About the Conference by **Dr. Mahendra Lalwani,** Associate Prof., Department of Electrical Engineering, RTU, Kota | 05 Min | 01.10 pm-01.15 pm |
| 9. | Introduction & Address by **Ar. Rahul Singhi,** Director, Poornima Group. | 05 Min | 01.15 pm-01.20 pm |
| 10. | Introduction & Address by **Dr. Jagdish Chandra Bansal,** Associate Prof., South Asian University New Delhi. | 05 Min | 01.20 pm-01.25 pm |
| 11. | Introduction of **Guest of Honour Dr. Marcin Paprzycki,** Polish Academy of Science, Warsaw, Poland - **Keynote Address** | 10 Min | 01.25 pm-01.35 pm |
| 12. | Introduction & Address by **Chief Guest Prof. R. A. Gupta,** Chief Patron and Hon'ble Vice-Chancellor RTU Kota | 10 Min | 01.35 pm-01.45 pm |
| 13. | Vote of Thanks by **Dr. Garima Mathur,** Organizing Secretary ICAIAA 2021 | 03 Min | 01.45 pm-01.48 pm |
| 14. | **Group Photograph -Virtual** | 02 Min | 01.48 pm-01.50 pm |

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## KEYNOTESPEAKERS:

- **KatarzynaWasielewska-Michniewska**,
  *Systems Research Institute, Polish Academy of Sciences.*
- **NilanjanDey**,

*JIS University, Kolkata, India.*

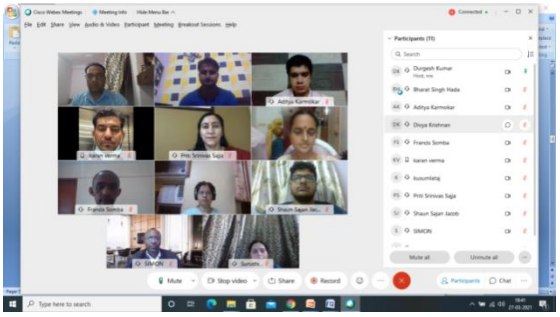
- **Montaz Ali**,

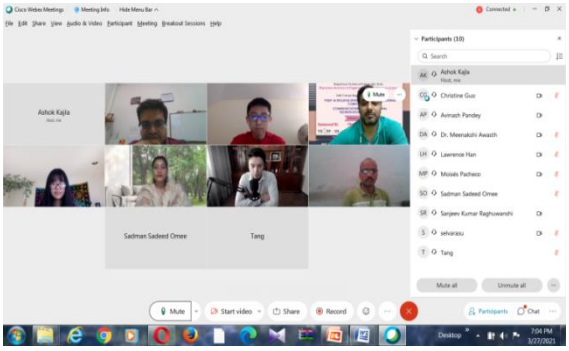
  *University of the Witwatersrand, Johannesburg, South Africa*

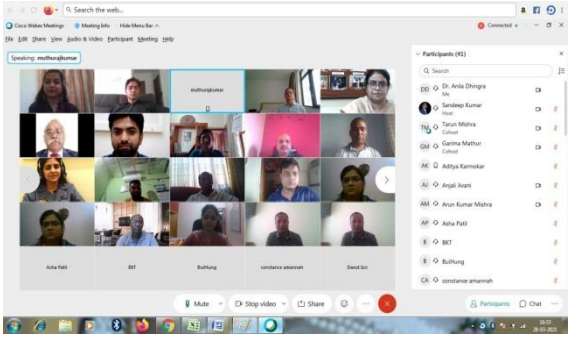
- **PrashantJamwal**,

  *Nazarbayev University (NU), Astana, Kazakhstan*

## GLIMPSESOFPRESENTATIONS:







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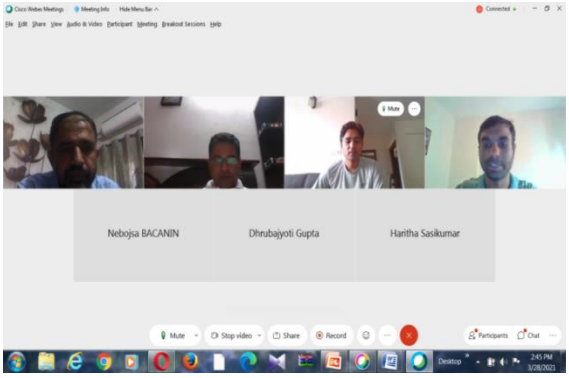


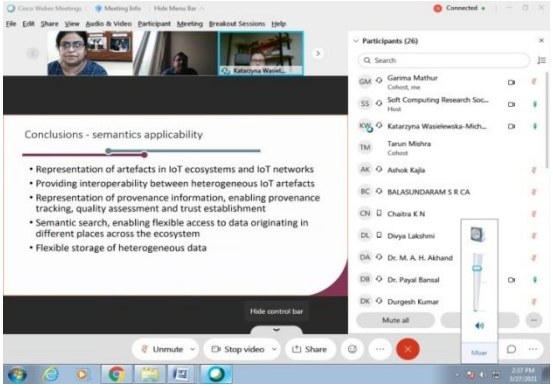


**VALEDICTORYSESSION:**

# CONFERENCE REPORT

## ICAIAA-2021(Mar 27-28, 2021)

## Valedictory Function

## DAY 2 Sunday- 28th March 2021

## Time: 3:45PM- 4:30PM

***Valedictory Session***

**Venue:**OnlineICAIAAConferenceHall(Webex) **Time**:3:45 pmto 4:30 pm

| S.No | Activity | Duration | Time |
|---|---|---|---|
| 1. | ArrivalofParticipants–OnWebex | 10 Min | 03:30pm-03:45pm |
| 2. | Arrival of Dignitaries<br>A. **Dr. PrashantJamwal**, Nazarbayev University (NU), Astana, Kazakhstan – **Chief Guest**<br>B. **Dr.HarishSharma,**AssociateProfessor,RTUKota,OrganizingSecretaryICAIAA2021<br>C. **Dr. MukeshSarawat,** Joint Secretary SCRS<br>D. **Dr.MaheshBundele,** Principal&Director,PCE,GeneralChair ICAIAA2021<br>E. **Mr.PakajDhemla,**VicePrincipal,PCE<br>F. **Dr.GarimaMathur,**Organizing SecretaryICAIAA2021 | 03 Min | 03:45pm-03:48pm |
| 3 | **Felicitation of Chief Guest Dr. PrashantJamwal**, Nazarbayev University (NU), Astana, Kazakhstan, by **Dr.MaheshBundele,** Principal&Director,PCE,GeneralChair ICAIAA2021 | 02 Min | 03:48pm-03:50 pm |
| 4 | Report on Conference by **Dr.GarimaMathur,**Organizing SecretaryICAIAA2021 | 05 Min | 03:50pm-03:55 pm |
| 5. | Participants Feedback online | 05 Min | 03:55pm-04:00 pm |
| 6. | Address by **Dr.MaheshBundele,** Principal&Director,PCE,GeneralChair ICAIAA2021 | 05 Min | 04:00pm-04:05 pm |
| 7. | Address by **Prof. PrashantJamwal, NazarbayevUniversity (NU), Astana, Kazakhstan, Chief Guest** | 10 Min | 04:[illegible] |
| 8. | **Award Announcement by By Prof. PrashantJamwal, Nazarbayev University (NU), Astana, Kazakhstan, Chief Guest** | 05 Min | 04:15pm-04:20 pm |

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|---|---|---|---|
| 9. | **Vote of Thanks by Dr. AnilaDhingra, Associate Professor, Poornima College of Engineering, Jaipur** | 05 Min | 04:20pm-04:25 pm |
| 10. | **GroupPhotograph-Virtual** | 05 Min | 04:25pm-04:30 pm |

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# POORNIMA
## COLLEGE OF ENGINEERING

Promoted by Shanti Education Society, Affiliated to Rajasthan Technical University & Approved by AICTE

## A Report on 2-day International Conference

**TITLE AND DURATION:** 'Sustainable Energy, Environment and Green Technologies (ICSEEGT 2021)'on 05-06 March 2021

**SPONSORS:** NIL

**SUPPORTERS:** NIL

**ORGANIZING PARTNERS:** NIL

**PUBLISHER(S):** IOP Conference Series: Earth and Environmental Science (EES) (Online ISSN: 1755-1315, Print ISSN:1755-1307).

**ISBN / PART NO. / INDEXING AGENCY:**

Website: https://iopscience.iop.org/journal/1755-1315
Scope: https://iopscience.iop.org/journal/1755-1315/page/scope
Indexing: https://www.scopus.com/sourceid/19900195068

**THEMES / TRACKS:**

| TRACK 1: SUSTAINABLE ENERGY | TRACK 2: ENVIRONMENT | TRACK 3: GREEN TECHNOLOGIES |
|---|---|---|
| • Energy efficiency and rationale use of energy<br>• Renewable Energy<br>• Sustainable Technologies for Energy Conservation<br>• Heating, Ventilation and Air Conditioning (HVAC)<br>• Computational Models for Sustainable Development<br>• Energy Efficient Designs and Standards<br>• Renewable Energy Supply and Technologies<br>• Energy Management, Policies, Economics and Sustainability<br>• Smart Grid / Smart City / Smart Mobility<br>• Energy and the Environment<br>• Energy Management Systems<br>• Sustainable Solutions in Developing Countries<br>• Sustainable Materials<br>• Sustainable Development Goals (SDGs) and Green Energy<br>• Energy and Health | • Environmental Chemistry and Pollution Control<br>• Renewable Energy (Wind, Solar, Hydro, Geothermal)<br>• Bio-energy, Biomass and Bio-fuels<br>• Environmental Risk management<br>• Waste Management and Waste Water Treatment<br>• Low Carbon Economy and Society<br>• Global Warming<br>• Resource and Environment<br>• Automation Applications in Environmental Technology<br>• Greenhouse Gas Mitigation and Climate Change<br>• Water Pollution and Control<br>• Solid Waste Valorization | • Energy Saving Technologies and Systems<br>• Green Technologies in Information<br>• Green Energy in Transport<br>• Sustainable Cities, Architecture and Green Buildings<br>• Green Nanotechnology<br>• Greening Urbanization and Urban Settlements<br>• Green Energy Trade for Economic Development<br>• Green Design, Products and Manufacturing Processes<br>• Green Power Systems and Smart Grids<br>• Emerging and Advanced Green Energy Technologies<br>• Green Energy Policies and Programmes<br>• Rural Development |

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**OBJECTIVES:**

The Conference on Sustainable Energy, Environment and Green Technologies (ICSEEGT-2021) organized by the department of Civil and Mechanical Engineering along with Applied Sciences, Poornima College of Engineering, Jaipur, India was the first International Conference on this theme. We are happy to that we could organize it with the publication support of SCOPUS indexed IOP Conference series Earth and Environmental Engineering. The objective of this conference was to bring together researchers from academia, government agencies, research laboratories and the corporate sector to present their research works carried out in sustainable energy, environment and green technologies.

**EXPECTED OUTCOMES:**

The conference will strengthen contacts and foster cooperation among accelerator-based science and application researchers, accelerator manufacturers and the coordinators of academic programs in the accelerator sciences, leading to a comprehensive review of the status of accelerator-based research and applications. The conference is expected to generate ideas that will form the basis of future ICSEEGT-2021 programs in the area of research and applications using accelerator technologies.

**BROCHURE / POSTER / LEAFLET / FLYER:**

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**PROGRAM OUTLINE:**

**DAY-I: Friday, March 5, 2021**

| TIME (IST) | EVENT |
|---|---|
| **11:30AM–11:45AM** | Virtual Registration of Delegates |
| **11:45AM–12:30PM** | **Inaugural Function**<br>***Session Link (Zoom):https://tinyurl.com/au7k8as2*** |
| **12:30PM-13:15PM** | **Keynote session-I**<br>***Session Link (Zoom):https://tinyurl.com/au7k8as2***<br>**Title*: From Idea to innovation: The Shit Killer***<br>**Speaker: Dr. Damir Brdanovic,** Professor of Sanitary Engineering, IHE Delft Institute for Water Education, The Netherlands |
| **13:15PM-13:30PM** | ***Session Break*** |
| **13:30PM – 15:30PM** | **Technical Session-I:** ***Emerging and Advance Tech***<br>***Session Link (Google Meet):https://tinyurl.co session1t***<br>**Session Chair: Dr. Salifu Tahiru Azeko,** Tamale Technical \| **Moderator: D insal,** Poorni Engineering, |

Dr. Mahesh Bundele B.E., M.E., Ph.D. Director Poornima College of Engineering ISI-6 RIICO Institutional Area Sitapura, JAIPUR

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|---|---|---|
| | University, Ghana | Jaipur, Rajasthan India |
| | | |
| | **Technical Session-II:** ***Sustainable Energy***<br>***Session Link (Google Meet):https://tinyurl.com/session2t*** | |
| | **Session Chair: Dr. T.N. Verma**, Maulana Azad National Institute of Technology Bhopal, India | **Moderator:Mr. ANKIT SINGH BENIWAL** ngineering, Jaipur, Rajasthan India |
| **15:30PM – 15:45PM** | ***Session Break*** | |
| **15:45PM-16:45PM** | **Keynote session-II**<br>***Session Link (Zoom):https://tinyurl.com/au7k8as2*** | |
| | ***Title: Advances in Materials for Green Energy Storage technologies***<br>**Speaker: Prof. M.V. Reddy,** Institute of Research Hydro-Québec, Centre of Excellence in Transportation Electrification and Energy Storage (CETEES), Hydro-Québec, Canada | |

**DAY-II: Saturday, March 6, 2021**

| TIME (IST) | EVENT | |
|---|---|---|
| **10:00AM - 12:00 PM** | ***Technical Session-III: Green Technologies***<br>***Session Link (Google Meet):https://tinyurl.com/session3t*** | |
| | **Session Chair: Dr. Pankaj Gupta,** Malaviya National Institute of Technology Jaipur, India | **Moderator: Dr. Payal Bansal,** Poornima College of Engineering, Jaipur, Rajasthan India |
| | | |
| | ***Technical Session-IV: Environment***<br>***Session Link (Google Meet):https://tinyurl.com/session4t*** | |
| | **Session Chair: Dr. Pradeep Kumar Gautam**, National Institute of Technology, Meghalaya, India | **Moderator: Mr. Vikas Sharma,** Poornima College of Engineering, Jaipur, Rajasthan India |
| **12:00PM - 12:15PM** | ***Session Break*** | |
| **12:15PM - 13:15PM** | **Keynote session-III**<br>***Session Link (Zoom):https://tinyurl.com/au7k8as2*** | |
| | **Title:** ***Green technology, Innovative Nano-materials and Eco Sustainability***<br>**Speaker: Dr. Alka Sharma**, Centre for Advanced Studies, University of Rajasthan, Jaipur, Rajasthan, India | |
| **13:15PM-13:30PM** | ***Session Break*** | |
| **13:30PM - 14:30PM** | **Keynote session-IV**<br>***Session Link (Zoom):https://tinyurl.com/au7k8as2*** | |
| | **Title:** ***Green Energy Technologies for Sustainable Development***<br>**Speaker: Prof. K. S. Reddy,** Indian Institute of Technology, Madras, India | |
| **14:30PM-16:00PM** | ***Session Break*** | |

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|---|---|
| **16:00PM-17:00PM** | **Valedictory Function**<br>***Session Link (Zoom):https://tinyurl.com/au7k8as2*** |

**PROGRAM SCHEDULE:**

PROGRAMME SCHEDULE (DAY-I)

**DAY-I: Friday, March 5, 2021**

| TIME (IST) | EVENT | | |
|---|---|---|---|
| **11:30AM – 11:45AM** | Virtual registration of delegates | | |
| **11:45AM – 12:30PM** | **Inaugural Function**<br>***Session Link (Zoom):https://tinyurl.com/au7k8as2*** | | |
| **12:30PM - 13:15PM** | **Keynote session-I**<br>Session Link (Zoom):***https://tinyurl.com/au7k8as2*** | | |
| | **Title: From Idea to innovation: The Shit Killer**<br>**Speaker: Dr. Damir Brdanovic**, Professor of Sanitary Engineering, IHE Delft Institute for Water Education, The Netherlands | | |
| **13:15PM - 13:30PM** | ***Session Break*** | | |
| **13:30PM – 15:30PM** | **Technical Session-I:** ***Emerging and Advanced Technologies***<br>***Session Link (Google Meet):https://tinyurl.com/session1t*** | | |
| | **Session Chair: Dr. Salifu Tahiru Azeko,** Tamale Technical University, Ghana | | **Moderator: Dr. Payal Bansal,** Poornima College of Engineering, Jaipur, Rajasthan India |
| | **Time** | **Paper ID** | **Title** |
| | 13:35-13:45 | ICSEEGT2021_T2_013 | Impact of particulate matter on pre and post COVID locked down in the wards of Urban Jaipur. |
| | 13:45- | ICSEEGT2021_T2_08 | Suitability [illegible] of |

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|---|---|---|---|
| | 13:55 | 9 | groundwater for irrigation in some villages of Sirsa district, Haryana (India) |
| | 13:55-14:05 | ICSEEGT2021_T2_090 | Process optimization for biodiesel production from highly acidic hibiscus cannabinus (Deccan hemp) oil |
| | 14:05-14:15 | ICSEEGT2021_T1_092 | Effect of expanded graphite on nitrate based phase change materials being used in thermal energy storage systems |
| | 14:15-14:25 | ICSEEGT2021_T1_094 | A sustainability index tool to measure environmental performance of an Indian city |
| | 14:25-14:35 | ICSEEGT2021_T1_101 | Impact of cleaner production and environmental management systems on sustainability: the moderating role of industry 4.0 |
| | 14:35-14:45 | ICSEEGT2021_T2_106 | Environmental carbon footprint assessment of a LHB railway coach. |
| | 14:45-14:55 | ICSEEGT2021_T2_108 | Life cycle analysis for the production of urea through Syngas. |
| | 14:55-15:05 | ICSEEGT2021_T1_110 | Building and performance evaluation of novel solar cooking system in Gujarat, India |
| | 15:05-15:15 | ICSEEGT2021_T2_113 | Experimental Investigation of Light Weight Concrete using Sintered Fly Ash Aggregates |
| | 15:15-15:25 | ICSEEGT2021_T1_100 | Strategies for reduction of harmful emissions from diesel engines |

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| | | | |
|---|---|---|---|
| **13:30PM – 15:30PM** | **Technical Session-II:** ***Sustainable Energy*** <br> ***Session Link (Google Meet):https://tinyurl.com/session2t*** | | |
| | **Session Chair: Dr. T.N. Verma**, Maulana Azad National Institute of Technology Bhopal, India | | **Moderator: Mr. Vikas Sharma,** Poornima College of Engineering, Jaipur, Rajasthan India |
| | **Time** | **Paper ID** | **Title** |
| | 13:35-13:45 | ICSEEGT2021_T1_014 | Measurement of Power in Distribution System using DTCWT based signal processing technique |
| | 13:45-13:55 | ICSEEGT2021_T1_016 | Fabrication of pure Aluminium reinforced Graphene composite for heat sink applications |
| | 13:55-14:05 | ICSEEGT2021_T1_030 | Women and social sustainability: A critical parametric evaluation of urban settings in developing countries. |
| | 14:05-14:15 | ICSEEGT2021_T1_035 | A Multivariate Analysis of Factors influencing Green Energy |
| | 14:15-14:25 | ICSEEGT2021_T1_049 | Change in fresh and rheological properties of mortar and concrete prepared using red mud - A review |
| | 14:25-14:35 | ICSEEGT2021_T1_055 | Sustainable production of concrete using coir fibres |
| | 14:35-14:45 | ICSEEGT2021_T1_056 | A critical study to assess the hurdles in adoption of sustainable walling materials in construction industry |
| | 14:45-14:55 | ICSEEGT2021_T1_063 | CFD modelling and [illegible] of an indirect forced con[illegible] solar d[illegible] |

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|---|---|---|---|
| | 14:55-15:05 | ICSEEGT2021_T1_075 | R&D Management as a Driver for Sustainable Agricultural Innovation and Adoption: Evidence from India |
| | 15:05-15:15 | ICSEEGT2021_T1_096 | Influence of coco peat powder on the solar still productivity: An exergo-economic study |
| **15:30PM – 15:45PM** | TEA/COFFEE BREAK | | |
| **15:45PM - 16:45PM** | **Keynote session-II**<br>***Session Link (Zoom):https://tinyurl.com/au7k8as2*** | | |
| | Title: Advances in Materials for Green Energy Storage technologies<br>Speaker: **Prof. M. V. Reddy,** Institute of Research Hydro-Québec, Centre of Excellence in Transportation Electrification and Energy Storage (CETEES), Hydro-Québec, Canada | | |

PROGRAMME SCHEDULE (DAY-II)

**DAY-II: Saturday, March 6, 2021**

| **TIME (IST)** | **EVENT** | | |
|---|---|---|---|
| **10:00AM - 12:00 PM** | **Technical Session-III:** ***Green Technologies***<br>***Session Link (Google Meet):https://tinyurl.com/session3t*** | | |
| | **Session Chair: Dr. Pankaj Gupta,** Malaviya National Institute of Technology Jaipur, India | | **Moderator: Dr. Payal Bansal,** Poornima College of Engineering, Jaipur, Rajasthan India |
| | **Time** | **Paper ID** | **Title** |
| | 10:05-10:15 | ICSEEGT2021_T3_012 | Review and Assessment of Factors Associated with Green Building Rating Systems |
| | 10:15-10:25 | ICSEEGT2021_T3_022 | Retrieving spatial pattern of urban using space [illegible] for major features of an urban ecosystem with [illegible] image [illegible] |
| | 10:25- | ICSEEGT2021_T3_031 | Impact of aspect ratio of floor |

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|---|---|---|---|
| | 10:35 | | plan on the energy performance of office rooms in New Delhi, India |
| | 10:35-10:45 | ICSEEGT2021_T2_033 | Assessment of Green Practices for Sustainable Development for the Automotive Sector |
| | 10:45-10:55 | ICSEEGT2021_T3_034 | Selection of Green Supplier in Automotive Industry: An Expert Choice Methodology |
| | 10:55-11:05 | ICSEEGT2021_T3_046 | Effect of Nano particle based anti-stripping agent on moisture induced damage for bituminous concrete mixes |
| | 11:05-11:15 | ICSEEGT2021_T3_048 | Composting: A better alternative of chemical fertilizer |
| | 11:15-11:25 | ICSEEGT2021_T2_083 | Study of Stress-Strain Behaviour in Soil Nail Wall Using Flexible Facing |
| | 11:25-11:35 | ICSEEGT2021_T3_102 | Life cycle based greenhouse gas footprint assessment of a Smartphone. |
| | 11:35-11:45 | ICSEEGT2021_T3_112 | Technical evaluation of sustainable cement containing fly ash and carbide lime sludge |
| | **Technical Session-IV:** ***Environment***<br>***Session Link (Google Meet):https://tinyurl.com/session4t*** | | |
| | **Session Chair: Dr. Pradeep Kumar Gautam**, National Institute of Technology, Meghalaya, India | | **Moderator: Mr. Vikas Sharma,** Poornima College of Engineering, Jaipur, Rajasthan India |
| **10:00AM - 12:00 PM** | **Time** | **Paper ID** | **Title** |
| | 10:05-10:15 | ICSEEGT2021_T2_024 | Suitable sites identification for solid waste disposal using Geographic Information System and Analytical Hierarchy Process method in Debark town, north-western Ethiopia |
| | 10:15-10:25 | ICSEEGT2021_T2_042 | Don't Transfer Waste, Transform waste: A Sustainable Approach Towards Zero Waste Events Initiative During Hockey World Cup in Bhubaneswar, India |
| | 10:25-10:35 | ICSEEGT2021_T2_047 | Construction & demolition waste as [illegible] of rigid pavement material [illegible] |
| | 10:35-10:45 | ICSEEGT2021_T2_059 | A comparison [illegible] two [illegible] of metamaterial |

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| | | | unit cells for miniaturization and multiband of microstrip patch antenna at 2.4 ghz frequency |
| | 10:45-10:55 | ICSEEGT2021_T2_065 | Faecal sludge management in urban environment, Omni Processor an innovative technology |
| | 10:55-11:05 | ICSEEGT2021_T2_077 | Developing and Implementing Environment Management Practices in Small & Medium Size Manufacturing Companies in India |
| | 11:05-11:15 | ICSEEGT2021_T2_087 | Building a Low Carbon Indian Economy |
| | 11:15-11:25 | ICSEEGT2021_T2_091 | Building Resilient Future: Information Technology and Disaster Management. A Malaysian Perspective |
| | 11:25-11:35 | ICSEEGT2021_T2_104 | A Portable Water Pollution Monitoring Device for Smart City based on Internet of Things (IoT) |
| | 11:35-11:45 | ICSEEGT2021_T2_105 | Environmental impact assessment of coal gasification in hydrogen production. |
| **12:00PM - 12:15PM** | ***Session Break*** | | |
| **12:15PM - 13:15PM** | **Keynote session-III**<br>***Session Link (Zoom):https://tinyurl.com/au7k8as2***<br>**Title:** ***Green technology, Innovative Nano-materials and Eco Sustainability***<br>**Speaker: Dr. Alka Sharma,** Centre for Advanced Studies, University of Rajasthan, Jaipur, Rajasthan, India | | |
| **13:15PM-13:30PM** | ***Session Break*** | | |
| **13:30PM - 14:30PM** | **Keynote session-IV**<br>***Session Link (Zoom):https://tinyurl.com/au7k8as2***<br>**Title:** ***Green Energy Technologies for Sustainable Development***<br>**Speaker: Prof. K. S. Reddy,** Indian Institute of Technology, Madras, India | | |
| **14:30PM-16:00PM** | ***Session Break*** | | |

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| **16:00PM-17:00PM** | **Valedictory Function**<br>***Session Link (Zoom):https://tinyurl.com/au7k8as2*** |

**INAUGURAL SESSION:**

INAUGURAL SESSION Q-SHEET

**Friday, March 5, 2021 Time: 11:30 AM to 12.30PM (IST)**

**Joining Link (Zoom): *https://tinyurl.com/au7k8as2***

**Anchors: Kalpana Sharma** & Kuldeep Sharma

| S. No. | Activity | Duration | Time |
|---|---|---|---|
| 1 | Reporting and registration of delegates | **10 Min** | **11:30AM-11:40AM** |
| 2 | Gathering of audience in the virtual hall | **05 Min** | **11:40AM-11:45AM** |
| 3 | Arrival of guests &dignitaries-virtual | **03 Min** | **11.45AM-11.48AM** |
| 4 | Welcome of Dignitaries<br>• **Dr. Damir Brdanovic,** Professor of Sanitary Engineering, IHE Delft Institute for Water Education, The Netherlands-**Chief Guest**<br>• **Mr. Suneel Rajavaram**, Senior Global WASH Advisor, The Centre for Affordable Water and Sanitation Technology, Calgary, Albreta, Canada-**Guest of Honour**<br>• **Dr. L. M. Das,** Former Professor, Indian Institute of Technology, Delhi, India-**Guest of Honour**<br>• **Ar. Rahul Singhi**, Director, Poornima Group, Jaipur, India<br>• **Dr. Mahesh Bundele**, Director and Principal, PCE, Jaipur, India, General Chair, ICSEEGT 2021<br>• **Sh. Pankaj Dhemla,** Vice Principal, PCE,Jaipur, India<br>• **Dr. Rekha Nair,** Convener, ICSEEGT 2021<br>• **Dr. Raj Kumar Satankar,** Convener, ICSEEGT 2021<br>• **Dr. Harshwardhan Singh Chouhan,** Convener, | **03 Min** | **11:48AM-11:51AM** |

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| | ICSEEGT 2021<br>● **Dr. Narayan Lal Jain**, Professor& Head, Mechanical Engineering, PCE, Jaipur, India<br>● **Sh. Balwan Sheshma**, Head, Civil Engineering, PCE, Jaipur, India | | |
| 5 | Request the dignitaries for lighting of lamp (Parallel Saraswati Vandana) | **03 Min** | **11:51AM-11:54AM** |
| 6 | ● Felicitation of Chief Guest **Dr. Damir Brdanovic,** Professor of Sanitary Engineering, IHE Delft Institute for Water Education The Netherlands, The Netherlands by **Dr. Mahesh Bundele**, Director and Principal, PCE, Jaipur, India, General Chair, ICSEEGT 2021<br>● Felicitation of Guest of Honour **Dr. L. M. Das**, Former Professor, Indian Institute of Technology, Delhi, India, by **Ar. Rahul Singhi**, Director, Poornima Group, Jaipur, India<br>● Felicitation of Guest of Honour **Mr. Suneel Rajavaram,** Senior Global WASH Advisor, The Centre for Affordable Water and Sanitation Technology, Calgary, Albreta, Canada, by **Sh. Pankaj Dhemla,** Vice Principal, PCE**,** Jaipur, India | **03 Min** | **11:54AM-11:58AM** |
| 7 | out the conference by **Dr. Raj Kumar Satankar,** Convener, ICSEEGT 2021 | **02 Min** | **11:58AM-12:00PM** |
| 8 | Welcome address by **Dr. Mahesh Bundele**, Director and Principal, PCE, Jaipur, India & General Chair, ICSEEGT 2021 | **05 Min** | **12:00PM-12:05PM** |
| 9 | Address by **Ar. Rahul Singhi**, Director, Poornima Group, Jaipur, India | **05 Min** | **12:05PM-12:10PM** |
| 10 | Address by Guest of Honour **Mr. Suneel Rajavaram**, Senior Global WASH Advisor, The Centre for affordable water and Sanitation Technology, Calgary, Albreta, Canada | **05 Min** | **12:10PM-12:15PM** |

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| 11 | Address by Guest of Honour **Dr. L. M. Das,** Former Professor, Indian Institute of Technology, Delhi, India | **05 Min** | **12:15PM-12:20PM** |
| 12 | Inaugural Address by Chief Guest of the Program **Dr. Damir Brdanovic**, Professor of Sanitary Engineering, IHE Delft Institute for Water Education The Netherlands | **10 Min** | **12:20PM-12:30PM** |
| 13 | te of Thanks by **Dr. Harshwardhan Singh Chouhan,** Convener, ICSEEGT 2021 | **03 Min** | **12:20PM-12:23PM** |
| 14 | Group Photograph -Virtual | **03 Min** | **12:23PM-12:25PM** |

**DETAILS OF RESOURCE PERSONS:**

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**Jitendra Kumar**

Department of Civil Engineering, PCE, India

**KEYNOTE SPEAKERS:**

| | | |
|---|---|---|
| **TITLE OF THE TALK** | **From Idea to innovation: The shit killer** | |
| **SPEAKER:1** | **Dr. DamirBrdanovic**<br>Professor of Sanitary Engineering, IHE Delft Institute for Water Education The Netherlands | |
| | | |
| **BRIEF BIO SKETCH** | | |

**Abstract:** Solutions for effective and sustainable faecal sludge management (FSM) represent a significant global need. Tremendous amounts of faecal sludge are produced daily on a daily basis from onsite sanitation: 2.7 billion people worldwide are served by onsite sanitation technologies and that number is expected to grow to 5 billion by 2030. FSM presents a global challenge. A new technological concept for [illegible] dehydration of

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excreta (faeces and urine) has been developed by IHE Delft and Tehnobirod.o.o. The technology makes use of microwave generators that are part of a specially designed unit that can convert pathogenic human waste into clean water and inert dry fertilizer. The concept has been successfully tested in the Netherlands, Slovenia, Kenya, and a pilot demonstration unit was successfully evaluated in the Jordan Valley in Jordan under a refugee camp context. This presentation describes the process of turning the initial idea to invention, and further, to innovation.

| **TITLE OF THE TALK** | **Advances in Materials for Green Energy Storage technologies** | |
|---|---|---|
| **SPEAKER:2** | **Prof. M. V. Reddy**<br>Professor, Institute of Research Hydro-Québec, Centre of Excellence in Transportation Electrification and Energy Storage (CETEES), Hydro-Québec, Canada | |
| | | |
| **BRIEF BIO SKETCH** | | |

**Profile:** Dr. M.V. Reddy, doctorate in the area of Materials Science from University of Bordeaux 1, ICMCB-CNRS/ENSCPB, and France, is currently working as a Senior Researcher (level3) at Institute of Research Hydro-Québec, Centre of Excellence in Transportation Electrification and Energy Storage, Hydro-Québec, Montreal, Canada. He ranked no 1 highly cited researchers in Hydro Quebec (source: Scopus). Previously (from July 2003 to May 2019), he worked at National University of Singapore (NUS) at the Department of Materials Science and Engineering, Chemistry and Physics. For the last 20 years, he has been working on Materials for Energy Storage(cathodes, anodes, super capacitors and solid electrolytes), solar cells, electro catalysis and photo catalysis, including novel methods of synthesis ex: Molten salt method (top1 publication list (source: Scopus) and evaluation of functional properties of materials. He has published around 200 papers in various international journals. He conducted several workshops related to functional materials and Energy storage& Conversion and delivered 100 (Plenary (12), Keynote (12), Invited talks (62) and 18 contributed talks) at various conferences and conducted few workshops on Battery materials fundamentals, synthesis, and characterization techniques. Recently he selected for prestigious 2021 Battery Materials electrochemistry award from the Electrochemical Society of India, Indian Institute of Science (IISc), Bangalore, India(7th Prof. S.M. Mayanna Memorial Lecture).Recently he has been Invited as a honary Adjunct Professor Department of Mining and Materials Engineering McGill University. He has been a speaker in various Universities in India, Malaysia, Indonesia, Europe, USA, South Africa, Iran, Iraq, Morocco, and Africa. He also had given popular Materials Science and Engineering outreach talks to college and high school students all over the world. He is

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serving as editorial advisory board member in “Materials Research Bulletin and Journal of Energy Storage`` (Elsevier) several other open access Journals (Materials, Energies and Molecules, MDPI) and Regional editor: Nanoscience & Nanotechnology-ASIA.

**Abstract:** In my talk, i will discuss various materials manufacturing, physical characterizations techniques, fundamentals and applications in area of Energy storage applications. Various chemical and physical process for nano and submicron sized materials and its characterization techniques like Rietveld refined X-ray diffraction, Neutron diffraction, X-ray absorption spectroscopy, X-ray photo electron spectroscopy , Rutherford Backscattering spectrometry, Scanning and Transmission electron microscopy (SEM/TEM), Raman/IR, density and BET surface area methods will be discussed. Importance of electro analytical studies like cyclic voltammetry, galvanostatic cycling and impedance spectroscopy techniques for testing high performance evaluations, ion conduction mechanisms of energy storage materials. Finally I will discuss the challenges and opportunities for green storage technology

| **TITLE OF THE TALK** | **Green technology, Innovative Nano-materials and Eco Sustainability** | |
|---|---|---|
| **SPEAKER:3** | **Dr. Alka Sharma**<br><br>Centre for Advanced Studies,<br>University of Rajasthan, Jaipur,<br>Rajasthan, India | |
| **BRIEF BIO SKETCH** | | |

**Profile**: Dr. Alka Sharma is currently, Vice Principal (Science), University Maharani College (one of the constituent colleges of University). Dr. Sharma’s major areas of research interest include Corrosion Science; Bio-fabrication of Nano-composites, nano-materials and their industrial applications; innovation and designing in material science. To her credit, she has published 46 research papers of international repute. Her proclivity is to bring out some prototype(s) via innovation & designing in material science as DIC-Course Coordinator (CIMSID) [Certificate course in Innovation in Material Sciences for Inclusive Development], MHRD-Designing and Innovation Centre (DIC), CCT, University of Rajasthan, Jaipur, funded by MHRD, New Delhi.

She has published several books and is reviewer of prestigious journals in the field of corrosion and material science. She has been recipient of award & recognition (unrice) for Outstanding Contribution in Reviewing from the prestigious Journal – Corrosion Science, Elsevier).

Apart from various administrative responsibilities, she has also actively contributed various assignments/duties in various capacities as and when assigned by University of Rajasthan,

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Jaipur.

**Abstract:** Nanoscience and nanotechnology is a powerful tool for host of processes in support of Sustainability and ecology conservation. Green-nanotechnology endeavors for bringing out products and processes that are safe, energy efficient and reduce waste with low net impact on the environment. Green nanotechnology is also about manufacturing processes that are economically and environmentally sustainable. Natural resources are potential source to fabricate nanomaterials which can be beneficiary tool for eco-sustainability. Nano-materials have multifold utility in numerous sectors such as eco-sustainability, health-care, pharmaceutical, industries etc. Nano-coating materials, nano-composites, multi-material nanoparticles (doped nano-particles) etc are some of the green-nanomaterials fabricated successfully and characterized by standard tools and techniques, viz., FT-IR, UV-Visible, FL spectroscopy, SEM, EDX, AFM, QCA, XRD.

| **TITLE OF THE TALK** | **Green Energy Technologies for Sustainable Development** | |
|---|---|---|
| **SPEAKER:4** | **Prof. K. S. Reddy**<br>Professor, Indian Institute of Technology, Madras, India | |
| **BRIEF BIO SKETCH** | | |

**Profile:** Dr. K. SRINIVAS REDDY obtained his PhD from Indian Institute of Technology Delhi in Energy Studies in 1999. He then joined National Institute of Technology Warangal in June 1999, after a brief service of about 4 years at NITW, he joined IIT Madras in April 2003 as an Assistant Professor. Presently, Dr. Reddy is a Professor of Mechanical Engineering at IIT Madras and he is also an honorary professor at University of Exeter, UK. He also served as an Adjunct Professor at CEERI-CSIR, Chennai during 2014-17

Prof. Reddy is a Fellow of the National Academy of Engineering (FNAE) and he is specialist in renewable energy with special research interests on concentrating solar power, energy efficiency and environment. He has 8 patent applications and more than 280 publications of which, 151 papers in reputed international journals, including five review articles on solar energy systems and energy storage. His co-authored book on "Sustainable energy and the environment: a clean technology approach" Published by Springer and book chapters on solar energy systems are popular among energy and environment community.

Prof. Reddy is actively involved in the implementation of solar thermal technologies for power generation and process heat applications through "Design-Development-Demonstration-Deployment (4-D)" approach. He has executed several sponsored projects related to solar energy and energy & environment funded by various Indian and international agencies such as DST, MNRE, AICTE, RCUK, [illegible] and ICIMPACT. His work on estimation of thermal conductivity & thermo-physical properties

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and characterization of engineering materials significantly benefited the industrial associates for development of energy efficient thermal insulation materials

**PLENARY TALK SPEAKERS:** NIL

**CONTENT DELIVERY / PRACTICAL SESSIONS:** NIL

**GLIMPSES OF PRESENTATIONS:**

**LIST OF PARTICIPANTS/REGISTERED/ATTENDED CANDIDATES**

| S. No. | Certificate no | Presenter | Institute |
|---|---|---|---|
| 1 | ICSEEGT2021 -AU-1001 | Ms. Parveen | Bhartiya skill develo[illegible] jaipur [illegible] |

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| | | parihar | |
| **2** | ICSEEGT2021 -AU-1002 | Ms. Manasa putrevu | Indian institute of technology bhubaneswar argul, khordha, pin - 752050, odisha, india |
| **3** | ICSEEGT2021 -AU-1003 | Dr. Muralitharan jothimani | Department of geology, arba minch university, ethiopia |
| **4** | ICSEEGT2021 -AU-1004 | Mr. Haresh bhupendra chodnekar | Indian institute of technology kharagpur, west bengal |
| **5** | ICSEEGT2021 -AU-1005 | Dr. Rashmi kumari | National institute of technology hamirpur |
| **6** | ICSEEGT2021 -AU-1006 | Mr. Ram vilas meena | Department of civil engineering, mnit jaipur, india |
| **7** | ICSEEGT2021 -AU-1007 | Mr. Amanpreet tangri | Juit solan, himachal pradesh, india |
| **8** | ICSEEGT2021 -AU-1008 | Dr. Sudarshan d. Kore | National institute of construction management and research (nicmar), pune, india |
| **9** | ICSEEGT2021 -AU-1009 | Ms. Rupinder kaur | University business school, guru nanak dev university, amritsar, india |
| **10** | ICSEEGT2021 -AU-1010 | Mr. Shubham goswami | Jaypee university of engineering and technology, guna |
| **11** | ICSEEGT2021 -AU-1011 | Mr. Adwitiya patro | Deutsche gesellschaft für internationale zusammenarbeit (giz) gmbh, new delhi |
| **12** | ICSEEGT2021 -AU-1012 | Ms. Asmita yadav | National institute of hamirpur,h.p. |
| **13** | ICSEEGT2021 -AU-1013 | Mrs. Nameeta sharma | Arya college of engineering and it, kukas, jaipur, rajasthan, india |
| **14** | ICSEEGT2021 -AU-1014 | Ms. Kirti katiyar | Jaypee university of engineering and technology, guna |
| **15** | ICSEEGT2021 -AU-1015 | Dr. Hari prapan sharma | Gla university, 17km stone, nh-2, mathura-delhi road mathura, chaumuhan, uttar pradesh - india 281406 |
| **16** | ICSEEGT2021 -AU-1016 | Mrs. Ekta baranwal | Department of civil engineering, jamia millia islamia, new delhi-110025, india |
| **17** | ICSEEGT2021 -AU-1017 | Mr. Rupanshu singh | Delhi technological university, delhi, india 110042 |
| **18** | ICSEEGT2021 -AU-1018 | Ms. Kavya | College of engineering, pune |

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| | | venu pillai | |
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| **20** | ICSEEGT2021 -AU-1020 | Dr. Anil dutt vyas | Department of civil engineering, manipal university jaipur, 303007 india |
| **21** | ICSEEGT2021 -AU-1021 | Mr. Sheikh kamran abid | Universiti tun hussein onn malaysia |
| **22** | ICSEEGT2021 -AU-1022 | Dr. Timothy malche | Manipal university jaipur, dehmi kalan, off jaipur-ajmer expressway, jaipur, rajasthan 303007 |
| **23** | ICSEEGT2021 -AU-1023 | Dr. Amol d pawar | Nicmar 25/1 n i a post office balewadi pune ms india411045 |
| **24** | ICSEEGT2021 -AU-1024 | Mr. Aditya joshi | Department of applied mechanics, motilal nehru national institute of technology allahabad, prayagraj, india |
| **25** | ICSEEGT2021 -AU-1025 | Mr. Krishanve er singh | Gla university, mathura, uttar pradesh, india |
| **26** | ICSEEGT2021 -AU-1026 | Mr. Sandeep kumar rajput | Department of applied mechanics, motilal nehru national institute of technology allahabad, prayagraj, india |
| **27** | ICSEEGT2021 -AU-1027 | Dr. Pradeep kumar gautam | Nit meghalaya |
| **28** | ICSEEGT2021 -AU-1028 | Dr. Dr. Kishore kumar | Gla university, mathura india |
| **29** | ICSEEGT2021 -AU-1029 | Mr. Manjunat ha swamy k m | Siddaganga institute of technology, tumkur, karnataka, india, pin: 572103 |
| **30** | ICSEEGT2021 -AU-1030 | Dr. Lokesh vijayvargy | Jaipuria institute of management jaipur, 1-bambala institutional area, pratap nagar, sanganer, jaipur, rajasthan, india-302033 |
| **31** | ICSEEGT2021 -AU-1031 | Mr. Vivek singh | Department of applied mechanics, motilal nehru national institute of technology allahabad, prayagraj, india |
| **32** | ICSEEGT2021 -AU-1032 | Mr. Prashant kumar | Department of applied mechanics, motilal nehru national institute of technology allahabad, prayagraj, india |
| **33** | ICSEEGT2021 -AU-1033 | Dr. Anil dutt vyas | Manipal university jaipur |
| **34** | ICSEEGT2021 -AU-1034 | Dr. Lokesh vijayvargy | Jaipuria institute of management jaipur, 1-bambala institutional area, pratap nagar, sanganer, jaipur, rajasthan, india |

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| | | | |
|---|---|---|---|
| **35** | ICSEEGT2021 -AU-1035 | Mr. Akshay dhawan | Nicmar delhi ncr |
| **36** | ICSEEGT2021 -AU-1036 | Ms. Priyanka | Siddaganga institute of technology, tumkuru-572103, karnataka. |
| **37** | ICSEEGT2021 -AU-1037 | Mr. Parul kumar | Govt. Dungar college, bikaner |
| **38** | ICSEEGT2021 -AU-1038 | Mr. Pankaj dhemla | Malviya national institute of technology, jaipur, india |
| **39** | ICSEEGT2021 -AU-1039 | Dr. Vipin sharma | Sagar institute of research and technology, bhopal |
| **40** | ICSEEGT2021 -AU-1040 | Mr. Mohammad nurul hassan reza | Multimedia university,faculty of management,persiaran multimedia,cyberjaya,selangor, malaysia |
| **41** | ICSEEGT2021 -AU-1041 | Mr. Piyushkumar m. Mistri | Government engineering college, modasa, dist. Aravalli, gujarat, india |
| **42** | ICSEEGT2021 -AU-1042 | Mr. Hardik saxena | India |

**SAMPLE COPY CERTIFICATE**

International Conference on Sustainable Energy, Environment and Green Technologies (ICSEEGT 2021)

March 5-6, 2021

Organized by POORNIMA COLLEGE OF ENGINEERING

Affiliated to RTU, Kota • Approved by AICTE & UGC under 2(f) • Accredited by NBA

Publication Support by IOP Conference Series Earth and Environmental Science

Certificate ID:

CERTIFICATE OF PRESENTATION

*This is to certify that the paper entitled* _____

_____ *authored by* _____

_____

*was presented by* _____ *of* _____

_____ *in the International Conference on Sustainable Energy, Environment and Green Technologies (ICSEEGT-2021) held during 5-6 March, 2021, at Poornima College of Engineering, Jaipur, Rajasthan, India*

Dr. Rekha Nair, Convener, ICSEEGT 2021

Dr. Harshwardhan Singh Chouhan, Convener, ICSEEGT 2021

Dr. Raj Kumar Satankar, Convener, ICSEEGT 2021

Dr. Mahesh Bundele, Co-Chair, ICSEEGT 2021

Dr. Mahesh Bundele B.E., M.E., Ph.D. Director Poornima College of Engineering ISI-6, RIICO Institutional Area Sitapura, JAIPUR

**VALEDICTORY SESSION:**

Dr. Mahesh Bundele
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Director
Poornima College of Engineering
ISI-6, RIICO Institutional Area
Sitapura, JAIPUR

| S. No | Event | Duration | Time |
|---|---|---|---|
| 1 | Reporting of Delegates-On Zoom link | 15 Min | 16:00PM-16:15PM |
| 2 | **Welcome of dignitaries**<br>• **Prof. K. S. Reddy,** Indian Institute of Technology Madras, India, **Chief Guest**<br>• **Dr. B. Ravindra,** Indian Institute of Technology Jodhpur, India- **Guest of Honour**<br>• **Ar. Rahul Singhi,** Director Poornima Group, Jaipur, India<br>• **Dr. Mahesh Bundele**, Director and Principal, PCE, General Chair, ICSEEGT 2021<br>• **Mr. Pankaj Dhemla,** Vice Principal, PCE, Jaipur, India<br>• **Dr. Rekha Nair**, Dean Academics, PCE, Jaipur, India, Convener, ICSEEGT 2021<br>• **Dr. Raj Kumar Satankar**, Convener, ICSEEGT 2021<br>• **Dr. Harsh Wardhan Singh Chouhan**, Convener, ICSEEGT 2021<br>• **Dr. Narayan Lal Jain**, Professor & Head, Mechanical Engineering Department, PCE, Jaipur, India<br>• **Sh. Balwan Sheshma,** Head, Civil Engineering Department, PCE, Jaipur, India | 03 Min | 16:15PM-16:18PM |
| 3 | • Felicitation of Chief Guest, **Prof. K. S. Reddy**, Indian Institute of Technology Madras, India by **Dr. Mahesh Bundele**, Director and Principal, PCE, General Chair, ICSEEGT 2021<br>• Felicitation of Guest of Honour **Dr. B Ravindra**, IIT Jodhpur by **Ar. Rahul Singhi**, Director, Poornima Group, Jaipur, India | 02 Min | 16:18PM: 16:20PM |
| 4 | Welcome Address by **Ar. Rahul Singhi,** Director Poornima Group | 02 Min | 16:20PM-16:22PM |
| 5 | Report by **Dr Rekha Nair**, Convener, ICSEEGT 2021 | 03 Min | 16:22PM-16:25PM |
| 6 | Distribution of best paper Awards by **Chief Guest & Guest of honour** | 03Min | 16:25PM-16:28PM |
| 7 | Participants Feedback | 05 Min | 16:28PM-16:33PM |
| 8 | Address by **Dr. Mahesh Bundele**, General Chair, ICSEEGT 2021 | 05 Min | 16:33PM-16:38PM |
| 9 | Address by Guest of Honour **Dr. B. Ravindra,** Indian Institute of Technology Jodhpur, India | 05 Min | 16:38PM-16:43PM |
| 10 | Address by **Chief Guest Prof. K. S. Reddy, Indian Institute of Technology Madras, India** | 10 Min | 16.43PM-16.53PM |
| 11 | Vote of Thanks by **Dr. Raj Kumar Satankar**, Convener, ICSEEGT 2021 | [illegible] | [illegible] |
| 12 | **Group Photograph** -Virtual | [illegible] | [illegible] |

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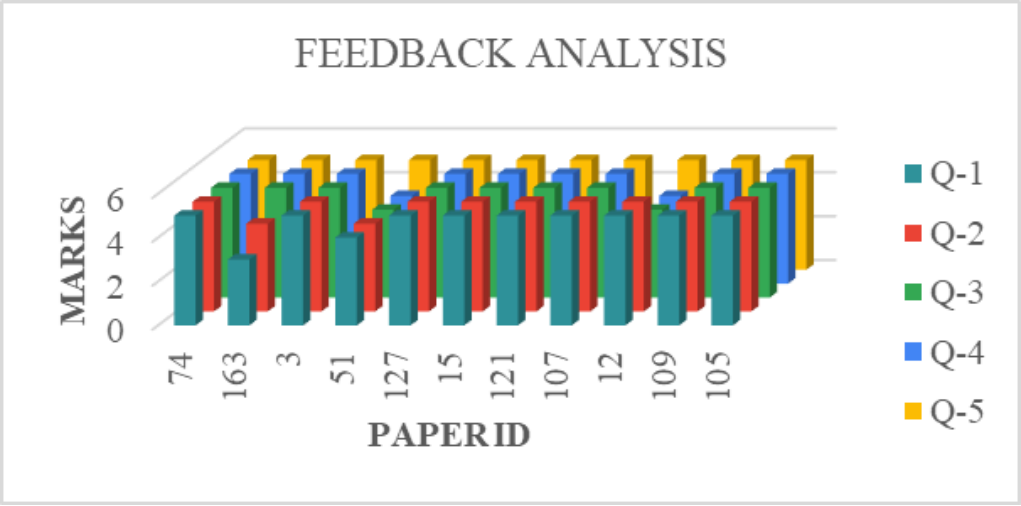
**FEEDBACK ANALYSIS:**

Questions asked

| |
|---|
| 1. How do you rate Keynote Speaker's talk? |
| 2. Technical Sessions were informative and managed well. |
| 3. The organization of the conference was? |
| 4. Timely Information sharing with participants, and responses from the organizers. |
| 5. Knowledge sharing during the conference? |




**SWOT ANALYSIS: Nil**

**BUDGET & ACTUALS:**

| S. NO. | EXPENDITURE | RATE | QUANTITY | AMOUNT (INR) |
|---|---|---|---|---|
| 1 | Session Chair Honorarium | | | 12000 |
| 2 | Best Paper Award | | | 8050 |
| 3 | Paper Publication Fee (@ 80 Dollar) | 5200 | 42 | 218400 |
| 4 | Souvenir Print | 4000 | 3 | 12000 |
| 5 | Inaugural Expenditure | | | |
| 6 | Other Expenditure | | | |
| | | TOTAL EXPENDITUTRE | | 250[illegible] |

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POORNIMA
COLLEGE OF ENGINEERING

Promoted by Shanti Education Society, Affiliated to Rajasthan Technical University & Approved by AICTE

# CONFERENCE REPORT

- **TITLE AND DURATION:** 4th IEEE International Conference on Recent Advances and Innovation in Engineering (ICRAIE-2019) held during 28-29 November 2019.

- **SPONSORS:** Technically sponsored by IEEE Computer Society Poland Section Chapter and IEEE Computational Intelligence Society.

- **SUPPORTERS:** University Tun Hussein Onn Malaysia, Intel, the University of Melbourne.

- **ORGANIZING PARTNERS**: ICRAIE-2019 was jointly organized by UiTM Kedah, Malaysia, IEEE Malaysia & Poornima College of Engineering, Jaipur

- **PUBLISHER(S):**IEEE

- **ISBN/PARTNO./INDEXINGAGENCY**: Electronic ISBN: 978-1-5386-4525-3, Printon Demand (PoD) ISBN: 978-1-5386-4526-0, IEEE Xplore Digital Library.

- **THEMES/TRACKS:**

- **Track 1:** Computer Science & Engineering / Information Technology.
- **Track 2:** Electronics & Communication Engineering.
- **Track 3:** Electrical Engineering.

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## OBJECTIVES:

Poornima University, Poornima College of Engineering & UiTM Kedah Malaysia, IEEE Malaysia team has made an effort to make the Third International Conference ICRAIE-2019 a reality. As per the objective, it could bring together Academicians, Researchers, and Industry Experts in the areas of Computer Science & Information Technology, Electronics & Communication Engineering, and Electrical Engineering for the dissemination of original research, new innovations, and ideas on the International Platform.

## EXPECTED OUTCOMES:

ICRAIE 2019 was technically sponsored by IEEE Delhi Section, supported by IEEE Rajasthan Subsection and Technically Co-sponsored by ISLE, IETE, ISTE, and IEI, Poornima University IEEE Student Branch Chapters. A target of 250 papers was set in three tracks Computer Science & Information Technology, Electronics & Communication Engineering, and Electrical Engineering

## LEARNING OUTCOMES:

**CO1:** To appropriate agreement to promote and encourage the youth to select for Engineering education.

**CO2:** To produce quality Engineers for the bright future of our country.

**CO3:** Opportunity to learn, Discuss & interact with intellectuals all over the world.

## MAPPINGS WITH PO AND PSO

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO1 | - | - | - | - | - | 3 | - | - | - | - | - | - | - | 1 | 1 |
| CO2 | - | - | - | - | - | - | - | - | 3 | - | - | - | - | - | 1 |
| CO3 | | | | | | | | | 3 | 2 | | 1 | | | |

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**BROCHURE / POSTER / LEAFLET / FLYER:**

**FOURTH IEEE INTERNATIONAL CONFERENCE ON RECENT ADVANCES AND INNOVATIONS IN ENGINEERING (ICRAIE - 2 019)**

**IEEE CONFERENCE RECORD # 4 7 7 3 5**

**Technically Sponsored by:**

IEEE COMPUTER SOCIETY Poland Section Chapter

IEEE Computational Intelligence Society

## Co-Organizer:

IEEE

IEEE IE/IA Malaysia Joint Chapter

**Supporters:**

FMM

UTHM Universiti Tun Hussein Onn Malaysia

intel

THE UNIVERSITY OF MELBOURNE

Department of Computer Science UiTM Kedah Branch, Kedah, Malaysia

PAN

POORNIMA COLLEGE OF ENGINEERING

**Organized by:**

**UiTM Kedah, Malaysia**

**IEEE Malaysia &**

**Poornima College of Engineering, Jaipur**

Dr. Mahesh Bundele B.E., M.E., Ph.D. Director Poornima College of Engineering ISI-6, RIICO Institutional Area Sitapura, JAIPUR

## RESPONSE (SUBMISSION / ACCEPTANCE / PRESENTATION):

In ICRAIE-2019, a total of 240 reviewers across the world consented and reviewed the papers. 52 papers were accepted after a rigorous review procedure, making it very selective. 39 registered papers were presented in 13 Oral Sessions during November 28-29, 2019. A total of 160 Bachelor, Master, and Doctoral scholars and professionals attended all the sessions including registered participants and local attendees.

## SUMMARY / CATEGORIZATION OF PARTICIPANTS:

ICRAIE-2019 provided a stimulating environment for researchers, scientists, engineers, educators, industrial lists, and students from all over the world to discuss and present the research findings in the interest of society and the nation. The conference covered major areas of research in Electrical, Electronics, and Computer Engineering. Technical sponsor of the ICRAIE-2019 with IEEE Conference Record # 47735was IEEE Delhi Section and supported by IEEE Rajasthan Subsection and Technically Co-sponsored by ISLE, IETE, ISTE, IEI, and Poornima University IEEE Student Branch Chapters.
In ICRAIE-2019, the Easy Chair conference management system was utilized to cater to the enthusiastic response making it to around 78 received manuscripts across 9 countries. Participants from countries like the United Kingdom, Iran, Germany, and Nigeria have also presented their research. The average paper acceptance rate was 66 % whereas 50 % with reference to accepted papers were presented.

| | Track1CS /IT | Track2E CE | Track3EE |
|---|---|---|---|
| Total No .of Papers Submitted | 49 | 15 | 13 |
| Total No. of Papers Accepted | 32 | 12 | 8 |
| Total No. of Papers Registered | 26 | 10 | 3 |
| Total No .of Papers Presented | 26 | 10 | 3 |

The Honorable Dr. Mahesh Bundele, Director and Principal of Poornima College of Engineering Rajasthan, Jaipur, India accompanied by the organizing chair, Dr. Shamsul Jamel Elias, and, the conference chair II, Mrs. Siti Rafidah Muhamat Dawam, welcoming session with UiTM Kedah Branch Campus Rector, Assoc. Prof. Dr. Shaiful Annuar Khalid. The inaugural session was initiated with two parallel sessions at two different locations, 5 presentations were held at Seri Jerai Hall while 4 oral presentations were held at Big Data Lab. The guest of honor, is Associate Professor Dr. Maxim Mozgovoy from the University of Aizu Japan.
The sessions continued with a skype presentation from the honorable keynote speaker from Prof. Rajkumar Buyya from the University of Melbourne, Australia. The title of his presentation is "New Frontiers in Cloud and Edge/Fog Computing for Big Data & Internet-of-

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Things Applications".

The conference continued with a Plenary speech by Associate Professor Dr. Maxim Mozgovoy from University of Aizu Japan titled "Multiplatform Automated Software Testing: Personal Experience". Next, plenary speech was given by Dr. Mahesh Bundele, Director and Principal of Poornima College of Engineering Rajasthan, Jaipur, India, titled "Scientific Research Paper: Reading & Writing". The session proceeded with an opening ceremony by the arrival of VVIPs from UiTM Kedah Branch, Deputy Rector of Academic Affairs, Dr. Kamarudin Othman, the Deputy Rector of Student Affairs, Dr. Wan Irham Wan Ishak, the Deputy Registrar, Mr. Ismi Ridhwan Ismail, the Chief Librarian, Mrs. Azizah Khasim, and the Deputy Bursar, Mrs. Norhafizah Che Mat. The event started with the national anthem, "Negaraku" and university song, "UiTM Di Hatiku". The conference chair I, Dr. Taniza Tajuddin delivered her speech to welcome the guest, audiences and participants. The officiating speech was given by the Deputy Rector of Academic Affairs, Dr. Kamarudin Othman, followed by a gimmick and montage presentation. Dr. Kamarudin Othman accompanied by the conference chairs, later presented tokens of appreciation to plenary speakers, Associate Prof. Dr. Maxim Mozgovoy and Dr. Mahesh Bundele for their outstanding presentation.

Conference materials were initially published on USB pen drives (as Preprints) and distributed to conference participants. After the conference, full papers were submitted to the IEEE Xplore Digital Library for publishing and indexing. Moreover, the Proceedings and Communication Papers of the ICRAIE-2019 Conference (in their final version) were posted on the IEEE Explore website with a link as https:// ieeexplore.ieee.org/xpl/conhome/8703604/proceeding and DOI: 10.1109/ICRAIE47735.2019.9037647.

It should be stressed that only papers presented at the conference were published in either form (the ICRAIE conference series strictly adheres to the "IEEE No-show Policy")

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# PROGRAM OUTLINE:

## INAUGURAL SESSION:

CONFERENCE SCHEDULE
4th International Conference and Workshops on Recent Advances and Innovations in Engineering (ICRAIE2019)
At Universiti Teknologi MARA Kedah Branch

| DAY 1: Thursday (28th Nov 2019) | |
|---|---|
| 08:00am – 09:00am | Conference Preparation & Registration I |
| 09:00am – 10:30am | Parallel Session 1<br>Venue 1: Big Data Lab, Grd Floor (MK10), UiTM Kedah<br>Venue 2: Seri Jersai Hall, UiTM Kedah |
| 10:30am – 11:00am | Refreshment |
| 11:00pm – 12:00pm | Keynote Address by Prof. Rajkumar Buyya, University of Melbourne, Australia.<br>*{Skype Presentation Title: New Frontiers in Cloud and Edge/Fog Computing for Big Data & Internet-of-Things Applications}* |
| 12:00pm – 01:00pm | Conference Preparation & Registration II |
| 01.00pm – 01.50pm | Lunch Break |
| 02.00pm – 02.15pm | Arrival of Guests and Participants<br>Arrival of VIPs |
| 02:15pm – 02:50pm | Plenary Speaker by Assc. Prof. Maxim Mozgovoy, University of Aizu, Japan<br>*Title: Multiplatform Automated Software Testing: Personal Experience* |
| 02:50pm – 03:20pm | Plenary Speaker by Dr Mahesh Bundele, Poornima College of Engineering Rajasthan, Jaipur, India<br>*Title: Scientific Research Paper: Reading & Writing* |

| | | |
|---|---|---|
| 03:30pm – 04:30pm | OPENING CEREMONY | |
| | 3.30 pm – 3.40pm | Arrival of VVIPs |
| | 3.40 pm – 3.50 pm | Negaraku & UiTM Di Hatiku<br>MC's Welcoming Speech & Doa Recitation |
| | 3.50 pm – 4.00 pm | Welcoming Speech of Conference Chair 1 |
| | 4.00 pm – 4.10 pm | Officiating Speech of Deputy Rector of Academic Affairs |
| | | Gimmick & Montage |
| | 4.30 pm – 5.00 pm | Photography session<br>Refreshment |
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| | |
|---|---|
| **DAY 2: Friday (29th Nov 2019)** | |
| **08:00am – 08:30am** | Registration |
| **08:30am – 10:00am** | Parallel Session 2<br>Venue 1: Merbok Room (K1) at Ground Floor, UiTM Kedah<br>Venue 2: Mahawangsa Room (K2) at Ground Floor, UiTM Kedah<br>Venue 3: Jerai Room (K3) at Ground Floor, UiTM Kedah<br>Venue 4: Langkasuka Room (K4) at Ground Floor, UiTM Kedah |
| **10:00am – 10:30am** | Refreshment |
| **10:30am – 11:30am** | Parallel Session 3<br>Venue 1: Merbok Room (K1) at Ground Floor, UiTM Kedah<br>Venue 2: Mahawangsa Room (K2) at Ground Floor, UiTM Kedah<br>Venue 3: Jerai Room (K3) at Ground Floor, UiTM Kedah<br>Venue 4: Langkasuka Room (K4) at Ground Floor, UiTM Kedah<br>Venue 5: Tanjung Dawai Room (K5) at Ground Floor, UiTM Kedah |
| **11:30am – 01:00pm** | CLOSING & AWARD GIVING CEREMONY<br>Lunch |
| **01:00pm – 02:30pm** | Adjoum & Jumaat Prayer |
| **02:30pm – 05:30pm** | Conference Tour |

## KEYNOTE SPEAKERS:

- **Prof. Rajkumar Buyya** ( Professor and Director of the Cloud Computing and Distributed systems Laboratory, University of Melbourne Australia.

Topic: New Frontiers in Cloud and Edge/Fog Computing for Big Data & Internet-of-Things Applications

- **Assoc. Prof. Dr. Maxim Mozgovoy** (University of Aizu, Japan)

Topic: Multiplatform Automated Software Testing: Personal Experience

- **Dr. Mahesh Bundele** (SMIEEE, Vice Chair, ACM Jaipur Professional Chapter,

Member STDCOM, IEEE Delhi Section, LMISTE, AMIE, MACM, Principal & Director, Poornima College of Engineering, Jaipur)

Topic: Scientific Research Paper: Reading & Writing

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## GLIMPSES OF PRESENTATIONS:

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# Conference Tour

## DAY 2 Friday - 29th November 2019

ICRAIE 2019 has also offered a fantastic Merbok River Cruise, and a visit to a historical Sungai Batu Archeological site – the oldest Southeast Asian Civilization to the participants.

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## VALEDICTORY SESSION:

Lastly, the Conference came to an end with a Valedictory Function. Deputy Rector of Academic Affairs of University Teknologi MARA Kedah, the underlying agenda of this conference, it served as a venue to forge closer ties among the national and international participants. He took the opportunity to thank the guest of honors, the keynote and plenary speakers, the presenters, and the participants for their support of ICRAEI 2019. To borrow Winston Churchill's words "The price of greatness is responsibility" Technology is a precious gift so it is up to us how we search for the proper knowledge and care of handling it. As scholars, are we ready for this challenging task? With that note, he officiated the conference ICRAEI 2019 with the theme: "Thriving Technologies". He finally congratulated the best paper award winners, and wished all participants "Happy Conferencing and all the best".

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## List of Attendees

| AUTHORS as ATTENDEEs | | | | |
|---|---|---|---|---|
| **Track 1: Computer Science Engineering / Information Technology** | | | | |
| ***S.No*** | ***ID*** | ***Authors*** | ***Paper*** | ***Name of Attendees*** |
| 1. | 7 | Animesh Deval, Rohit Kumar, Rahul Vyas (Flytxt Mobile Solution, India) | A recommendation of right product to right customer, next best offer: a comparative study | Animesh Deval, Rohit Kumar |
| 2. | 10 | See Yuen Chark, Jian Jing Saw (Universiti Tunku Abdul Rahman, Malaysia) | Internet Of Things (IOT) Based Smart Wall Outlet | See Yuen Chark |
| 3. | 13 | Mohammed Hajjaj Mitsunori Miki and Kitsunori Shimohara (Doshisha University, Japan) | Reducing the Energy by Utilizing Distributed Luminance of the Occupancy Spaces at the Office | Mohammed Hajjaj |
| 4. | 16 | Nor Laily Hashim Yasir Salman Dawood (Universiti Utara Malaysia, Malaysia) | Review on Test Case Generation Methods using UML Statechart | Nor Laily Hashim |
| 5. | 19 | Jamal Salem Amro Rohaida Romli (Universiti Utara Malaysia, Malaysia) | Investigation on the Learning Programming Techniques via Mobile Learning Application | Rohaida Romli |
| 6. | 69 | Siti Azreena Mubin Matthew Wee Ann Poh (Asia Pasific University of Technology & Innovation (APU), Malaysia) | A Review on Gamification Design Framework: How They Incorporated for Autism Children | Siti Azreena Mubin |
| 7. | 22 | Suman Sukhavasi, Thinagaran Perumal Norwati Mustapha Razali Yaakob (Universiti Putra Malaysia, Malaysia) | Device Verification and Compatibility for Heterogeneous Semantic IoT Systems | Thinagaran Perumal |
| 8. | 27 | Yi Yun Lau, Muhammad Nasiruddin Mahyuddin Bakhtiar Affendi Rosdi Noor Hafizi Hanafi (Universiti Sains Malaysia, Malaysia) | Autonomous Test System for CAN-based Automotive Instrument Cluster | Muhammad Nasiruddin Mahyuddin |
| 9. | 37 | Yong Jonathan Chung Ee Shariff Ghanem Nawazdeen, Norsaremah Bt Salleh Siow Chee Loon (UCSI University) | Risk Assessment of Building Fire Evacuation with Stochastic Obstructed Emergency [illegible] | Yong Jonathan [illegible] |

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| | | | | |
|---|---|---|---|---|
| 10. | 39 | Zhong Ying Thean<br>Vooi Voon Yap<br>Peh Chiong The<br>(Universiti Tunku Abdul Rahman, Malaysia) | Container-based MQTT broker cluster for edge computing | Zhong Ying Thean |
| 11. | 40 | Muhamad Najib Zamri<br>Mohd Shahrizal Sunar<br>(Universiti Teknologi Malaysia, Malaysia) | Research on Atmospheric Clouds: A Review of Cloud Animation Methods in Computer Graphics | Muhamad Najib Zamri |
| 12. | 41 | Syahida Hassan<br>Azizah Ahmad,<br>Alawiyah Abd Wahab,<br>Rahayu Ahmad,<br>Juliana Wahid<br>(Universiti Utara Malaysia, Malaysia) | Simplicity is The Golden Rule: Lesson Learned from The Development of Smart Mobile Apps for Rural Community | Syahida Hassan |
| 13. | 42 | Nur Nabilah Binti Abd Rahman<br>Noor Syuhada Elyza Ghazali,<br>Abdullah Sharaf and Rania Al-Ashwal<br>(Universiti Teknologi Malaysia, Malaysia) | Critical Path Analysis For Myocardial Infarction Patient | Nur Nabilah Binti Abd Rahman |
| 14. | 46 | Laurent Nana<br>François Monin and Sophie Gire<br>(University of Brest, France) | Proof of properties of a syntax analyzer of robotic mission plans | Laurent Nana |
| 15. | 50 | Ramesh Chand Meena<br>Meenakshi Nawal<br>Mahesh Bundele<br>(SET, Poornima University, Jaipur, India) | Appraisal of Source IP Validation Techniques in SDN | Ramesh Chand Meena |
| 16. | 56 | Medikonda Asha Kiran<br>Syam Kumar Pasupuleti<br>R Eswari<br>(IDRBT/NIT Trichy) | A Lightweight Two-factor Mutual Authentication Scheme for Cloud-based IoT | Medikonda Asha Kiran |
| 17. | 57 | Nahla Mohammed Elzein<br>Mazlina Abdul Majid<br>Mohammed Fakherldin Ibrahim Abaker<br>(Universiti Malaysia Pahang, Malaysia) | ANN-based Performance Analysis on Human Activity Recognition | Nahla Mohammed Elzein |
| 18. | 54 | Boezura Borhanuddin<br>Norziana Jamil<br>Ooi Thomas Wei Min<br>Mohd Zafri Baharuddin<br>Chen Soong Der<br>Tan Kelvin Sim Zhen<br>(Universiti Tenaga Nasional, Malaysia) | Small-Scale Deep Network for DCT-Based Images Classification | Boezura Borhanuddin |

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| 19. | 64 | Suhanah Rosnan<br>Nurazzah Abd Rahman<br>Shahirah Mohamed Hatim<br>Zahirah Hamid Gul<br>Universiti Teknologi MARA Johor, Perak, Shah Alam, Malaysia) | Performance Evaluation of Inverted Files B-Tree and B+Tree Indexing Algorithm in Malay Text | Shahirah Mohamed Hatim |
| 20. | 72 | Khairul Adilah Ahmad<br>Mahmod Othman<br>Sharifah Lailee Syed Abdullah<br>Noor Rasidah Ali<br>Siti Rafidah Muhamat Dawam<br>(UiTM Kedah, Malaysia) | Mango Shape Maturity Classification Using Image Processing | Khairul Adilah Ahmad |
| 21. | 75 | Jamaluddin Jasmis,<br>Mohd Nor Hajar Hasrol Jono,<br>Azlan Abdul Aziz,<br>Rosdiana Abd Razak,<br>Shamsul Jamel Elias<br>Shaifizat Mansor<br>(UiTM Kedah Malaysia) | An Evolutionary Tool For Requirements and Design Crosscutting Concerns | Shaifizat Mansor |
| 22. | 76 | Afida Ahmad,<br>Ong Weng Eng<br>Ab Razak Mansor<br>(UiTM Kedah, Malaysia) | Preserving the Positivity of Curves and Surfaces using Radial Basis Function | Afida Ahmad |
| 23. | 77 | Aznor Hanah<br>M R A Rejab,<br>Rohani Farook,<br>M Fairuz M Fadzil,<br>Shamsul Jamel Elias<br>Zulkifli Husin<br>(UNIMAP, Malaysia) | IoT Room Control And Monitoring System Using Rasberry Pi | Aznor Hanah |
| 24. | 67 | Nur Hana Samsudin<br>Lukman Nurhaqim Rahim<br>(Universiti Sains Malaysia) | Rapid Heteronym Disambiguation for Text-to-Speech System | Nur Hana Samsudin |
| 25 | 79 | Quinny Ben Hassan,<br>Azlan Abdul Aziz,<br>Jamaluddin Jasmis Jasmis,<br>Zainal Fikri Zamzuri,<br>Syamsul Ariffin Yahya,<br>Mohd Nor Hajar Hasrol Jono<br>Shamsul Jamel Elias Elias<br>Siti Nurbaya Ismail<br>(UiTM Kedah) | Evaluation of e-Content for Adult Learners in a Distance Education Program: A Case Study | Siti Nurbaya Ismail |
| 26 | 80 | Taniza Tajuddin<br>Azizah Abdul Manaf, | Crime Suspect Profiling (CSP) for Forensic | Taniza Tajuddin |

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| | | Nor Fatimah Awang, Siti Rafidah Muhamat Dawam, Noor Rasidah Ali Rafidah Amat (UiTM Kedah) | Investigation on Smartphone | |
| **Track 2: Electronics And Communication Engineering** | | | | |
| 27 | 14 | Anita Garhwal Mohd. Riduan Ahmad, Badrul Hisham Ahmad, Sanyog Rawat, Pushepndra Singh, Kanad Ray, Anirban Bandyopadhyay (Amity University Rajasthan) | Dual Band Flower Shaped Fractal Patch Antenna for Remote Health Monitoring | Anita Garhwal |
| 28 | 23 | Fredrik Schalling Sebastian Ljungberg Naveen Mohan (KTH Royal Institute of Technology) | Benchmarking LiDAR Sensors for Development and Evaluation of Automotive Perception | Fredrik Schalling |
| 29 | 38 | Ramashini Murugaiya, Pg Emeroylariffion Abas, Ulmar Grafe, Liyanage C De Silva | Bird Sounds Classification using Linear Discriminant Analysis | Pg Emeroylariffion Abas, |
| 30 | 44 | Yuliarman Saragih Gilang Ramadhany Hakim Agatha Elisabet (Singaperbangsa Karawang of University, Indonesia) | Monitoring Design of Methods and Contents Methods in Semi Real Water Tandon by Using of Arduino – based on Internet of Things | Yuliarman Saragih |
| 31 | 48 | Ahmed A. Hussain Nizar Tayem, Abdel-Hamid Soliman (Prince Muhammad Bin Fadh University) | Matrix Decomposition Methods for Efficient Hardware Implementation of DOA Estimation Algorithms: A Performance Comparison | Ahmed A. Hussain |
| 32 | 55 | Venkata Raghunadh Machavaram (A. Prof) Bheema Rao Nistala (National Institute of Technology, Warangal, India) | A High Performance Miniaturized onchip 25 GHz Narrow Bandpass Filter for 5G Radio Access Applications | Venkata Raghunadh Machavaram (A. Prof) |
| 33 | 58 | Sridhar K V Prof. Kishore Kumar T (National Institute of Technology, Warangal, India) | Performance Evaluation Of CS Based Speech Enhancement Using Fixed And Sparse Dictionaries | Sridhar K V |

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| 34 | 63 | Sagar Shankarrao<br>Dr Minh Nyuen<br>Prof Wei Qi Yan<br>Shazebo Kazi<br>(Auckland University of Technology, New Zealand) | Human Tumor Detection using Active Contours and Region Growing Segmentation | Sagar Shankarrao |
| 35 | 66 | Saravana Selvan Umayal<br>(Aimst University, Malaysia) | A Novel Dual Electrode and Gate Extended Doping-less TunnelFET for RF Energy Harvesting | Saravana Selvan |
| 36 | 70 | Indu Chhipa<br>Devendra Somwanshi<br>(Poornima University, India) | Fuzzy Logic Controller to control internal climate of a greenhouse | Indu Chhipa |
| **Track 3:Electrical Engineering** | | | | |
| 37 | 49 | You-Chun Huang<br>Chin-Sien Moo,<br>Wan-Jung Chen,<br>Shih-An Yin<br>(National Sun Yat-Sen University) | An LED Driver Circuit with Partial Power Regulation for Photovoltaic Warning-Light | You-Chun Huang |
| 38 | 60 | Nur Darina Ahmad<br>Nik Muhamad Syazwan Nek Omar<br>Siti Solehah Md Ramli,<br>Nurul Huda Ishak<br>Mohd Taufiq Ishak<br>Norlina Md Zain<br>(UiTM Pulau Pinang Branch, Malaysia) | A Study on Varies Temperature and Varies Gap Distance on Mixed Vegetable Oil as an Transformer Oil | Nur Darina Ahmad |
| 39 | 61 | Siti Solehah Md Ramli<br>Mohd Khairul Anwar Md Khairudin<br>Nur Darina Ahmad<br>Nurul Huda Ishak<br>Nur Fadhilah Jamaludin<br>Nur Atharah Kamarzaman<br>Mohamad Kamarol Mohd Jamil<br>(UiTM Pulau Pinang Branch, Malaysia) | An Effect on Form Particle Contamination in Biodegradable Transformer Oil | Siti Solehah Md Ramli |

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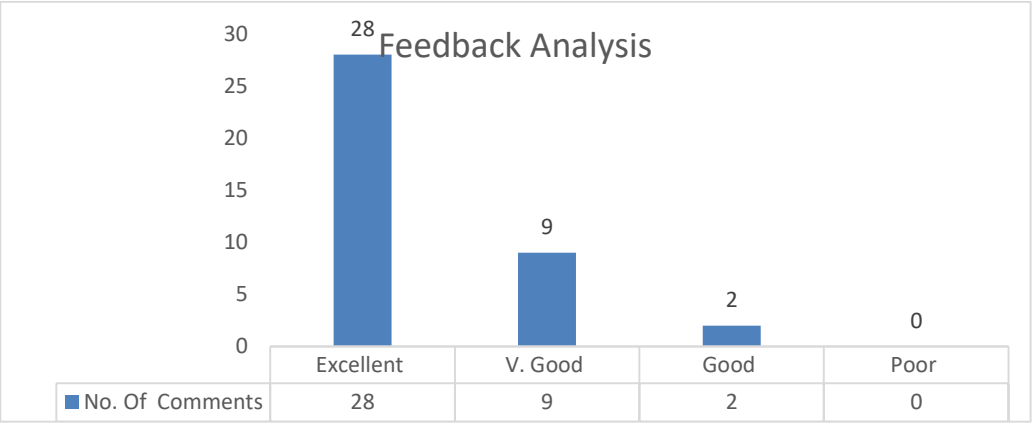
## FEEDBACK ANALYSIS:

Written feedback was collected from each participant during each session. Oral feedback and views shared by the participants revealed that the conference has successfully fulfilled the objectives of the conference set forth. All the participants in their oral feedback have given positive remarks in all respects and shown their satisfaction over all the arrangements except about the time management.

- **The analysis is presented below;**

| | Attributes | Comments | No. Of Comments |
|---|---|---|---|
| Program | How was the seminar? | Excellent | 28 |
| | | V. Good | 9 |
| | | Good | 2 |
| | | Poor | 0 |




## SWOT ANALYSIS:

The primary goal of such conferences is to promote research and developmental activities in recent advances in engineering and allied areas. Another goal is to promote scientific information interchange between researchers, developers, engineers, students, and practitioners working in and around the world.

**Strengths of the Conference:**

- Experienced event team.
- Excellent PR.
- High motivation level.
- Usage of the right event marketing tools.
- Good market share, strong brand name.
- Many social media followers.

**Weakness of Conference:**

- Domination by a few Participants
- Expenditure

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# CONFERENCEREPORT

## International Conferenceon Artificial Intelligence: Advances andApplications (ICAIAA-2019)

**TITLEANDDURATION:**International Conference on "Artificial IntelligenceAdvances and Applications (ICAIAA-2019)"June 28-29, 2019.

**SPONSORS:**RTU TEQIP-III.

**SUPPORTERS:**Rajasthan Technical University (RTU), Kota.

**ORGANIZING PARTNERS:**ICAIAA-2019was jointly organized by Poornima College of Engineering, Jaipur and Rajasthan Technical University, Kota in association with Soft Computing Research Society (SCRS)

**PUBLISHER(S):**Springer

## THEMES/TRACKS:

**Track-1** Artificial Intelligence

**Track-2** Intelligent Sensor, Devices & Applications

## OBJECTIVES:

Rajasthan Technical University, Kota, Poornima College of Engineering, Jaipur , Poornima Institute of Engineering and Technology, Jaipur & Jawaharlal Nehru Technological University, Hyderabad are jointly organized a TEQIP III Sponsored International Conference on "Artificial Intelligence: Advances and Applications-2019" (ICAIAA-2019) on June 28-29, 2019. ICAIAA-2019 (International Conference on Artificial Intelligence: Advances and Applications-2019) is a two-day conference which aims bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Engineering Applications of Artificial Intelligence. It also provides a premier interdisciplinary platform for researchers, practitioners and scientists to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the fields of Engineering Applications of Artificial Intelligence. In this conference covers research works carried out by various students such as bachelor, master and doctoral scholars, faculty and industry persons in the

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area of Artificial Intelligence, Machine Learning, and Deep Learning applications in Healthcare, Agriculture, Business, and Security etc. It will also cover research in core concepts of Computer Networks, Intelligent System design and deployment, Real time systems, WSN, Sensors and Sensor nodes, SDN, NFV etc. Each book chapter shall emphasize on specific sub domains of AI and Deep Learning. It will be useful for students, faculty and industry working on AI applications. AI is an emerging technology that shall be used almost all applications / technologies/ systems in one or other form. Thus, the conference provides opportunities for the delegates to exchange new ideas and application experiences face to face, to establish business or research relations and to find global partners for future collaboration.

## EXPECTEDOUTCOMES:

The expected outcomes from the Conference are:

- A toolkit for implementation
- Learning and knowledge exchange among Conference participants through interdisciplinary discussions.
- A series of documented case studies, video interviews, information briefs and other materials for Artificial Intelligence.
- A Conference report, including lessons from the International Decade for Advancement and Application in the field of Artificial Intelligence.

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## BROCHURE/POSTER/LEAFLET/FLYER:

# International Conference on Artificial Intelligence: Advances and Applications-2019 (ICAIAA-2019)

**JUNE 28-29, 2019**

In Association with Springer

**RAJASTHAN TECHNICAL UNIVERSITY, KOTA**

TEQIP-III

### ICAIAA-2019 COMMITTEES

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**Sandeep Poonia,** Amity University, Jaipur

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**Punit Mathur,** PIET, Jaipur

**PUBLICATION & MEDIA CHAIRS**

**Virendra Sangtani** PCE, Jaipur India
**Rekha Jain,** PIET

### CALL FOR PAPERS

**Prospective authors from academia as well as Industry are invited to submit their full papers in Main Conference ICAIAA- 2019, which have not been yet submitted/ published and that illustrate research, surveying works, and industrial applications in artificial intelligence domain describing significant innovation and advances in following broad areas, but not limited to:**

#### Track-I Artificial Intelligence

- Agent-Based Systems
- Ant Colony Optimization
- Approximate Reasoning
- Bioinformatics And Computational Biology
- Artificial Intelligence In Modeling And Simulation
- Natural Language Processing
- Artificial Life
- Artificial Immune Systems
- Brain-Machine Interfaces
- Collective Intelligence
- Computer Vision And Speech Understanding
- Data Mining
- Differential Evolution
- Evolutionary Design
- Neural Network Theory and Architectures
- Evolutionary Scheduling
- Expert Systems
- Human–Computer Interaction
- Machine Learning
- Deep Learning
- Nature Inspired Algorithm

#### Track-2 Applications of AI

- Automatic Control
- Sensors In Automobile
- Fuzzy Systems For Robotics
- Intelligent Database Systems
- Sensor Modeling And Identification
- Molecular And Quantum Computing
- Robotics And Related Fields
- Web Intelligence Applications And Search
- Intelligent System Architectures
- Health Care Applications
- Network Intelligence
- Routing Protocol in WSN
- Natural Language Processing
- CAD Design & Testing
- Computational Theories Of Learning
- Intelligent Sensor
- Information Retrieval
- Mechatronics
- VANET
- Energy Optimization of Wireless Devices
- Agriculture Applications
- Disaster Management
- Variable Bio-Sensors
- Coverage Problem in WSN
- Sensors for Medical Health Application
- Hybrid Intelligent Systems
- Multi-Agent Systems
- Environmental/ Earth Sensing
- Pervasive Computing And Ambient Intelligence
- Synthesizing Controllers
- Industrial Monitoring
- Security and Privacy Data Mining
- Business intelligence

#### Registration Fees

| Category | Fee | |
|---|---|---|
| RTU & BTU Faculty & Students (All the authors should be from RTU & BTU affiliated colleges) | 100% Fee Waiver will be given | |
| Regular Author Academician | 5000 INR/- | 100 USD |
| Regular Author Student (PG) | 4000 INR/- | 80 USD |
| Regular Author Student (UG) | 3000 INR/- | 60 USD |
| Attendee / Co Author (First Author is from RTU & BTU affiliated colleges & co Authors are from non RTU Organization) | 60% of Respective Category | 60% of Respective Category |

#### Important Dates

| | |
|---|---|
| Last Date of Paper Submission | : April 15, 2019 |
| Acceptance Notification | : May 31, 2019 |
| Camera Ready Paper | : June 15, 2019 |
| Last Date of Registration | : June 20, 2019 |

#### PAPER SUBMISSION

**All the review manuscripts should be submitted in PDF format without authors name and affiliations using Easy Chair Conference Management Systems written as per Springer Template in Word (A4). However the names of all authors should be registered on easy chair while submission.**

**Paper submission Link : https://easychair.org/conferences/?conf=icaiaa2019**


**WRITE TO US:**
Track 1: icaiaa.ai@poornima.org
Track 2: icaiaa.sda@poornima.org
**http://www.icaiaa-2019.poornima.org**

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#### Organized by

**Rajasthan Technical University, Kota**
**Poornima College of Engineering, Jaipur**
**Poornima Institute of Engg. and Tech., Jaipur**

#### Conference Venue

**POORNIMA COLLEGE OF ENGINEERING**
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**Phone/Fax: 0141-2770790, 92**

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## RESPONSE(SUBMISSION/ACCEPTANCE/PRESENTATION):

In ICAIAA-2019, total 188 papers are received across the world consented and reviewed the papers. 59 papers were accepted after a rigorous review procedure, making it very selective. 51 papers are registered, Out of which 40 papers are presented in the conference.

| | Track1 | Track2 | Total |
|---|---|---|---|
| Total No. of Papers Submitted | 97 | 91 | 188 |
| Total No. of Papers Accepted | 33 | 26 | 59 |
| Total No. of Papers Registered | 28 | 23 | 51 |
| Total No. of Papers Presented | 22 | 18 | 40 |

## PROGRAMOUTLINE:

**International Conference**
**on Artificial Intelligence: Advances and Applications (ICAIAA-2019)**
**(28-29th June 2019)**

**Programme Outline**
**Friday, Day 1: 28th June, 2019**

| | | | |
|---|---|---|---|
| 09.00 am – 10.00 am | Welcome Reception and Registration Opens | | |
| 9.30 am – 10.00 am | High Tea | | |
| 10.00 am – 11.30 am | **Inaugural Function & Keynote Address**<br>A. **Prof. Dr. Uday A. Dabade**, State Project Administrator of SPIU (TEQIP III), **Chief Guest**<br>B. **Dr. S.M. Seth**, Chairman (Emeritus), Poornima Foundation, (Presiding over the function)<br>C. **Prof. Ravindra P. Purohit**, Vice President Hindustan Construction Ltd. Mumbai **(Guest of honour)**<br>D. **Prof. B. Vishnu Vardhan, JNTU, Hyderabad**, Organizing Chair ICAIAA 2019<br>E. **Prof. Harish Sharma**, Associate Professor CSE, RTU Kota, General Chair, ICAIAA 2019<br>F. **Dr. Jagdish Chandra Bansal**, Associate Professor, South Asian University New Delhi<br>G. **Dr. Mahesh Bundele**, Director, PCE, General Chair ICAIAA 2019<br>H. **Dr. Dinesh Goyal**, Director, PIET, Organizing Chair ICAIAA 2019<br>I. **Shri Rahul Singhi**, Director, Poornima Group<br>**Venue: Arbuda Convention Center, PIET** | | |
| 11.30 am- 12.00 Noon | **Plenary Talk 1**<br>**Speaker: Dr. Nilanjan Dey, Assistant Professor**, Department of IT, Techno India College of Technology, Kolkata, India<br>***Title: The Silent Thief of Sight - CAD for Glaucoma*** | | |
| 12.00 Noon – 12.30 pm | **Plenary Talk 2**<br>**Speaker: Dr. Swagatam Das**, Associate Professor, EC, Sciences Unit of the Indian Statistical Institute, Kolkata, India<br>***Title: Predictive and Generative Deep Inference Models: Perspectives and Recent trends*** | | |
| 12.30 pm - 01.30 pm | **Lunch Break- Transfer from PIET to PCE** | | |
| 01.30 pm – 2.30 pm | **Parallel Technical Sessions** | | |
| | **Session 1A**<br>**Seminar Hall CG-05**<br>**AI, ML & Deep Learning Applications** | **Session 1B**<br>**Seminar Hall AG-03**<br>**AI, Cloud and Power System** | **Session 1C: Seminar Hall AB-05**<br>**Human Face, Emotions, Handwriting & Finger Print Recognition** |
| 02.30 pm – 03.00 pm | **Tea Break** | | |
| 03.00 pm – 03.30 pm | **Plenary Talk 3**<br>**Speaker: Dr. Kottakkaran Sooppy Nisar**, Associate Professor, Department of Mathematics, College of Arts & Sciences, Prince Sattam bin Abdul-Aziz University, Kingdom of Saudi Arabia<br>***Title: Some Recent Trends in Mathematics: Fractional Calculus, Optical Communications, and Cryptosystems*** | | |
| 03.30 pm – 04.00 pm | **Plenary Talk 4**<br>**Speaker: Dr. Jagdish Chand Bansal**, Assistant Professor (Senior Grade), Department of Mathematics, South Asian University, New Delhi<br>***Title: Artificial Intelligence & Environment*** | | |
| 04.00 pm – 05.00 pm | **Parallel Technical Sessions** | | |
| | **Session 2A**<br>**Seminar Hall CG-05**<br>**Health Care Applications** | **Session 2B**<br>**IT Seminar Hall AG-03**<br>**Filter Design and Instrumentation Amplifier** | **Session 2C**<br>**Seminar Hall AB-05**<br>**Miscellaneous Applications** |

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## INAUGURALSESSION:

International Conference on *Artificial Intelligence: Advances and Applications*
**ICAIAA-2019-(28-29 June 2019)**
**Organized by:**
Poornima College of Engineering, Poornima Institute of Engineering & Technology, Jaipur
Rajasthan Technical University, Kota and Jawahar Lal Nehru Technological University, Hyderabad

***Inaugural Session***
**Friday**, June 28, 2019
**Venue:** Arbuda Convention Centre, PIET, Jaipur
**Time**: 10 AM to 11.30 AM

| S. No | Activity | Duration | Time |
|---|---|---|---|
| 1. | Reporting and Registration of Delegates | 60 Min | 09:00 am-10:00 am |
| 2. | High Tea | 30 min | 9.30 am – 10.00 am |
| 3. | Gathering of audience in **Arbuda** | 20 min | 9.40 am – 10.00 am |
| 4. | **Arrival of Guests & Group Photograph of Dignitaries** | 02 Min | 9.58 am- 10.00 am |
| 5. | Welcome of Dignitaries by the anchors & **Ganesh Vandana** | 05 Min | 10:00 am-10:05 am |
| 6. | Request the dignitaries for lighting of lamp (Parallel Saraswati Vandana Audio)<br>A. **Prof. Dr. Uday A. Dabade,** State Project Administrator of SPIU (TEQIP III) **Chief Guest**<br>B. **Dr. S. M. Seth,** Chairman (Emeritus), Poornima Foundation, **Presiding over the function**<br>C. **Prof. Ravindra P. Purohit,** Vice President Hindustan Construction Ltd. Mumbai **(Guest of honour)**<br>D. **Prof. B. Vishnu Vardhan,** JNTU, Hyderabad, Organizing Chair ICAIAA 2019<br>E. **Dr. Harish Sharma,** Associate Professor, RTU Kota, Organizing Secretary ICAIAA 2019<br>F. **Dr. Jagdish Chandra Bansal,** Associate Prof., South Asian University New Delhi<br>G. **Dr. Mahesh Bundele,** Director, PCE, General Chair ICAIAA 2019<br>H. **Dr. Dinesh Goyal,** Director, PIET, Organizing Chair ICAIAA 2019<br>I. **Ar. Rahul Singhi,** Director, Poornima Group<br>J. **Dr. Garima Mathur,** Organizing Secretary ICAIAA 2019 | 03 Min | 10:05 am-10:08 am |
| 7. | A. **Felicitation of Chief Guest Prof. Dr. Uday A. Dabade,** State Project Administrator of SPIU (TEQIP III), by **Prof. Harish Sharma,** RTU Kota<br>B. **Felicitation of Dr. S. M. Seth,** Chairman (Emeritus), Poornima Foundation by **Ar. Rahul Singhi,** Director, Poornima Group<br>C. **Felicitation of Guest of honour Prof. Ravindra P. Purohit,** Vice President Hindustan Construction Ltd. Mumbai **by Dr. Mahesh Bundele, Director, PCE**<br>D. **Felicitation of Prof. B. Vishnu Vardhan, JNTU, Hyderabad** by **Dr. Dinesh Goyal,** Director, PIET<br>E. **Felicitation of Prof. Harish Sharma,** RTU Kota by **Mr. Pankaj Dhemla,** Vice Principal, PCE<br>F. **Felicitation of Dr. Jagdish Chandra Bansal,** SAU, New Delhi by **Dr. Garima Mathur** Organizing Secretary ICAIAA 2019 | 05 Min | 10:08 am-10:13 am |
| 8. | Release of Conference Souvenir & Proceeding by Dignitaries | 03 Min | 10.13 am-10.16 am |
| 9. | Welcome Address & About Conference **Dr. Mahesh Bundele** | 05 Min | 10:16 am-10:21 am |
| 10. | Introduction & Address by **Dr. Dinesh Goyal,** Director, PIET | 04 Min | 10.21 am-10.25 am |
| 11. | Introduction & Address by **Ar. Rahul Singhi,** Director, Poornima Group. | 05 Min | 10.25 am-10.30 am |
| 12. | Introduction & Address by **Dr. Jagdish Chandra Bansal,** Associate Prof., South Asian University New Delhi. | 05 Min | 10.30 am-10.35 am |
| 13. | Introduction & Address by **Prof. Harish Sharma,** Organizing Chair ICAIAA 2019 | 05 Min | 10.35 am-10.40 am |
| 14. | Introduction & Address by **Prof. B. Vishnu Vardhan, JNTU, Hyderabad** | 05 Min | 10.40 am-10.45 am |
| 15. | Introduction & Address by **Prof. Dr. Uday A. Dabade,** Professor, Department of Mechanical Engineering, WCE, Sangli, **State Project Administrator of SPIU (TEQIP III)** | 10 Min | 10:45 am-10:55 am |
| 16. | Introduction & Words of blessing by **Dr. S. M. Seth,** Chairman (Emeritus), Poornima Foundation | 10 Min | 10:55 am-11:05 am |
| 17. | Introduction of **Guest of honour Prof. Ravindra P. Purohit,** Vice President Hindustan Construction Ltd. Mumbai -**Keynote Address**<br>**(All other Dignitaries will take their Seats in Front Row)** | 20 Min | 11:05 am-11:25 am |
| 18. | Vote of Thanks by **Dr. Garima Mathur,** Organizing Secretary ICAIAA 2019 | 03 Min | 11:25 am-11:28 am |
| 19. | **Group Photograph in front of PIET** | 02 Min | 11.28 am-11:30 am |

## KEYNOTESPEAKERS:

- **Dr. Nilanjan Dey,** Assistant Professor, Department of IT, Techno IndiaCollege of Technology, Kolkata, India

  Title: The Silent Thief of Sight - CAD for Glaucoma

- **Dr. Swagatam Das,** Associate Professor, EC, Sciences Unit of [illegible] Institute, Kolkata, India

  Title: Predictive and Generative Deep Inference Models: [illegible] recent trends

- **Dr. Kottakkaran Sooppy Nisar**, Associate Professor, Department of Mathematics,

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College of Arts & Sciences, Prince Sattam bin Abdul-Aziz University, Kingdom of Saudi Arabia

Title: Some Recent Trends in Mathematics: Fractional Calculus, Optical Communications, and Cryptosystems

- **Dr. Jagdish Chand Bansal,** Assistant Professor (Senior Grade), Departmentof Mathematics, South Asian University, New Delhi

  Title: Artificial Intelligence & Environment

## GLIMPSESOFPRESENTATIONS:

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## VALEDICTORYSESSION:

International Conference

on

***Artificial Intelligence: Advances and Applications (*ICAIAA-2019*)***

**28-29th June 2019)**

**Publication Support:**

Springer

**Organized by:**

Poornima College of Engineering, Poornima Institute of Engineering & Technology, Jaipur
Rajasthan Technical University, Kota and Jawahar Lal Nehru Technological University, Hyderabad

***Valedictory Session***

**Wednesday**, January 9, 2019
**Venue:** CG-05, PCE
**Time**: 4.00 m to 5.00 pm

| Sr. No | Activity | Duration | Time |
|---|---|---|---|
| 1. | Gathering of audience in CG-05, PCE | 15 Min | 3.45 pm-4.00 pm |
| 2. | Welcome of Dignitaries by the anchors<br>A. **Prof. Anupam Shukla, Director, IIIT Pune, Chief Guest**<br>B. **Dr. Shabana Urooj**, Professor, Electrical Engineering Department, School of Engineering, Gautam Buddha University, Greater Noida UP India. – Workshop Organizer, PerCAA, **Guest of Honour**<br>C. **Dr. Manoj Gupta, Pro-President,** Poornima University, Jaipur<br>D. **Dr. Mahesh Bundele**, Program Co-Chair, PerCAA 2019 | 02 Min | 4:00 pm- 4:02 pm |
| 3. | **A. Felicitation of Chief Guest Prof. Rahul Banerjee**, Director, LNMIIT, Jaipur by **Dr. Manoj Gupta**, President PU<br>**B. Felicitation of Dr. Shabana Urooj by** Dr. Mahesh Bundele | 03 Min | 4:02 pm-4:05 pm |
| 4. | Conference Report by Dr. Mahesh Bundele | 5 Min | 4.05 pm-4.10 pm |
| 5. | Address by **Dr. Manoj Gupta, Pro-President PU** | 5 Min | 4.10 pm-4.15 pm |
| 6. | Address by **Dr. Shabana Urooj**, Workshop Organizer, PerCAA 2019 | 5 min | 4.15 pm-4.20 pm |
| 7. | Certificate Distribution at the Hands of Dignitaries | [illegible] | [illegible] pm-4.30 pm |
| 8. | Participants Feedback | 10 [illegible] | [illegible] pm-4.40 pm |
| 9. | Introduction & Address by **Dr. Rahul Banerjee**, Director LNMIIT, Jaipur | 10 Min | 4.40 pm -4.50 pm |

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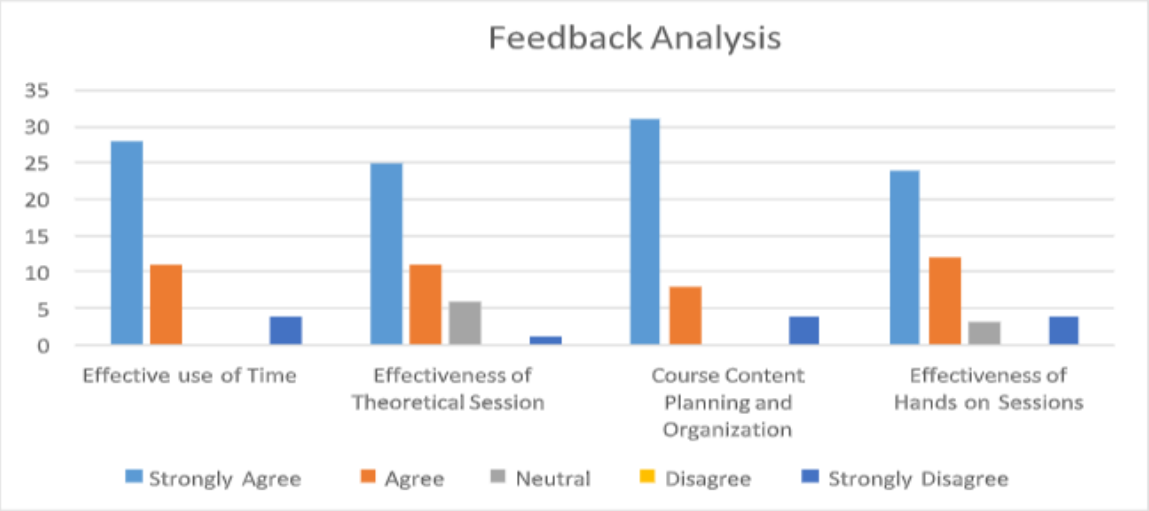
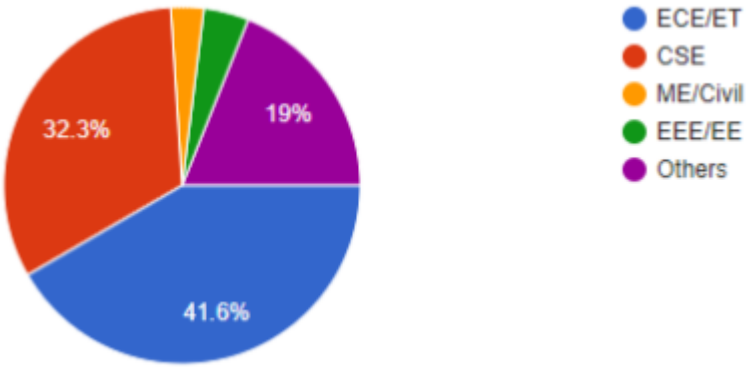
| | | | |
|---|---|---|---|
| 10. | Vote of Thanks by **Dr. Ajay Khunteta** | 05 Min | 4.50 pm-4.55 pm |
| 11. | Group Photograph in Porch | 05 Min | 4.55 pm-5:00 pm |

## FEEDBACKANALYSIS:

| | Effective use of Time | Effectiveness of Theoretical Session | Course Content Planning and Organization | Effectiveness of Hands on Sessions |
|---|---|---|---|---|
| **Strongly Agree** | 28 | 25 | 31 | 24 |
| **Agree** | 11 | 11 | 8 | 12 |
| **Neutral** | 0 | 6 | 0 | 3 |
| **Disagree** | 0 | 0 | 0 | 0 |
| **Strongly Disagree** | 4 | 1 | 4 | 4 |




## SWOTANALYSIS:

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POORNIMA
COLLEGE OF ENGINEERING

Promoted by Shanti Education Society, Affiliated to Rajasthan Technical University & Approved by AICTE

# A Report on 2-dayInternational Conference on Advances in Refrigeration & Energy Systems

**TITLEANDDURATION:**"Advances in Refrigeration & Energy Systems" (April 7-8, 2018)

**SPONSORS:**NIL

**SUPPORTERS:**NIL

**ORGANIZING PARTNERS:** ASHRAE, India Chapter

**PUBLISHER(S):**Nil

**THEMES/TRACKS:**

• RAC Components, Standards and Test Facilities
• CFD Simulation and Modeling in RAC
• Refrigerated Cold Chain, Transport and Cold Storage
• New Refrigeration Techniques
• Cold/Heat Recovery and Energy Efficiency
• Low Temperature Applications
• Automobile Air Conditioning
• Alternative Refrigerants & Technologies
• IC Engine Applications
• Heat Transfer and Fluid Flow
• Solar Thermal and PV Techniques
• Wind Energy Systems
• Hydropower Applications
• Bio fuel Technology

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• Fuel Cell and Hydrogen Technology

• Geothermal Systems

• Renewable Energy in Smart Cities

• Sustainable and High Performance Buildings

• Building Simulations and Energy Modeling

• Alternate Fuels

• Waste Heat Recovery

• Mechatronics

• Energy saving for Vehicular Technology, Electric Machinery and Power Electronics

• Life Cycle Assessment

• Energy and Environment Policy Regulations

**OBJECTIVES:**

Realizing that intellectual competitiveness is vital to India in achieving the status of a vibrant global leader in the growing knowledge age and technical and management education has created for itself a critical niche area, the PJ Foundation, as an umbrella body, will devote itself to formulation of desired policies and providing broad directions, guidance and support to the managements of the participating colleges.

The main objectives are to:

• Create industry effective curriculum and courses
• Establish effective collaboration and cooperation among institutions
• Initiate fellowships, scholarships and awards
• Identify new growth areas
• Create new research and development platform
• Provide orientation and approach/practices for efficient institutional management
• Ensure effective execution of teaching learning processes

The areas indicated are only illustrative and do not limit the scope of the Foundation's guidance/assistance. It may contribute in any other area(s) conducive to the attainment of its broad Mission. The endeavor will be to develop and implement mechanisms and practices to supplement engineering/technical education with knowledge of management and social sciences and inculcate interpersonal skills so as to make the students more enterprising and competitively oriented.

The PJ Foundation will serve as a 'think tank' to deliberate on all aspects of technical/professional education and reorientation of approach/ practices adopted for the efficient management of the colleges/ institutions. The Foundation is also committed to providing quality research in technology and management and their specialized [illegible]. The directions/ guidelines issued by the PJ Foundation will be followed and adhered to by the participating colleges in all seriousness. In the day-to-day management of individual colleges, the foundation will have no direct role and they will [illegible] freedom of approach and practice. The foundation is not intended to interfere in their working except to the extent

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of seeing that the directions/guidelines, if any, issued by it is any specific matter (s) are duly followed.

**EXPECTEDOUTCOMES:**

It's palpable that Refrigeration and Energy System are of primary importance and modern society requires an ever increasing amount of energy resources. Refrigeration is considered as the most important engineering achievements of the 20th century having its large impact on industry, lifestyle, agriculture etc. Following the same ideology, the conference acts as the forum for the high intellectuals to discuss the scope of future research emphasizing the need and availability of energy resources and the applications of refrigeration system.

The conference will provide a platform to academicians, students and researchers for showcasing the different innovative ideas related to research and applications of mechanical engineering. The presentations and expert talks will demonstrate the significance of Refrigeration & Energy System in different professional prospects. In this conference, deliberations on Refrigeration & Energy System will take place through the gathering of renowned personalities and expertise opening the new arenas of knowledge and professions for engineers and entrepreneurs.

**DETAILS OF CONFERENCE:**

Department of Mechanical Engineering, Poornima College of Engineering, Jaipur organized an International Conference on "Advances in Refrigeration & Energy Systems" on April 7 & 8th,2018 with technical support of green-assocham (GEM), Indian Society of Heating Refrigeration & Air Conditioning Engineering (ISHRAE) and TWIGA as a Table Partner. The conference took place to emphasize the need and importance of refrigeration and energy in current scenario.

On this occasion, Dr. Bruce D. Hunn, Consultant, Building Energy Analysis & Former Director, Strategic Technical Programs, ASHRAE, graced the occasion as the Chief Guest along with Mr. Priyank Garg, President, ASHRAE India Chapter, Guest of Honor, Mr. Indrajit Bhattacharya, General Manager, U.P. Twiga Fiberglass Limited, Guest of Honor , Dr. Jyotirmay Mathur ,Prof. Department of Mechanical Engineering ,MNIT Jaipur ,Mr. K.K. Mitra, Past President, ASHRAE India Chapter, Mr. Sunil Bajaj, ASHRAE India Chapter, Dr. Om Prakash Sharma, Director, Poornima College of Engineering, Mr. Shailendra Kasera, Head & Asst. Prof., Dept of Mech. Engg. and Dr. Arun Kumar Behura, Associate Prof. Dept. of Mech. Engineering.

The conference began with the floral welcome of the dignitaries followed by felicitation ceremony and releasing of the Souvenir. It got initiated with the welcome address & introduction of ICARES -2018 which was given by Dr. Om Prakash Sharma, Director PCE. He motivated the students and thanked the dignitaries for their precious time. He urged the students to witness such conference in future for their academic benefits. After this, Mr. Priyank Garg, President, ASHRAE India Chapter spoke about ASHRAE India Chapter. He handed over the certificate of Best Student Chapter Award to Dr. [illegible] Sharma and Mr. Shailendra Kasera.

The Chief Guest Dr. Bruce D. Hunn, Consultant, Building Energy Analysis & Former Director, Strategic Technical Programs, ASHRAE delivered the inaugural speech. He, in his

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remarks, described the implementation procedures for the performance measurement protocols documented in the 2012 ASHRAE publication ***Performance Measurement Protocols for Commercial Buildings: Best Practices Guide*.** This how-to guide provides practical steps and tools for continuously monitoring, evaluating, and improving the performance of commercial buildings throughout their service life. He stated that it supports integrated commissioning and all activities of the O&M team to ensure that their buildings are green, energy efficient, highly productive, and healthy. A process and tools are provided to quantitatively evaluate building performance at three levels of application for this. The inaugural ceremony ended with the vote of thanks given by Mr.Shailendra Kasera. Various technical sessions were also organized in this conference.

**BROCHURE/POSTER/LEAFLET/FLYER:**

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**PROGRAMOUTLINE/ PROGRAM SCHEDULE/ INAUGURALSESSION:**

## ICARES-2018 Program Schedule

### Day-1

**Venue: CG05, PCE** **Anchors: Mr. Saket Verma and Puneet Suthar**

| S.No | Activity | Time |
|---|---|---|
| 1 | Reporting and Registration of Delegates | 08:30-09:30 am |
| 2 | Welcome of Dignitaries by the anchors<br>Request the dignitaries for lighting of lamp (Parallel Saraswati Vandana) | 09:30-09:40 am |
| 3 | Felicitation of Chief Guest , Guest of Honor and Other Dignitaries | 09:40-09:45 am |
| 4 | Release of Souvenir by Dignitaries on Dias | 09:45-09:55 am |
| 5 | Welcome Address & Introduction of ICARES-2018 by Dr. Om Prakash Sharma, Director, PCE | 09:55-10:00 am |
| 6 | About ASHRAE India Chapter and Handing Over the Best Chapter Award by Mr. Priyank Garg, President, ASHRAE India Chapter to Director, PCE and HOD, Dept of Mech Engg, PCE | 10:00-10:10 am |
| 7 | Inaugural Speech by Chief Guest Dr. Bruce D Hunn, Consultant, Building Energy Analysis & Former Director, Strategic Technical Programs, ASHRAE | 10:10-10:20 am |
| 8 | Vote of Thanks by Mr. Shailendra Kasera, Head & Asst. Prof., Dept of Mech Engg, PCE | 10:20-10:25 am |
| 9 | Poornima Gaan followed by National Anthem | 10:25-10:30 am |
| 10 | Request the dignitaries to leave the Dias | [illegible] |
| 11 | Technical Sessions<br>Lecture by Dr. Bruce D. Humm on Best Practice for | [illegible] am |

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| | | |
|---|---|---|
| | Evaluating and Improving the Performance of Commercial Buildings | |
| 12 | Lecture by Dr. S.C. Bhaduri on Impact of Kigali amendment on refrigeration industry | 11:30-12:05 pm |
| 13 | Lecture by Dr. Jyotirmay Mathur on Radiant Cooling | 12:05-12:40 pm |
| 14 | Presentation by U.P. Twiga Fiberglass Limited | 12:40-01:05 pm |
| 15 | Photo Session (PCE Porch) | 01:05- 01:15 pm |
| 16 | Lunch at PCE Mess | 01:15-2:00 pm |
| 17 | Lecture by Mr. Sameer Maithel on Energy Efficient Building Envelope for Residential Buildings | 02:00 - 02:30pm |
| 18 | Lecture by Mr. Kanagraj Ganeshan on Low Energy Cooling Systems | 02:30 -03:00 pm |
| 19 | Lecture by Mr. Neeraj Arora, Senior Director, ASSOCHAM on Green Building – Stop Nature being a Historical topic | 03:00-03:30 pm |
| 20 | High Tea | 03:30-04:00 pm |
| 21 | Lecture by Dr. Jorge E. Hernandz on Critical Applications | 04:00-04:45 pm |
| 22 | End of day one-Vote of Thanks by Anchors | 04:45 pm |

**Day -** 2

(Venue: CG-05 Seminar Hall, PCE, Jaipur)

| S.No | Activity | Time |
|---|---|---|
| 1 | Breakfast at PCE Mess | 08:45-09:30 |

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| | | |
|---|---|---|
| 2 | Registration | 09:30-09:45 am |
| 3 | Technical Parallel Session | 09:45-12:00 noon |
| 4 | Photo Session (Outside PCE, Main entrance) | 12:00-12:05 pm |
| 5 | Lunch at Poornima College of Engineering (Mess) | 12:05-01:00 pm |
| 6 | **Valedictory Session**<br>a. Brief overview of the conference<br>b. Discussion on issues related to Refrigeration and Energy Systems<br>c. Feedback of participants<br>d. Distributions of certificates<br>e. Vote of Thanks and concluding remarks | 01:00-01:30 pm |
| 7 | Poornima Gaan followed by National Anthem | 01:30-01:35 pm |

**DETAILSOFRESOURCEPERSONS/ ORGANIZING COMMITTEES:**

**<u>Poornima foundation advisor committee</u>**

**Mr. M. K. M. Shah** Director (Admin. & Fin.), PF

**Dr. Om Prakash Sharma** Director, PCE

**Mr. Rahul Singhi** Director, PF

**Ms. Renu Singhi** Advisor, Alumni Association, PF

**Dr. Rekha Nair** Dean Academic, PF

**Dr. Neeraj Jain** Dean (Admissions), PF

**Er. Rajeev David** Proctor-in-Chief, PF

**Mr. Ashwini Lata** Dean, Hostels, PF

**Ms. Dipti Lodha** Chief TPO, PF

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**Technical advisor committee**

**Dr. Essam Eldin Khalil** Cairo, University

**Dr. Max Sherman** Lawrence Berkeley National Laboratory, USA

**Mr. James Kurt Vallort** ASHRAE

**Mr. E. Mitchell Swann** MDC Systems, Paoli, USA

**Mr. Hoy Bohanon** Hoy Bohanon Engineering PLLC, USA

**Dr. P.M.V. Subbarao** IIT, Delhi

**Dr. S. C. Kaushik** IIT, Delhi

**Dr. K. Srinivasa Reddy** IIT, Madras

**Dr. S.P. Harsha** IIT, Roorkee

**Dr. P.K. Sahoo** IIT, Roorkee

**Dr. M. Mishra** IIT, Roorkee

**Dr. S. K. Mohapatra** IIT, Bhubaneswar

**Dr. A. M. Sidpara** IIT, Kharagpur

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**Dr. Shishir Chandra Bhadur**i JKLU, Jaipur

**Dr. Jyotirmay Mathur** MNIT, Jaipur

**Dr. Dilip Sharma** MNIT, Jaipur

**Dr. G. D. Agarwal** MNIT, Jaipur

**Dr. Amar Patnaik** MNIT, Jaipur

**Dr. R. K. Prasad** NIT, Jamshedpur

**Dr. L. Prasad,** NIT, Jamshedpur

**Dr. A. K. Prasad** NIT, Jamshedpur

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**Dr. S.S. Mohapatra** NIT, Rourkela

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**Dr. K. B Sahu** KIIT, Bhubaneswar

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**Dr. S. R. Das** VSSUT, Burla

**Dr. C. P. Mohanty** VIT, Vellore

**Dr. S. Rout** CVRCE, Bhubaneswar

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**Mr. K. K. Mitra** ASHRAE India Chapter

**Mr. Indrajeet Bhattacharya** ASHRAE India Chapter

**Mr. Sunil Bajaj** ASHRAE India Chapter

**Local Organisingcommittee**

**Dr. Hemat Kumar Gupta** Professor, ME, PCE

**Mr. Rajeev David** Proctor-in-Chief, PCE

**Mr. Punit Shukla** Registrar, PCE

**Dr. Virendra Sangtani** HOD, EE, PCE

**Dr. Ajay Khunteta** HOD, CS, PCE

**Mr. Amol Saxena** HOD, IT, PCE

**Dr. Garima Mathur** HOD, ECE, PCE

**Mr. Md. Tarique** HOD, Civil, PCE

**Mr. Shirish Nagar** HOD, Ist Year, PCE

**Local OrganisingMembers**

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**Mr. Peeyush Vats** ME, PCE

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**KEYNOTESPEAKERS:**

| SN | Name | Paper | Confirmation |
|---|---|---|---|
| 1 | Dr Bruce D Humm | Best Practice for Evaluating and Improving the Performance of Commercial Buildings | Yes |
| 2 | Dr SC Bhaduri | Impact of Kigali amendment on refrigeration industry | Yes |
| 3 | Dr Jyotirmay Mathur | Radiant Cooling | Yes |
| 4 | Mr. Sameer Maithel | Energy Efficient Building Envelope for Residential Buildings | |
| 5 | Mr. Kanagraj Ganeshan | Low Energy Cooling Systems | Yes |
| 6 | Mr. Neeraj Arora, Senior Director, ASSOCHAM | Green Building – Stop Nature being a Historical topic | |
| 7 | Dr. Jorge E. Hernandz | Latest Developments in the HVAC world | Video Conferencing |

**Brief profile of Chief Guest:**

Dr. Bruce D. Hunn is a consultant in building energy analysis residing in Raleigh, NorthCarolina, USA. He is the former Director of Technology/Director of Strategic TechnicalPrograms at ASHRAE (1997-2010) in Atlanta, Georgia, and continues as an activetechnical volunteer with ASHRAE. He chairs Technical Committee 7.6 on BuildingEnergy Performance and is a member of Standard Project Committee 211 (Standard forCommercial Building Energy Audits) and a consultant to the Building Energy QuotientCommittee. He is an ASHRAE Fellow, Life Member, and recipient of the DistinguishedService Award. Dr. Hunn holds BS, MS, and Ph.D. degrees in Mechanical Engineeringfrom Stanford University and a BA in Engineering from the University of Redlands.

Hunn has authored or co-authored more than 110 articles, technical reports and papers,along with eight books or chapters.

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**Best Practice for Evaluating and Improving Commercial Building Performance**

This presentation describes the implementation procedures for the performancemeasurement protocols documented in the 2012 ASHRAE publication PerformanceMeasurement Protocols for Commercial Buildings: Best Practices Guide. This how-toguide provides practical steps and tools for continuously monitoring, evaluating, andimproving the performance of commercial buildings throughout their service life. Itsupports integrated commissioning and all activities of the O&M team to ensure that theirbuildings are green, energy efficient, highly productive, and healthy. A process and toolsare provided to quantitatively evaluate building performance at three levels ofapplication. Examples of applications to the ASHRAE Headquarters Building arepresented.

**CONTENTDELIVERY/PRACTICALSESSIONS:**

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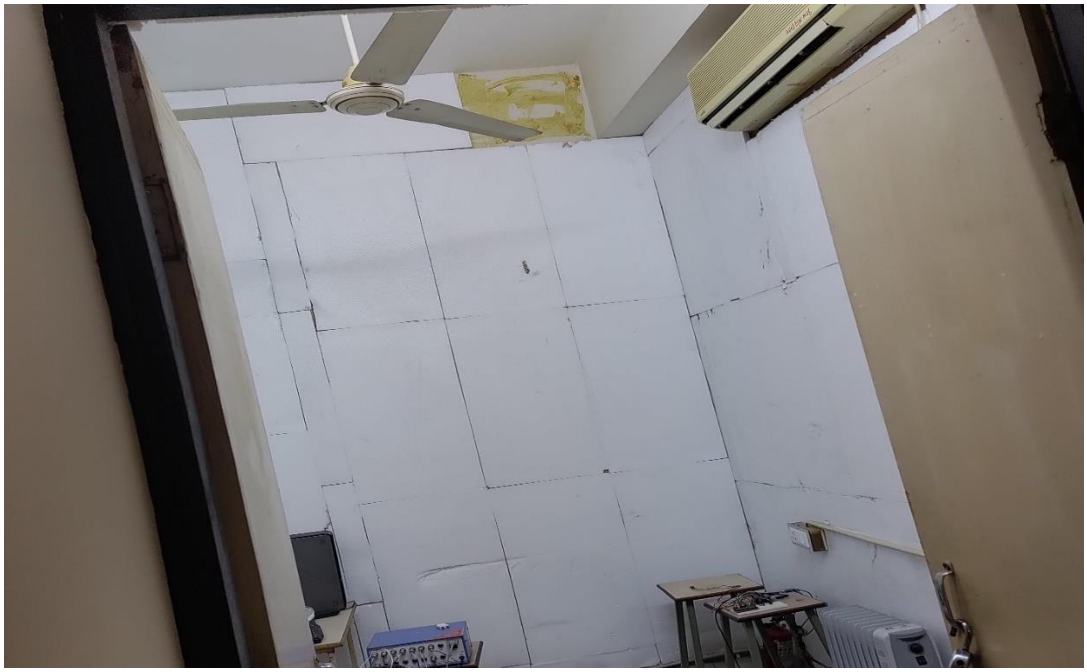

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**LISTOFPARTICIPANTS:**

| | | | | | |
|---|---|---|---|---|---|
| | | **ALL VENUES-POORNIMA COLLEGE OF ENGINEERING** | **DATE-08-04-2018** | | |
| | | **TECHNICAL SESSION I (FACULTY CO-ORDINATOR-YOGESH MISHRA)** | | | |
| **S No** | **PAPER ID** | **TITLE** | **AUTHORS** | **TIMING** | **VENUE** |
| 1 | ICARES-2018/01 | Simulation and Performance Analysis of Shell and Tube Heat Exchanger | Nishant Wadhwa, Geetanjali Raghav | 09:45-10:00AM | |
| 2 | ICARES-2018/02 | A Review of Variable Refrigerant Flow Systems (VRF) | Zoe Dickson, Marc Armitage, Ritvik Mathur, Shailendra Kasera | 10:00-10:15 AM | |
| 3 | ICARES-2018/03 | Thermal Performance Analysis of the Pulsating Heat Pipe for Hybrid Vehicle Applications | Surajit Chowdhury, Dr. Ashok K Dewangan | 10:15-10:30 AM | |

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|---|---|---|---|---|---|
| 4 | ICARES-2018/04 | Energy Performance Evaluation of R600a as a Drop-In Substitute for R134A | Prof. Shishir Chandra Bhaduri, Shailendra Kasera | 10:30-10:45 AM | |
| 5 | ICARES-2018/05 | Use Of Green Energy for Smart City: a Review | Yogesh Mishra, Gaurav Kumar, Bhawani Singh | 10:45-11:00 AM | CG-05 |
| 6 | ICARES-2018/06 | Generation of Electricity using Human Power | Chetan Khemraj, Abhisekh Singh, Neeelam Singh, Sushma Barahate | 11:00-11:15 AM | |
| 7 | ICARES-2018/07 | Performance Of Collector Parameters for Three Sides Artificially Roughened Solar Air Heaters | Dr. Ashwini Kumar Dr. Arun Kumar Behura Dr. Ravi Kumar | 11:15-11:30 AM | |
| 8 | ICARES-2018/08 | Analysing Effects Of Cracks on Natural Frequency and Vibrations in Cantilever Beam by FEM And FFT | Sanjay Kumawat, Arvind Singh Mirola, Atul Sharma | 11:30-11:45 AM | |
| 9 | ICARES-2018/09 | A Review On Hybrid Air Conditioning System | Deepak Singh, Prof.(Dr) Ravi Goyal | 11:45-12:00 PM | |
| 10 | ICARES-2018/10 | Issues in the Automative Parts Remanufacturing Industry-A Discussion | Digvijay Singh Nirwan, Devesh Pratap Singh, Ankur Agrawal | 12:00-12:15 PM | |
| | | | | | |
| | | **TECHNICAL SESSION II (FACULTY CO-ORDINATOR-BHAVESH DEVRA)** | | | |
| | | | | [illegible] | **VENUE** |
| 11 | ICARES-2018/11 | Basic Study of Steam Turbine | Dheeraj Kumar Dab[illegible] Singh | [illegible]:00AM | |

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|---|---|---|---|---|---|
| 12 | ICARES-2018/12 | A Study of Automobile Air Conditioning System | Aditya Kumar, Dharma Raj Yadav, Dhruva Khandal | 10:00-10:15 AM | |
| 13 | ICARES-2018/13 | Prevention of Air Pollution at the Very Generation and It's Purification: A Review | Anshul Maheswari And Chandan Kumar | 10:15-10:30 AM | |
| 14 | ICARES-2018/14 | Block chain Technology | Anurag Jain & Sakshi Mishra | 10:30-10:45 AM | |
| 15 | ICARES-2018/15 | A Comprehensive Review on Small Scale Wind Turbines | Amit Mandal | 10:45-11:00 AM | AB-05 |
| 16 | ICARES-2018/16 | A Review on Dual Clutch Transmission | Anshu Kumar Patel | 11:00-11:15 AM | |
| 17 | ICARES-2018/17 | Evaluation of Performance and Vibration Analysis Of Annular Disc by Using Finite Element Method | Asha Kumawat , Ankit Saharan, Akshay Shrivastav | 11:15-11:30 AM | |
| 18 | ICARES-2018/18 | Analysis of Thermal Performance in Three Sides Artificially Roughened Solar Air Heaters | Dr. Arun Kumar Behura, Dr. Ashwini Kumar, Dr. Ravi Kumar | 11:30-11:45 AM | |
| 19 | ICARES-2018/19 | Review on 3D Printing Technology | Devesh Pratap Singh, Digvijay Singh Nirwan | 11:45-12:00 PM | |
| 20 | ICARES-2018/20 | Building Energy Simulation –A Case Study in Composite Climate in India | Dinesh Chand Sharma, Abhay Raj | 12:00-12:15 PM | |
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| | | **TECHNICALSESSION III (FACULTY CO-ORDINATOR-PRAVEEN KUMAR TAGYEE)** | | | |
| | | | | **TIMING** | **VENUE** |
| 21 | ICARES-2018/21 | Issues in the Solar Power Air Conditioning-A Discussion | Himanshu Sharma, An[illegible] Seknawat, Gov[illegible] Parashar | 09:4[illegible] | |

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|---|---|---|---|---|---|
| 22 | ICARES-2018/22 | Mass Customized Manufacturing Practices: The Role Of Big Data and Analytics with Multiple Indian Cases | Dr. J.K. Purohit, Dr. Miland Kumar Sharma, Dr. A.S. Chauhan | 10:00-10:15 AM | |
| 23 | ICARES-2018/23 | Introduction to Self Inflating Tyre | Bhartendu Singh, Kapish Sharma | 10:15-10:30 AM | |
| 24 | ICARES-2018/24 | Combustion Instabilities in Liquid Propellant Rockets | Prashant Kumar Rawat Rahul Sharma Ashish Dubey | 10:30-10:45 AM | |
| 25 | ICARES-2018/25 | Dynamic Hysteresis Scaling of Ferroelectric Hysteresis Parameters of Ceramics | Ankit Kumar, Sudhanshusingh, Shatrughan Singh, Ashok Kumar Yadav | 10:45-11:00 AM | CONFERENCE HALL |
| 26 | ICARES-2018/26 | Thermal Analysis of Rapid Tooling Mold Integrated with Conformal Cooling Channels | Sagar Kumar, Vikas Kumar | 11:00-11:15 AM | |
| 27 | ICARES-2018/27 | Experimental Investigation of Surfactant Effect on Heat Transfer Characteristics in Non-Boiling Spray Cooling Of Water | Praveen Kumar Tyagi, Dr. Arun Kumar Behura | 11:15-11:30 AM | |
| 28 | ICARES-2018/28 | Road Power Generation by Flip Plate Mechanism- A Discussion | Atal Bihari Bairangi, Parbat Singh, Mohammad Ali | 11:30-11:45 AM | |
| 29 | ICARES-2018/29 | Experimental Investigation of Waste Cooking Oil Methyl Esters (Wcome) as Fuel in CI Engine | Chandrashekhar, P. K. Mandal, Ashok Kumar Yadav | 11:45-12:00 PM | |
| 30 | ICARES-2018/30 | Issues in the Direct Utilisation of Geothermal Energy- A Discussion | Pawan Kumar, Mohit Pareek, Ball Kishan | 12:00-12:15 PM | |
| 31 | ICARES-2018/31 | Fractional integral and beta transform formulas for the extended appell-lauricella hypergeometric functions | Shilpi Jain, Praveen Agarwal, O. Kiymaz | 12:15-12:30 PM | |
| | | | | | |
| | | **TECHNICAL SESSION IV** | | | |

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|---|---|---|---|---|---|
| | | **(FACULTY CO-ORDINATOR-DHANANJAY KUMAR)** | | | |
| | | | | **TIMING** | **VENUE** |
| 32 | ICARES-2018/32 | Project Loon | Anila Dhingra, Gaurav Saxena & Suman Kumari | 09:45-10:00AM | |
| 33 | ICARES-2018/33 | Exploration of Gmelina Arborea Biodiesel as A Fuel for Diesel Engine | Iftikhar Ahmed Khan, S.K. Singh, Ashok Kumar Yadav | 10:00-10:15 AM | |
| 34 | ICARES-2018/34 | Phase Change Materials and Thermal Energy Storage for Buildings | Sagar Kumar, Shivmani Kumar | 10:15-10:30 AM | |
| 35 | ICARES-2018/35 | Advancement in Hydraulic Pumps-A Review | Yogesh Mishra, Bhagraj Choudhary, Ashish Mali, Ashish Agarwal | 10:30-10:45 AM | |
| 36 | ICARES-2018/36 | Evolution of Performance and Vibration Analysis of Smart Structures by Piezoelectric Material | Asha Kumawat ,Siddhant Singh | 10:45-11:00 AM | AB-14 |
| 37 | ICARES-2018/37 | Variable Refrigerant Flow- A Review | Madhavendra | 11:00-11:15 AM | |
| 38 | ICARES-2018/38 | Digital Design and Manufacturing Software and Services on Cloud Fusion 360 | Nishant Yogi , Himanshu, Shreyansh, Dr. Robin Gupta | 11:15-11:30 AM | |
| 39 | ICARES-2018/39 | Plastic Bag Disposal Machine” | Rahul Sharma, Sambhav Saxena, Rishu Kumar, Vivek Viswakarma | 11:30-11:45 AM | |
| 40 | ICARES-2018/40 | Eco-Cooler | A.Sharma, G.Singh, S.Gupta, T.Singhal, R.Gupta | 11:45-12:00 PM | |
| 41 | ICARES-2018/41 | Review on Grain Refinement on A356 Aluminium Alloy | Nitin [illegible], Pranish Arora, | 12:00-12:15 PM | |

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|---|---|---|---|---|---|
| | | | Robin Gupta | | |

## LIST OF REGISTERED CANDIDATES/LIST OF ATTENDED CANDIDATES

| S No | PAPER ID | AUTHORS | TITLE |
|---|---|---|---|
| 1 | ICARES-2018/01 | Nishant Wadhwa, Geetanjali Raghav | Simulation and Performance Analysis of Shell and Tube Heat Exchanger |
| 2 | ICARES-2018/02 | Digvijay Singh Nirwan, Devesh Pratap Singh, Ankur Agrawal | Issues in the Automative Parts Remanufacturing Industry-A Discussion |
| 3 | ICARES-2018/03 | Surajit Choudhury, Dr. Ashok K Dewangan | Thermal Performance Analysis of the Pulsating Heat Pipe for Hybrid Vehicle Applications |
| 4 | ICARES-2018/04 | Prof. Shishir Chandra Bhaduri Shailendra Kasera | Energy Performance Evaluation of R600a as a Drop-In Substitute for R134A |
| 5 | ICARES-2018/05 | Yogesh Mishra, Gaurav Kumar, Bhawani Singh | Use Of Green Energy for Smart City: a Review |
| 6 | ICARES-2018/06 | Chetan Khemraj, Abhisekh Singh, Neeelam Singh, Sushma Barahate | Generation of Electricity using Human Power |
| 7 | ICARES-2018/07 | Dr. Ashwini Kumar Dr. Arun Kumar Behura Dr. Ravi Kumar | Performance Of Collector Parameters for Three Sides Artificially Roughened Solar Air Heaters |
| 8 | ICARES-2018/08 | Sanjay Kumawat, Arvind Singh Mirola, Atul Sharma | Analysing Effects Of Cracks on Natural Frequency and Vibrations in Cantilever Beam by FEM And FFT |
| 9 | ICARES-2018/09 | Deepak Singh, Prof.(Dr) Ravi Goyal | A Review On Hybrid Air Conditioning System |
| 10 | ICARES-2018/10 | Zoe Dickson, Marc Armitage, Ritvik Mathur, Shailendra Kasera | A Review of Variable Refrigerant Flow Systems (VRF) |
| 11 | ICARES-2018/11 | Dheeraj Kumar Dabhi, Abhay Singh | Basic Study of [illegible] |
| 12 | ICARES-2018/12 | Aditya Kumar, | A Study of Automobile Air Conditioning System |

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| | | Dharma Raj Yadav, Dhruva Khandal | |
| 13 | ICARES-2018/13 | Anshul Maheswari And Chandan Kumar | Prevention of Air Pollution at the Very Generation and It's Purification: A Review |
| 14 | ICARES-2018/14 | Anurag Jain & Sakshi Mishra | Block chain Technology |
| 15 | ICARES-2018/15 | Amit Mandal | A Comprehensive Review on Small Scale Wind Turbines |
| 16 | ICARES-2018/16 | Anshu Kumar Patel | A Review on Dual Clutch Transmission |
| 17 | ICARES-2018/17 | Asha Kumawat , Ankit Saharan, Akshay Shrivastav | Evaluation of Performance and Vibration Analysis Of Annular Disc by Using Finite Element Method |
| 18 | ICARES-2018/18 | Dr. Arun Kumar Behura, Dr. Ashwini Kumar, Dr. Ravi Kumar | Analysis of Thermal Performance in Three Sides Artificially Roughened Solar Air Heaters |
| 19 | ICARES-2018/19 | Devesh Pratap Singh, Digvijay Singh Nirwan | Review on 3D Printing Technology |
| 20 | ICARES-2018/20 | Dinesh Chand Sharma, Abhay Raj | Building Energy Simulation –A Case Study in Composite Climate in India |
| 21 | ICARES-2018/21 | Himanshu Sharma, Ankuj Sekhawat, Govind Kumar Parashar | Issues in the Solar Power Air Conditioning-A Discussion |
| 22 | ICARES-2018/22 | Dr. J.K. Purohit, Dr. Miland Kumar Sharma, Dr. A.S. Chauhan | Mass Customized Manufacturing Practices: The Role Of Big Data and Analytics with Multiple Indian Cases |
| 23 | ICARES-2018/23 | Bhartendu Singh, Kapish Sharma | Introduction to Self Inflating Tyre |
| 24 | ICARES-2018/24 | Prashant Kumar Rawat Rahul Sharma Ashish Dubey | Combustion Instabilities in Liquid Propellant Rockets |
| 25 | ICARES-2018/25 | Ankit Kumar, Sudhanshusingh, Shatrughan Singh, Ashok Kumar Yadav | Dynamic Hysteresis Scaling of Ferroelectric Hysteresis Parameters of [illegible]eramics |
| 26 | ICARES-2018/26 | Sagar Kumar, Vikas Kumar | Thermal Analy[illegible] Rapid [illegible]ing Mold Integrated with Conform[illegible] |
| 27 | ICARES-2018/27 | Praveen Kumar Tyagi, Dr. Arun | Experimental [illegible] Surfactant Effect on Heat Transfer Characteristics in Non-Boiling |

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|---|---|---|---|
| | | Kumar Behura | Spray Cooling Of Water |
| 28 | ICARES-2018/28 | Atal Bihari Bairangi, Parbat Singh, Mohammad Ali | Road Power Generation by Flip Plate Mechanism- A Discussion |
| 29 | ICARES-2018/29 | Chandrashekhar, P. K. Mandal, Ashok Kumar Yadav | Experimental Investigation of Waste Cooking Oil Methyl Esters (Wcome) as Fuel in CI Engine |
| 30 | ICARES-2018/30 | Pawan Kumar, Mohit Pareek, Ball Kishan | Issues in the Direct Utilisation of Geothermal Energy- A Discussion |
| 31 | ICARES-2018/31 | Anila Dhingra, Gaurav Saxena & Suman Kumari | Project Loon |
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| 33 | ICARES-2018/33 | Sagar Kumar, Shivmani Kumar | Phase Change Materials and Thermal Energy Storage for Buildings |
| 34 | ICARES-2018/34 | Yogesh Mishra, Bhagraj Choudhary, Ashish Mali, Ashish Agarwal | Advancement in Hydraulic Pumps-A Review |
| 35 | ICARES-2018/35 | Asha Kumawat ,Siddhant Singh | Evolution of Performance and Vibration Analysis of Smart Structures by Piezoelectric Material |
| 36 | ICARES-2018/36 | Madhavendra | Variable Refrigerant Flow- A Review |
| 37 | ICARES-2018/37 | Nishant Yogi , Himanshu, Shreyansh, Dr. Robin Gupta | Digital Design and Manufacturing Software and Services on Cloud Fusion 360 |
| 38 | ICARES-2018/38 | Rahul Sharma, Sambhav Saxena, Rishu Kumar, Vivek Viswakarma | Plastic Bag Disposal Machine” |

**SAMPLE COPY CERTIFICATE:**

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International Conference
on
ADVANCES IN REFRIGERATION & ENERGY SYSTEMS -2018

April 7-8, 2018

Department of Mechanical Engineering

ASHRAE India Chapter

POORNIMA COLLEGE OF ENGINEERING

Affiliated to Rajasthan Technical University, Kota & Approved by AICTE, New Delhi

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Certificate

This is to certify that Prof./Dr./Mr./Ms. Asha Kumavat from JJT University has participated as Delegate/Author/Co-author in the **INTERNATIONAL CONFERENCE ON ADVANCES IN REFRIGERATION & ENERGY SYSTEMS -2018 (ICARES-2018)** organized by Poornima College of Engineering, Jaipur.

He/She presented a paper entitled Evolution of performance and vibration analysis of smart structures by Piezoelectric Material

(Dr. Arun Kumar Behura) Convener: ICARES -2018

(Mr. Shailendra Kasera) Convener: ICARES -2018

(Dr. Om Prakash Sharma) Director, PCE

SAVE WATER • SAVE ENERGY • SAVE ENVIRONMENT • SAVE LIFE • SAVE EARTH • SAVE TREES • SAVE FUEL • SAVE ELECTRICITY

**FEEDBACKANALYSIS:**

2. The organization of the conference was?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

3. Technical Sessions were informative and managed well.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

4. How do you rate Keynote Speaker's talk? *

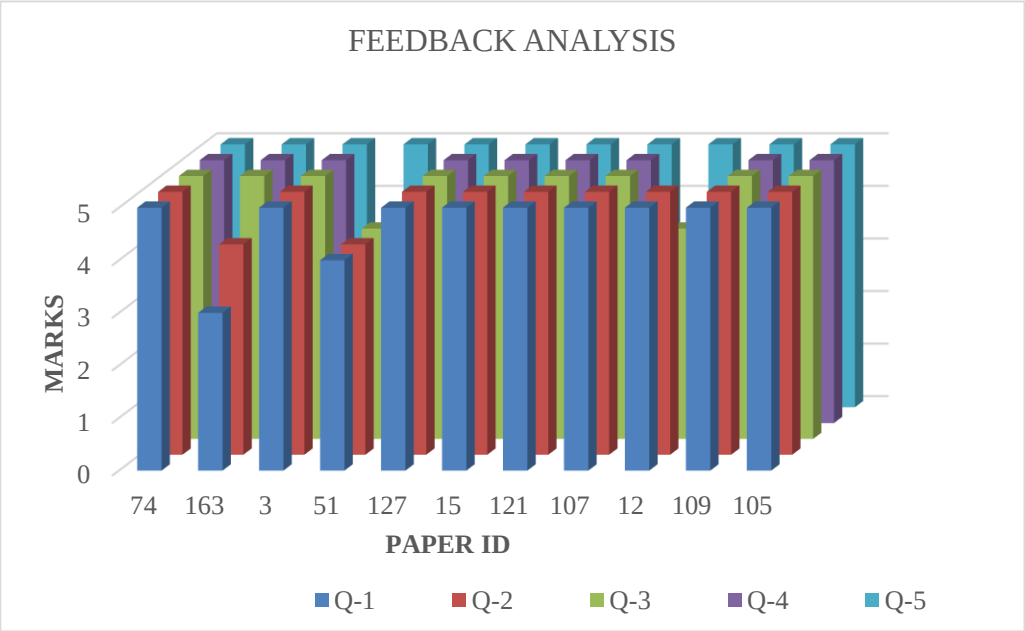
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

5. Knowledge sharing during the conference? *

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

6. Timely Information sharing with participants, and responses from the organizers

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |




**SWOTANALYSIS:** Nil

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**BUDGET&ACTUALS:**

| S.No | Heads | Amount |
|---|---|---|
| **1** | Domestic Travel | 15000 |
| **2** | International Travel (not more than 25olo of the total budget) | 45000 |
| **3** | Accommodation | 20000 |
| **4** | Food Expenses for Pa rticiDants | 150000 |
| **5** | Honorarium to Paper Writers | 20000 |
| **6** | Organizational Expenses (including Venue Bookings, Transport. Stationery, Xeroxing, Secretarial assistance, Contingency) | 55000 |
| **TOTAL** | | **305000** |

**PROJECT FUND EXPENDITURES (Given by ASHRAE)**

| ITEM | BUDGET |
|---|---|
| Danfoss DC Compressor for R290 | $1000 |
| Solar photovoltaic System (PV array, Charge Controller, Battery, Charge and Discharge meter) | $1500 |
| Data acquisition system | $700 |
| Condenser, Capillary tube and evaporator | $300 |
| Measuring equipments (Thermocouples, pressure transducer, Watt Meter, Pyranometer, Mass flow meter, Environment Chamber) | $1000 |
| R290 refrigerant, Nano-particle, Milk for testing | $500 |
| **TOTAL** | $5000 |

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**ASSOCIATED PROJECT DETAILS:**

**About ASHRAE:**

ASHRAE is the premier international body in the HVAC&R field and has more than 50000 members worldwide. The mission of ASHRAE is to advance the arts and sciences of heating, ventilation, air conditioning, refrigeration and related human factors to serve the evolving needs of the public and ASHRAE members. It is the foremost and authoritative source of technical and educational information, standards and guidelines. ASHRAE's Core Values are Excellence, Commitment, Integrity, Collaboration and Volunteerism ASHRAE India Chapter (AIC) is the first and oldest (1990) of the ASHRAE Chapters in the country. It has more than 300 ASHRAE members located in North and Eastern India. The Indian chapters belong to Region-At-Large (RAL), the largest of the 14 regions of ASHRAE.

RAL was formed in 2001 and contains individual members and chapters in Europe, Africa, Middle East and the Indian Sub-Continent.

ISHRAE, started at Delhi in 1981 as an International Associate of ASHRAE. It is promoted and funded by the ISHRAE Foundation Trust. ISHRAE focuses on the following areas in order to build the engineers more proficient in field of technology. The objectives of ISHRAE are:

- ✓ Advancement of the sciences of Heating, Refrigerating and Air conditioning Engineering and related Sciences.
- ✓ Providing the career guidance, financial assistance and consultancy services Conduction of Training Courses, Workshops, Seminars and Certifications.
- ✓ Encouragement of Scientific Research with facilities establishment.
- ✓ To impart education in the fields of Air-Conditioning, Refrigeration and Allied Sciences.
- ✓ To disseminate and make available information relating to said sciences through the various publications.

| | |
|---|---|
| **Project Title** | Performance analysis of solar operated milk refrigerator using hybrid nanomaterials |
| **Executive Summary of Project (**Brief Description not exceeding 50 words**)** | In this project, an experimental investigation on performance of solar power driven vapor compression milk refrigerator with R290 refrigerant using hybrid nanomaterials will be carried out in high ambient conditions. It is based on the concept of Variable Refrigerant Flow (VRF). |
| **Project Details** | |
| **Objective:** • Use of solar DC power to run the milk refrigera | |

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• Performance assessment of solar DC operated milk refrigerator using hybrid nanomaterials and R290 base fluid

**Outcome of the proposal:** Various performance parameters i.e. coefficient of performance, cooling capacity, energy consumption, PV efficiency of Milk refrigerator will be investigated using various combination of nanomaterials i.e.$Al_2O_3$-$TiO_2$, $Al_2O_3$ – CuO, $Al_20_3$ –ZnO using R290 base fluid

•This project will promote the use of renewable energy (solar) and simultaneously solve the global issues i.e. ozone depletion and global warming.

•Energy efficient refrigeration facility can be made available for rural areas that are not connected to the grid.

**Work Plan:** In this project, performance test will be carried out in an experimental apparatus that consists of two loops: Solar Photovoltaic loop and Refrigeration loop. Solar Photovoltaic loop consists of Stand-alone solar Photovoltaic system which fundamental components are given below:

- Solar photovoltaic panels of capacity 2kW
- Charge controller
- Lead acid battery bank of 200 AH

Crystalline silicon solar photovoltaic cell is chosen due to its higher conversion efficiency from solar irradiance to electricity. The solar panel with available rated voltage at 17.5 V was selected taking consideration of 12 V from a battery. Charge controller is an essential part of solar PV system. It is necessary to avoid frequent over-charging and over-discharging to maintain the battery in proper operation condition, which is required for battery to last for longer lifetime. The function of the battery in this project is to store the electrical energy generated from Solar PV when it can provide more energy than that required for the load. If PV electricity is not available due to fluctuation of irradiation, the battery can provide the electrical energy.

Refrigeration loop consists of vapor compression cycle which fundamental components are given below:

- DC compressor compatible with R290 refrigerant (12-24 volts, 500 W energy consumption)
- Air Cooled Condenser
- Capillary tube
- Evaporator

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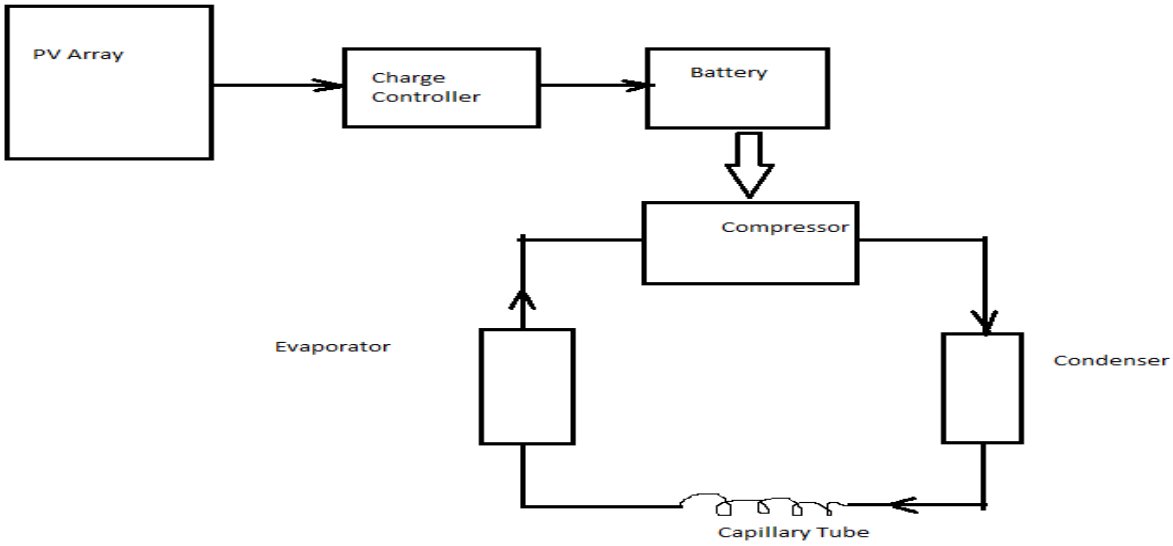
DC compressor provides a "soft-start" which means that the typical startup surge of an AC compressor running on an inverter is eliminated. A normal AC compressor will draw up to 500% more amps on startup, meaning that when running on an inverter, the inverter must be oversized accordingly. Oversized inverters are much less efficient. The DC compressor not only avoids needing an inverter, they also minimize the surge or spike at time of startup.

The test facility provides the thermodynamic state of refrigerant along with the various system parameters using following instruments

- T- Type Thermocouple with a temperature range of -270-200$^{o}$C
- Pressure transducer with a range 0-30 bar
- Digital Watt meter to measure the power in the range of 0-3kW
- Coriolis-effect mass flow meter operating in the range of 0-2 kg/min
- Pyranometer to measure the solar irradiation




**Preparation of Hybrid nanorefrigerant:**

Nanorefrigerant is one kind of nanofluids, in which the host fluid is conventional pure refrigerant. The term hybrid refers to two different types of Nanomaterial. Nano particle of $Al_2O_3$-$TiO_2$, $Al_2O_3$ – CuO, $Al_2O_3$ –ZnO will be mixed in R290 with concentration from 0.01-0.05 wt%. It will be measured by digital weight balance. Ultrasonication will be done for 4 hours in order to stabilize the dispersion of the nanoparticle.

**Testing:**

The primary operating principle of present system is as following. [illegible] power generated by PV array is higher than the chiller power, the chiller is completely operated

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by PV array while the excess power generated by PV array is stored in the battery bank. When the PV generated power is less than the load power of refrigerator, the power required by the load is provided by PV array and battery simultaneously. When the PV generated power is zero, as in the evening, the battery may power the refrigerator completely.

One objective of this work is to evaluate the efficiency of different components in the system using above mention Hybrid nanorefrigerant. Photovoltaic array is used as the energy source in present system. Hence, it is important to find out the PV efficiency.

The average PV conversion efficiency is defined as the ratio of total energy delivered from the photovoltaic array to the energy of the solar radiation on the PV.

$$\eta_{pv} = \frac{E_{pv}}{E_{sol}}$$

where $E_{pv}$ is the electricity generated by the PV array, and $E_{sol}$ is the energy of solar radiation.

State of discharge of battery bank is defined as the ratio of remainder power of battery bank ($E_r$) to the maximum power discharged by battery banks ($E_{max}$).

$$SOC = \frac{E_r}{E_{Max}}$$

Performance of refrigerator is given by Coefficient of performance, which is ratio of desired output, by required input.

$$COP = \frac{Q_c}{W_{in}}$$

Where $Q_c$ is desired cooling and $W_{in}$ is power input to compressor.

Desired cooling is calculated by $Q_c = mc_p\ (T_i - T_f)$ where m is mass of milk, $C_p$ is specific heat of milk, $T_i$ is initial temperature of milk and $T_f$ is final temperature of milk.

Similarly, Solar Coefficient of Performance is given by

$$COP_{solar} = \frac{Q_c}{E_{Sol}}$$

Solar Fraction (SF) is defined as the ratio of the electrical [illegible] by the solar

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energy to the total electrical energy used to drive the refrigerator.

Solar Direct Consumed Ratio (SDCR) is defined as the ratio of the electrical energy directly used by the refrigerator generated by PV to the total electrical energy generated by PV. When SDCR is higher, the battery storage capacity can be reduced.

**Result and Analysis**

Following performance parameters of solar milk refrigerator will be calculated for different ambient conditions and Hybrid nanorefrigerant

i. COP

ii. COPsolar

iii. PV Efficiency

iv. State of discharge of battery bank

v. Solar Fraction

vi. Solar Direct Consumed Ratio

vii. Cooling capacity

viii. Energy consumption

**Time Schedule**

| S.No | Activity | No of Weeks |
|---|---|---|
| 1. | Procurement of Material | 10 |
| 2. | Assembly | 2 |
| 3. | Testing for different ambient conditions | 52 |
| 4. | Result and Analysis | 4 |
| 5. | Report/paper writing | 4 |
| | **Total** | **72** |

**Involvement of students and guide**

| S.No | Students/Guide | Responsibility |
|---|---|---|
| 1 | Students | Fabrication and Testing |
| 2 | Guide | Design and Management |

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