POORNIMA
COLLEGE OF ENGINEERING

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

- **TITLE AND DURATION:** "Advancements in Signal Processing and Optimization Techniques in WSN" from September 21-25, 2020.

- **SPONSORS:** TEQIP-III, Rajasthan Technical University Kota.

- **SUPPORTERS:** Rajasthan Technical University Kota.

- **ORGANIZERS:** Rajasthan Technical University, Kota, and Department of Electronics & Communication Engineering, Poornima College of Engineering, Jaipur.

- **OBJECTIVES:**

  The aim of the Faculty Development Program is provide an opportunity to faculty members and on-going researchers to equip and advance their knowledge in the area of communication, signal processing and image processing and also, identify the prospective areas for novel research. You are requested to kindly circulate the same among your friends and colleagues.

- **EXPECTED OUTCOMES:**

  1. Bringing together the advancement of wireless system among faculties and to discuss the Latest applications and issues in the area of Signal Processing.

  2. Identify industry challenges and sensitize about latest trends and technologies in adopting different optimization techniques for reduction of fabrication cost.

  3. To provide use–case demonstrations, and research oriented discussion along with theoretical concepts, which shall facilitate the understanding of process through practical implementation in area of wireless sensor network.

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

BROCHURE

PCE ORGANIZING COMMITTEE

Er. Pankaj Dhemla	Vice-Principal, PCE
Dr. Rekha Nair	Dean I Year, PCE
Dr. Payal Bansal	Assistant Professor, ECE
Mr. Tarun Mishra	Assistant Professor, ECE
Mr. Durgesh Kumar	Assistant Professor, ECE
Mr. Manish Sharma	Assistant Professor, ECE
Ms. Manisha Kumawat	Assistant Professor, ECE
Mr. Amit Kumar Jain	Assistant Professor, ECE
Mr. Gaurav Saxena	Assistant Professor, ECE
Mr. Jitendra Gupta	Assistant Professor, ECE

RESOURCE PERSONS

Nithin V. George, Associate Professor, IIT, Gandhinagar
Dr Rajiv Mishra, Associate Professor, IIT, Patna
Dr. P Prakasam, Professor, VIT, Vellore
Dr. Sahyaal J. Nanda, Assistant Professor, MNIT, Jaipur
Dr. Rajendra Kumar, Assistant Professor, NIT, Kurukshetra
Dr. Renu Kumawat, Associate Professor, Manipal University, Jaipur
Dr. Amrita Rai, Associate Professor, GLBITM, Noida
Dr. Amit Sehgal, Director, Sharda Launchpad, Sharda University, Noida.
Dr. Chandrakant J. Gaikwad, Professor and Head, RAIT, Mumbai
Dr. Surjit Singh, Assistant Professor & Coordinator-M.E. (CSE), Thapar Institute of Engineering & Technology, Patiala

RESOURCE PERSONS

The resources persons for the FDP will be Eminent Professors and Experts in the area of Signal Processing from IITs, NITs and other Esteemed Institutions.

ELIGIBILITY

This course is open to all the Faculty Members of AICTE Approved Institutions, Research Scholars, and Persons working in R&D organizations or Industry. Number of participants for FDP is limited. All the sessions will be conducted online only.

REGISTRATION AND FEE PARTICULARS

- There is no registration fee for faculty from AICTE approved Institutions, Participants from Industry, and Research Scholars.
- Registration for the program may be done by filling the Registration Form online, Reg. Link: **https://tinyurl.com/yx9xxb4z**

IMPORTANT DATES

Last date of recipient of application	September 17, 2020
Intimation of selection by mail	September 19, 2020
FDP duration	September 21-25, 2020

CORRESPONDENCE

Dr. Anila Dhingra
Associate Professor, ECE
✉ : anila.dhingra@poornima.org • ✆ : +91-9829016670

Venue

Department of
Electronics & Communication Engineering
ISI-6, RIICO Institutional Area, Sitapura, Jaipur, Rajasthan 302022
www.pce.poornima.org

TEQIP-III SPONSORED

Faculty Development Program on Advancements in Signal Processing and Optimization Techniques in WSN

September 21-25, 2020

Organized by

Rajasthan Technical University, Kota
&
Department of
Electronics & Communication Engineering

POORNIMA
COLLEGE OF ENGINEERING

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

ABOUT TEQIP-III

The Project, third phase of Technical Education Quality Improvement Programme (referred to as TEQIP-III) is fully integrated with the Twelfth Five-year Plan objectives for Technical Education as a key component for improving the quality of Engineering Education in existing institutions with a special consideration for Low Income States and Special Category States and support to strengthen few affiliated technical universities to improve their policy, academic and management practices.

RAJASTHAN TECHNICAL UNIVERSITY

Rajasthan Technical University (RTU) is located in Kota in the state of Rajasthan. It was established in 2006 by the Government of Rajasthan. The University currently affiliates about 129 Engineering Colleges, 4 B.Arch., 41 MCA Colleges, 95 MBA Colleges, 44 M.Tech. Colleges and 3 Hotel Management and Catering Institutes. The University aims to provide quality technical education which may help Rajasthan in its technical development and will boost technical environment in the country.

POORNIMA COLLEGE OF ENGINEERING

Poornima College of Engineering (PCE), established as a brand of technical education in the year 2000, has its own glorious legacy of leading the young engineers to the mammoth sky of success. Its accomplishments forecast its journey through the hardships and its triumph over them one after another. PCE left no stone unturned since its establishment in turning the glorious vision into unbelievable reality providing the platform for knowledge and research and their practical implementations in different engineering professional prospects. Glorious glimpses of PCE:

- Highly recognized and renowned affiliated technical institution all over Rajasthan with built up area more than 3.5 lacs square feet
- Affiliated to RTU, Kota & approved by AICTE, New Delhi
- The most preferred NBA Accredited Engineering College with running of six specializations of Engineering at UG Level (CSE, ECE, EE, ME, IT, CIV) and two at PG level (CS & VLSI)
- The only institution permitted by RTU to admit FN/PIO/Gulf students & designated as centre of excellence by IBM

DEPT. OF ELECTRONICS & COMM. ENGINEERING

The Department of Electronics and Communication Engineering (ECE) was established in year 2003. National Board of Accreditation (NBA) accredited the ECE department in the year 2009 & 2016 for subsequent three years. It has intake capacity of 180. It also offers M. tech in VLSI Design with intake capacity of 18 students. The department has highly qualified committed and research oriented faculty members. The department has laboratories as per Rajasthan Technical University Syllabus with State-of-the-Art facilities in diversified fields such as Electronic Circuits, VLSI Design, DSP (Digital signal processing), Embedded Systems, Advanced Wireless Communication and Microwave etc. Research is being carried out in the areas of Antenna Design and Wireless Communication, and VLSI design. The department also has to his credit three labs, (i) Microwave Engineering lab & (ii) Advance Antenna & Wireless Communication lab (iii) Advancement of Wireless and Optical Fiber Lab supported by MODROBS Grants of AICTE, New Delhi.

IETE Student Forum (IFS) of the Department has been recognized as Most Active ISF for session 2016-17 by IETE Rajasthan Center, Jaipur. The department also has state of the art lab facility for the value added IBM Career Education Programs for faculty members and students on emerging technologies such as IBM BlueMix for Cloud, IBM Cognos for Business Intelligence and IoT Application Development & Deployment using IBM BlueMix.

ABOUT FACULTY DEVELOPMENT PROGRAM

Signal processing is concerned with the representation, manipulation and transformation of signals and the information that they carry. It provides techniques for processing acquired time-series data for the purpose of efficient analysis and synthesis. Over the years, it has been developed to give great advancements in the areas of microchips, digital systems and computer hardware. The applications of signal processing are vast and interdisciplinary, ranging from engineering to economics and astronomy to biology. The research in many areas such as signal coding and de noising has paved the path for advancements. Recent decade has witnessed major revolution in communication and processing of digital media. As a consequence solutions to major problems in processing, transmission and reception have made signal processing an integral part of modern electronic systems. This program will provide an opportunity to highlight recent trends and developments to identify emerging and future areas of growth in these exciting fields. It will further give impetus to the researchers towards bringing out newer and efficient techniques. Expert invited speakers from both industry and academia with their vast research experience in various fields will arouse the researchers for development of signal processing and Optimization Techniques.

TOPICS TO BE COVERED

- Fundamentals of adaptive signal processing
- Load Balanced Clustering in Wireless Sensor Networks
- Reinforcement Learning
- Classical Optimization and Unsupervised Learning Techniques
- Evolutionary and Nature Inspired Optimization Techniques
- Multi-Objective Optimization Techniques

OBJECTIVES OF THE FDP

- The Programme aims at equipping teachers with skills and knowledge in the field of communication, signal processing and image processing that are essential for inculcating learning values in students and guiding and monitoring their progress towards their career.
- To discuss state of the art developments and emerging techniques in Wireless Sensor Networks
- To provide an opportunity to faculty members and on-going researchers to equip and advance their knowledge in these application areas and also, identify the prospective areas for novel research.
- To exchange views, ideas the latest innovations in the field of Wireless sensor Networks. It also offers learning on adaptive signal Processing, evolutionary learning in WSN.

FDP COMMITTEE

CHIEF PATRON

Prof. (Dr.) R. A. Gupta
Hon'ble Vice Chancellor, RTU Kota

PATRON

Dr. Mahesh M. Bundele
Principal & Director, Poornima College of Engineering

RTU (ATU) TEQIP-III COORDINATOR

Prof. (Dr.) Dhirendra Mathur

RTU EVENT COORDINATOR

Dr. Deepak Bhatia (RTU, Kota)

RTU (ATU) TEQIP-III COMMITTEE

Dr. Harish Sharma	Nodal officer
Prof. D. K. Sambariya	Nodal Officer Procurement)
Dr. S. D. Purohit	Nodal Officer Finance
Dr. Irum Alvi	Conference
Mr. Santosh Sharma	Expert Lecture
Mr. Anshul Bansal	GATE & Induction
Mr. Dinesh Kumar	Workshop

HOST INSTITUTE COORDINATOR

Dr. Anila Dhingra	Associate Professor
Dr. Garima Mathur	Professor & Head ECE

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

FLAYER

- **DETAILS OF RESOURCE PERSONS:**

1. Dr. P.Prakasam, Professor, School of Electronics Engineering (SENSE), Vellore Institute of Technology (VIT), Vellore
2. Dr. Rajender Kumar , Assistant Professor Electronics and Communication Engineering, NIT Kurukshetra
3. Dr. Nithin V. George, TEOCO Chair Associate Professor, Electrical Engineering, Indian Institute of Technology, Gandhinagar.
4. Dr. Amit Sehgal, Director, Sharda Launchpad Professor, Electronics and Communication Engineering
5. Dr. Rajiv Mishra, Associate Professor Computer Science & Engineering Department, IIT Patna
6. Dr. Renu Kumawat , Associate Professor, Electronics and Communication Engineering

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, Manipal University, Jaipur

7. Dr. Surjit Singh , Assistant Professor & Coordinator M.E.(CSE), Computer Science & Engineering Department Thapar Institute of Engineering & Technology Patiala, Punjab
8. Dr. Chandrakant J. Gaikwad Professor and Head, Department of Electronics and Telecommunication Engineering Ramrao Adik Institute of Technology, Nerul, Navi Mumbai, Maharashtra.
9. Dr. Satyasai Jagannath nanda, Assistant Professor, Electronics and Communication Engineering, MNIT, Jaipur.
10. Dr. Amrita Rai, Associate Professor, Electronics and Communication
11. Engineering, GL Bajaj Institute of Technology & Management, Noida
12. Dr. Lokesh Tharani, Associate Professor Department of Electronics and communication Engineering, RTU, Kota.

Dr. Mahesh Bundele
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INAUGURAL SESSION:

RAJASTHAN TECHNICAL UNIVERSITY, KOTA
Poornima College of Engineering
TEQIP-III RTU (ATU) SPONSORED
Advancements in Signal Processing and Optimization Techniques in WSN
Five Days Faculty Development Program
(September 21-25, 2020)

Date: September 21, 2020 **Time: 9:00-9:30 AM**
Venue: Online

Q-Sheet- Inaugural Session

S. No	Activity	Duration	Time
1.	Welcome of Dignitaries and Introduction of FDP by **Dr. Anila Dhingra, (Associate Prof.) Coordinator, PCE** • **Prof. (Dr.) R.A. Gupta** , Hon'ble Vice Chancellor , RTU Kota **(Chief Guest)** • **Prof. (Dr.) Dhirendra Mathur,** RTU (ATU) TEQIP-III Coordinator **(Guest of Honour)** • **Dr. P.Prakasam,** Professor, School of Electronics Engineering(SENSE), VIT, Vellore **(Guest of Honour)** • **Dr. Deepak Bhatia**, Assistant Professor, RTU Event Coordinator • **Ar. Rahul Singhi,** Director, Poornima Group, Jaipur • **Dr. Mahesh Bundele**, Director & Principal, Poornima College of Engineering, Jaipur • **Er. Pankaj Dhemla,** Vice-Principal, Poornima College of Engineering, Jaipur • **Dr. Garima Mathur**, HOD, ECE, Poornima College of Engineering	**05 Min**	**9:00 AM -9:05 AM**
2.	Welcome Address by **Dr. Mahesh Bundele**, Director & Principal, Poornima College of Engineering, Jaipur	**05 Min**	**9:05 AM -9:10 AM**
3.	Address by **Ar. Rahul Singhi**, Director, Poornima Group, Jaipur	**05 Min**	**9:10 AM -9:15 AM**
4.	Introduction of Guest of Honour & Address by Guest of Honour **Prof (Dr.) Dhirendra Mathur** , RTU (ATU) TEQIP-III Coordinator **Dr. P.Prakasam,** Professor, School of Electronics Engineering(SENSE), VIT, Vellore.	**05 Min**	**9:15 AM - 9:20 AM**
5.	Introduction to Faculty Development Program by **Dr. Deepak Bhatia**, Assistant Professor, RTU Event Coordinator.	**05 Min**	**9:20 AM -9:25 AM**
6.	Introduction of Chief Guest & Inaugural Address by the Chief Guest **Prof. (Dr.) R.A. Gupta,** Hon'ble Vice Chancellor , RTU Kota	**10 Min**	**9:25 AM - 9:35 AM**
7.	Vote of Thanks by **Dr. Garima Mathur**, HOD, ECE, PCE	**05 Min**	**9:35 AM - 9:40 AM**

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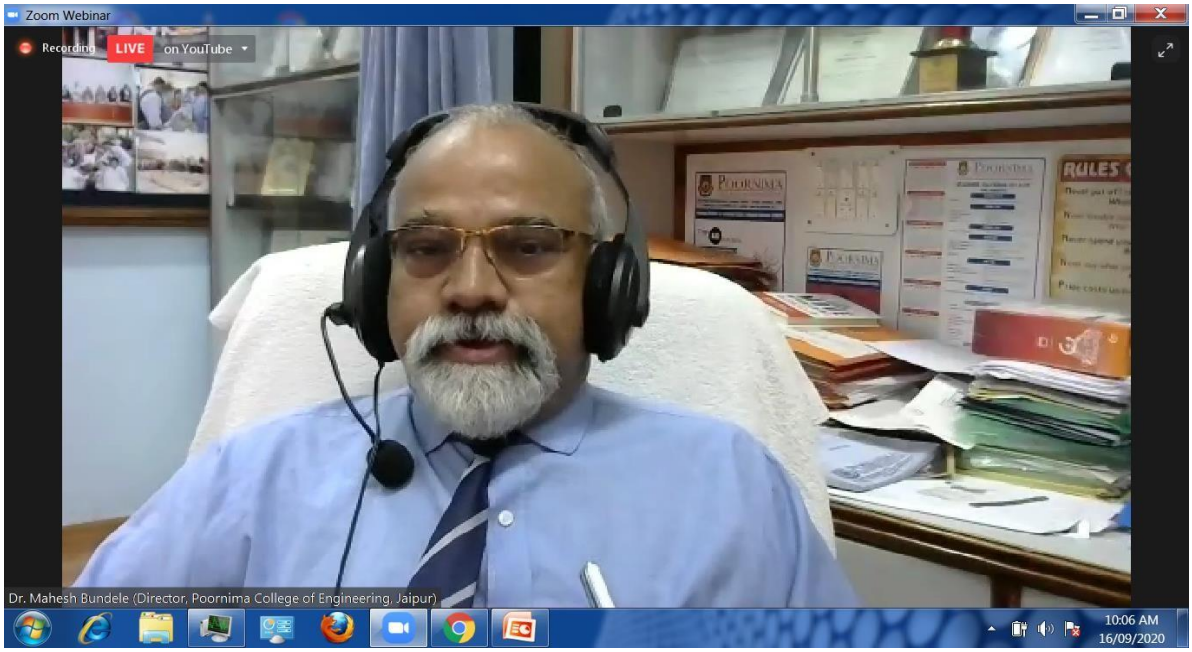
- **GLIMPSES OF CONDUCTION:**

Inaugural session

Welcome address by Dr. Payal Bansal (Coordinator FDP)



Motivational speech by Dr. Mahesh M Bundele (Director PCE)

Dr. Mahesh Bundele
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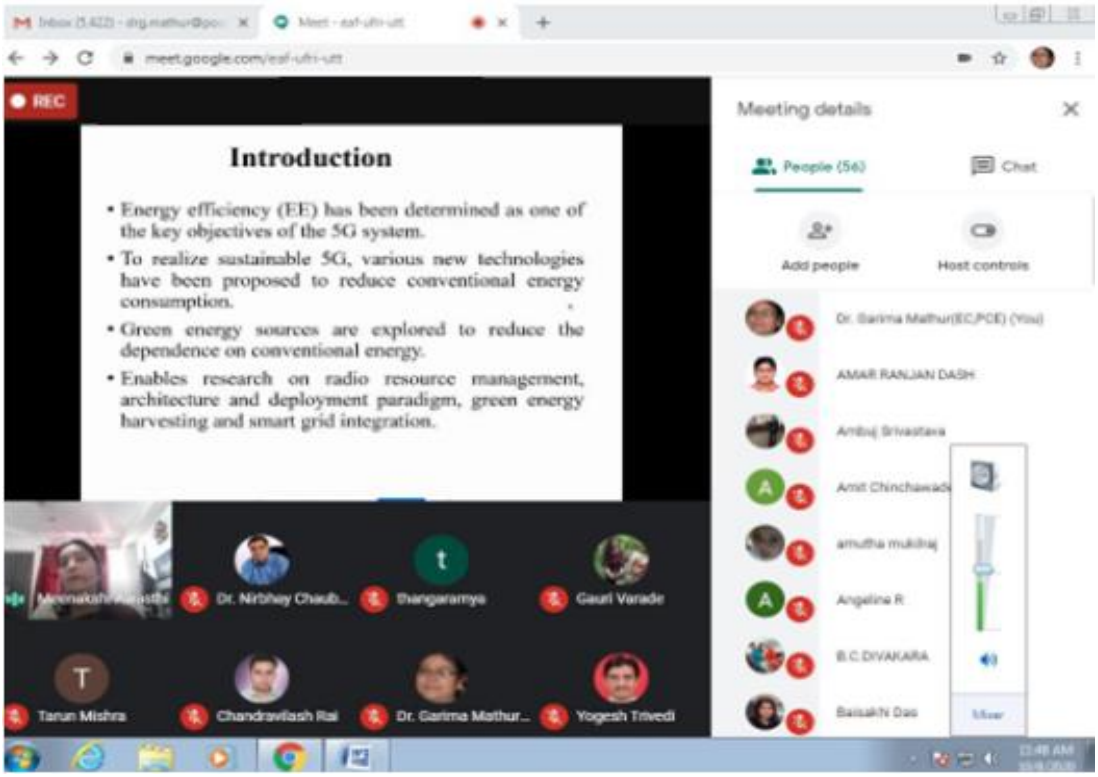
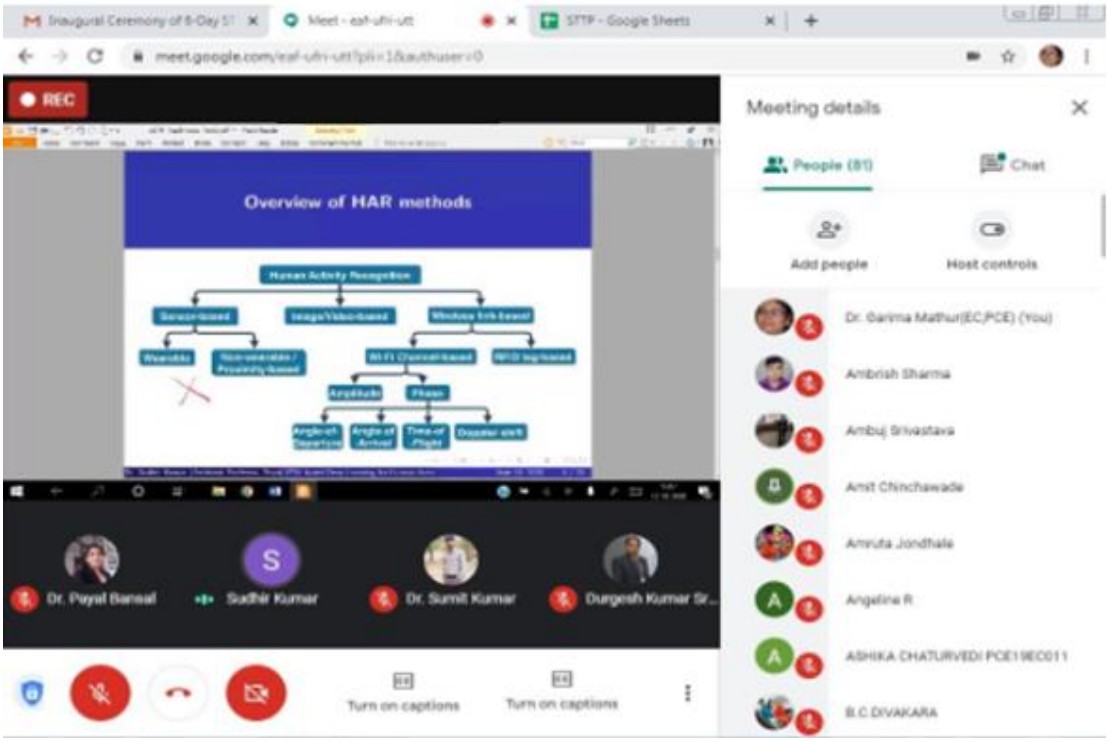
CONTENT DELIVERY / PRACTICAL SESSIONS:



Session Delivered by Dr. Renu Kumawat



Session Delivered by Dr. Lokesh Tharani

Dr. Mahesh Bundele
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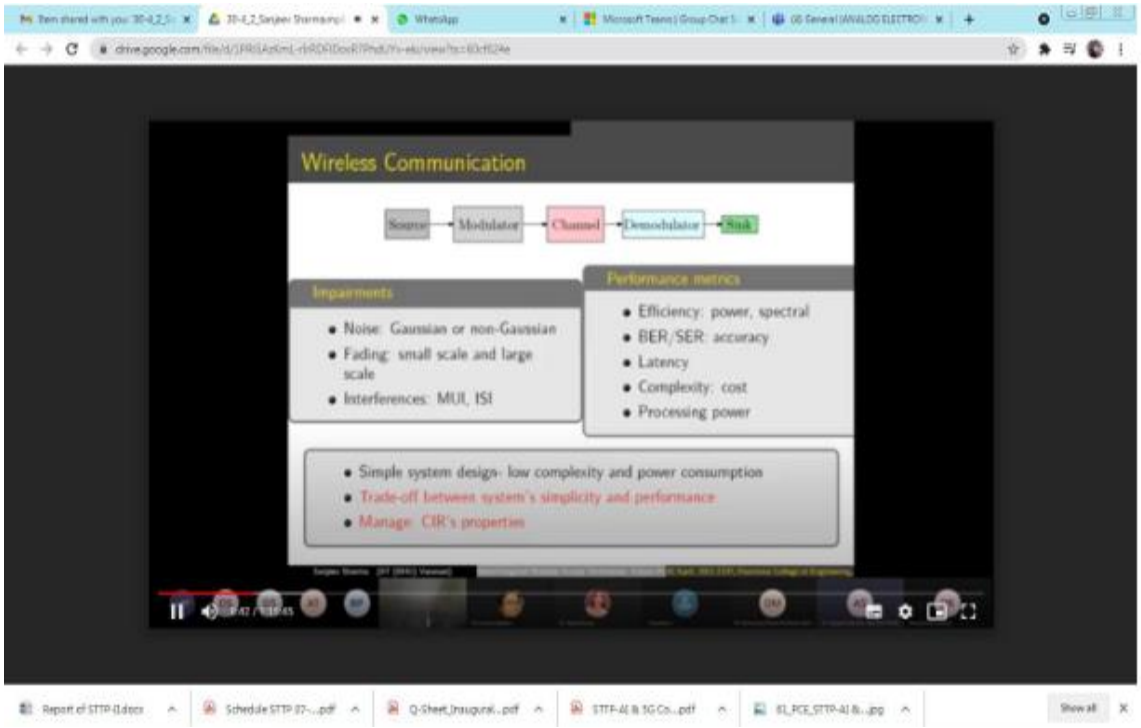

Session Delivered by Dr. Lokesh Tharani

Vote of Thanks by Dr. Garima Mathur

Dr. Mahesh Bundele
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LIST OF PARTICIPANTS:

S. No.	Name of Participants	Affiliation
1	Madhu Jain	Jaypee Institute of Information Technology, Noida
2	Manish Sharma	Poornima College of Engineering, Jaipur
3	Manish Sharma	Department of Information Technology and Communication, Govt. of Rajasthan
4	Manish Dubey	Poornima College of Engineering, Jaipur
5	Manish Sharma	Apex institute of engineering and technology
6	Manisha Kumawat	Poornima College of Engineering, Jaipur
7	Ms. S. Caroline	St. Xavier's Catholic College of Engineering
8	Ambrish Kumar Sharma	Rajiv Gandhi Proudyogiki Vishwavidyalaya (RGPV)
	Ms. Monika Malik	Jss Academy of Technical Education, Noida
9	Mr. Jigar Maheshbhai Patel	Bhailalbhai And Bhikhabhai Institute of Technology (Gia)
10	Dr. Beena A.O.	Saintgits College of Engineering
11	Kamlesh Gautam	Arya Institute of Engineering Technology and Management, Jaipur
12	Kana Ram Mali	Rajasthan Technical University, Kota
13	Krushna Chandra Sahoo	Dreims Aotonomous Engineering College, Cuttack
14	Kusum Yadav	JECRC Jaipur
15	Lakshya Rustagi	Poornima college of engineering
16	Lokesh Dashora	Laxmi Builders Private limited
17	Vadiraj Manvi	Maharani Lakshmi Ammanni College For Women
18	Dr. Rashmirekha Ram	Siksha O Anusandhan Deemed to be University
19	Dr. Krishna Chandra Roy	kautilya Institute of Technology and Engineering
20	Mohit Soni	Poornima College of engineering

21	Mukesh Chand	Poornima College of Engineering, Jaipur
22	Neha	Poornima college of engineering
23	Om Prakash Kumawat	IEI Kolkata
24	Pabitra Kumar Nayak	Synergy Institute of Engineering and Technology, Dhenkanal
25	Mr. A Sai Suneel	Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology
26	Dr. S. Maria Seraphin Sujitha	St.Xaviers Catholic College of Engg
27	Mr. Ramesh Dhulipudi	GIET College of Engineering
28	Pankaj Dadheech	Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur
29	Pruthwijeet Patnayak	NPTI, NAGPUR
30	Rahul Rathi	Poornima College of Engineering
31	Rahul Sharma	Poornima College of Engineering
32	Raj Kumar Jain	Poornima college of engineering
33	Ramesh Chand Meena	STPI, Ministry of Electronics and IT
34	Ravi Prakash Meghwanshi	Rajasthan Technical University, Kota
35	Reenal Jain	UBS
36	Riyanshi Jain	Rajasthan Technical University, Kota
37	Sakshi Tiwari	Arya college of engineering &IT
38	Sana Firoz	Poornima college of engineering
39	Shefali Sharma	Jaipur National University
40	Shikha Shrivastava	Jaipur Engg College and Research Centre
41	Shivali Sisodiya	Rajasthan Technical University Kota
42	Shubham Sharma	Rajasthan technical Univercity
43	Sumit kumar manna	Vidyasagar Metropolitan College
44	Sunil Kumar Mahapatro	Regional College for Education, Research and Technology, Sitapura, Jaipur, Rajasthan
45	Ms. Gauri Arun Varade	Sir Visvesvaraya Institute of Technology

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46	Dr. Manikandan J	Sri Sairam Engineering College
47	Mr. Shivaji Sinha	JSS Academy of Technical Education, Noida
48	Dr. Pokkuluri Kiran Sree	Shri Vishnu Engineering College for Women
49	Mr. Mehaboob Mujawar	Goa College of Engineering
50	Ms. Gauri Arun Varade	Sir Visvesvaraya Institute of Technology
51	Dr. A. Mary Joy Kinol	Sathyabama Institute of science and technology
52	Dr. S. Srinivasulu Raju	Velagapudi Ramakrishna Siddhartha Engineering College
53	Monika Rani	IKGPTU

ONLINE FEEDBACK

- Virtual feedback and views shared by the participants about the FDP. The FDP has successfully fulfilled the objectives of the FDP set forth. All the participants in their oral feedback have given positive remarks in all respects and shown their satisfaction with all the arrangements and the time management

FEEDBACK ANALYSIS:

	Effective use of Time	**Effectiveness of Theoretical Session**	**Course Content Planning and Organization**	**Effectiveness of Hands-on Sessions**
Strongly Agree	32	3	31	24
Agree	12	15	8	19
Neutral	10	9	15	12
Disagree	2	2	0	1
Strongly Disagree	0	0	0	0

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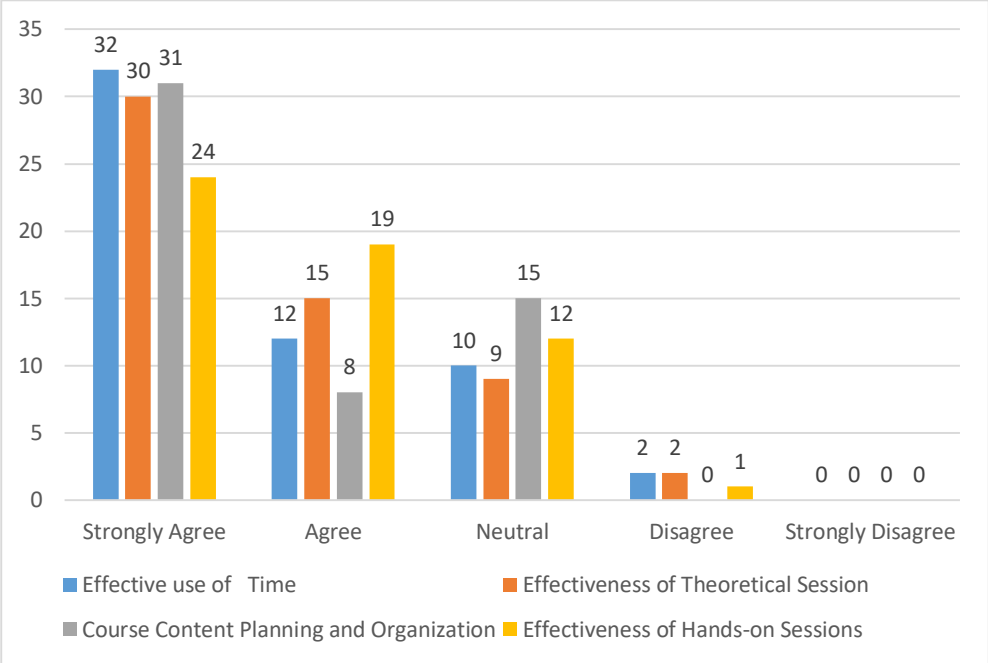

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