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A Report on 2-days Faculty Development Program

Flyer:



- TITLE AND DURATION: "Mobile Network Security & Smart Antenna" March 6-7, 2020
- SPONSORS: Nil
- **ORGANIZERS:** Department of Electronics & Communication Engineering, Poornima College of Engineering, Jaipur.

OBJECTIVES:

The main objective of this workshop was to provide an exposure to the participants to the state Advances in Mobile Network Security & Smart Antenna through interaction with different eminent experts. The main content of Workshop were LTE-Advanced and 5G Security, SATCOM Security, Wi-Fi, Bluetooth and NFC Security, antenna radiation patterns and testing and optimizing antennas.

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Director
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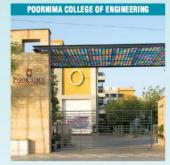
EXPECTED OUTCOMES:

- 1. Gain expertise of Mobile Network Security like LTE and LTE-Advanced and 5G Security etc. that can be used to solve various Complex and Smart Engineering Systems.
- 2. Understand features of Smart Antenna in the context of their concept, various adaptive beam forming techniques.
- 3. Design antenna approaches used for planning, designing, operating, testing and optimizing antennas and antenna systems.

• BROCHURE / POSTER / LEAFLET / FLYER:



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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 neathy 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 Rejasthan with built up area more than 3.5 face square feet

- Affiliated TORI/I, Koffa & approved y ACTE. New Obelhi

- 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, Π , CIV) and two at PG level (CS & VLSI)
- Lev) and evolat Psievel (CSS AVLSI).
 The only institution permitted by RTU to admit RNP10,Gulf students & designated as center of excellence by IBM.
 An excellent institution building its rapport in all sectors of education, research and development.

WORKSHOP OBJECTIVES WITH EXPECTED OUTCOMES

The main objective of this workshop is to provide an exposure to the participants to the state Advances in Mobile Network Security & Smart Antenna through interaction with different eminent experts.

Explosive growth of function rich smart devices coupled with rapid advances Exposive grown of microcontrolisms of convice coupled with approach and its martine theoretical forms and use transformed the functional capabilities and service offering of the conventional wireless networks into ned generation 5G networks. In view of explosive growth in the number of digital cellular subscribers. service providers are becoming increasingly concerned with the limited capacities of their existing networks with security. This concern has led to the ovment of smart antenna systems throughout major metropolital cellular. Such a configuration of aramtically enhances the capacity of a wireless link through a combination of diversity gain, array gain, and interference suppression. Increased capacity translates to higher data rates for a given number of users or more users for a given data rate per user.

Expected Outcomes:

- Gain expertise of Mobile Network Security like LTE and LTE-Advanced and 5G Security etc. that can be used to solve various Complex and
- 2. Understand features of Smart Antenna in the context of their concept. various adaptive beam forming techniques.
- 3. Design antenna approaches used for planning, designing, operating, testing and optimizing antennas and anter

- Overview of Mobile Networks Security & Smart Antenn.
- Concepts behind LTE and LTE-Advanced and 5G Security
- Concepts of the antenna theory and antenna types
- SATCOM Security
- . Concepts behind Wi-Fi, Blueto oth and NFC Security
- Understand the basic antenna terminology and terms
- Discuss concepts behind antenna radiation patterns, antenna pattern shaping, beam width, ratios,
- Discuss concepts of suppression, passive intermodulation, mechanical and electrical down tilt, reflectors, linear antenna types, array antenna, directional antenna and the Yagi.
- Discuss the effect of antenna radiation patterns and the role of various
- Summarize the approaches used for planning, designing, operating, testing and optimizing antennas and antenna systems

REGISTRATION

scanned copy by mail to the coordinator: drg.mathur@poornima.org. Confirmation of eligible candidates will be on FIRSTCOME-FIRST-SERVE basis. The complete registration form should be received to the coordinator till February 29, 2020.

The interested participants are requested to complete the online registration form https://shorturl.avsz119 A registration fee for participants form industries is ₹ 500/- which can be paid through Demand Draft.

IMPORTANT DATES

Deadline for receiving Registration Form 02.03.2020

ACCOMMODATION

Accommodation will be provided to the participants on prior request based on availability in hostel on payment.

ELIGIBILITY

Faculty Members/Ph.D/PG/UG Scholors from AICTE recognized Engineering colleges & Polytechnic colleges.

Dr. S. M. Seth Chairman (Emeritus) Poornima Group Chairman, Poornima Group

Mr. M. K. M. Shah

Mr. Hari Singh Shekhawat Director. (Infrastructure)

Ar. Rahul Singhi Director, Poornima Group

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

Mr. Pankaj Dhemla Vice-Principal Poornima College of Engineering

Dr. Garima Mathur Tarun Mishra

Assistant Professor

ACCOMMODATION & TRANSPORT

Mr. Ashwini Lata Mr. B. P. Yadav Mr. Ajmeet Singh Mr. Anmol Chaturvedi

Dean (Hostel), PG Proctor-In-Chief, PG Transport Officer, PG Proctor, PCE

PROGRAM SCHEDULE:

Program Outline			
Friday, Day 1: 06 March, 2020			
Activity	Duration	Time	
Walcoma Pagantian and Pagistration Opens	30 Min.	8.30 AM-	
Welcome Reception and Registration Opens	SU MIII.	09.00 AM	
Inaugural Function A. Chief Guest: Prof. R. P. Yadav, Professor-HAG, MNIT Jaipur B. Dr. Mahesh Bundele, Director, PCE, Jaipur C. Mr. Pankaj Dhemla, Vice Principal, PCE, Jaipur D. Dr. Garima Mathur, Coordinator, PCE, Jaipur Venue: CG-05, Seminar Hall, PCE, Jaipur	30 Min.	9.00 AM – 9.30 AM	
Expert Talk-1 Topic: Concepts behind LTE and LTE-Advanced and 5G Security Resource Person: Prof. R. P. Yadav, Professor-HAG, MNIT Jaipur Venue: CG-05, Seminar Hall, PCE, Jaipur	60 Min.	9.30 AM – 10.30 AM	
High Tea	30 Min.	10.30 AM – 11.00 AM	

Dr. Mahesh Bundele Director Poornima College of Engineering 131-6, RIICO Institutional Area Stapura, JAIPUR

Expert Talk-2	120 Min.	11.00 AM -
Topic: Compact Planar Antennas and their Applications		1.00 PM
Resource Person: Dr. Sanyog Rawat, Manipal University, Jaipur Venue: CG-05, Seminar Hall, PCE, Jaipur		
	20 14	1.00 PM -
Lunch Break	30 Min.	1.30 PM
Lab Session	90 Min.	1.30 PM-3.00
Topic: CST STUDIO SUITE		PM
Resource Person: Dr. Payal Bansal & Mr. Tarun Mishra Venue: AS-02, Computer Lab, PCE, Jaipur		
Saturday, Day 2: 07 March, 2020		
Activity	Duration	Time
Expert Talk-3		
Topic: Some Recent Results on Design, Operation and Security of	105 Min.	08.45 AM -
IoT and Cyber-physical Systems	105 Min.	10.30 AM
Resource Person: Dr. Arpan Chattopadhya, IIT Delhi Venue: CG-05, Seminar Hall, PCE, Jaipur		
	20 M:	10.30 AM-
High Tea	30 Min.	11.00 AM
Expert Talk-4		
Topic: Mobile & Cyber Security Threats & Their		
Countermeasures		11.00 AM-
Resource Person: Dr. Kota Solomon Raju, Senior Principal	105 Min.	12.45 PM
Scientist, CEERI, Pilani		
Venue: CG-05 Poornima College of Engineering, Jaipur		
	45 Min.	12.45 PM -
Lunch Break		1.30 PM
	30 Min.	1.30 PM –
Valedictory Session		
		2.00 PM

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INAUGURAL SESSION:



"Mobile Network Security & Smart Antenna" March 6-7, 2020



Department of Electronics & Communication Engineering, Poornima College of Engineering, Jaipur

Inaugural Session Q- Sheet

Friday, 6th March, 2020

Venue: CG 05, PCE, Jaipur

S. No	Activity	Duration	Time
1	Reporting and Registration of Delegates	30 Min.	08:30 AM-09:00 AM
2	Welcome of Dignitaries by the anchors	2 Min.	09:00 AM-09:02 AM
3	Request the dignitaries for lightning of lamp E. Chief Guest: Prof. R. P. Yadav, Professor- HAG, MNIT Jaipur F. Dr. Mahesh Bundele, Director, PCE, Jaipur G. Mr. Pankaj Dhemla, Vice Principal, PCE, Jaipur H. Dr. Garima Mathur, Coordinator, PCE, Jaipur	3 Min.	09:02 AM-09:05 AM
4	Felicitation of Chief Guest Prof. R. P. Yadav by Dr. Mahesh M Bundele , Principal & Director, PCE, Jaipur	2 Min.	09:05 AM-09:07 AM
5	Welcome Address by Dr. Garima Mathur , Professor ECE, PCE, Jaipur	5 Min.	09:07 AM-09:12 AM
6	Words of Wisdom by Dr. Mahesh M Bundele , Director, PCE, Jaipur	10 Min.	09:12 AM-09:22 AM
7	Address by Prof. R. P. Yadav, Professor-HAG, MNIT Jaipur	60 Min.	09:22 AM-10:22 AM
8	Vote of Thanks by Dr. Ashok Kajla , Professor, ECE, PCE	3 Min.	10:22 AM-10:25 AM
9	Group Photograph	5 Min.	10:25 AM-10:30 AM
10	High Tea	30 Min.	10:30 AM-11:00 AM

DETAILS OF RESOURCE PERSONS:

- 1. Prof. R. P. Yadav, Professor-HAG, MNIT Jaipur
- 2. Dr. Sanyog Rawat, Manipal University, Jaipur
- 3. Dr. Arpan Chattopadhya, IIT Delhi

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4. Dr. Kota Solomon Raju, Senior Principal Scientist, CEERI, Pilani

• GLIMPSES OF CONDUCTION:

Day 1: 6th **March**: Inaugural session witnessed the presence of Chief Guest Prof. R. P. Yadav, Professor-HAG, MNIT Jaipur, Dr. Mahesh Bundele, Director, PCE, Jaipur,



Mr. Pankaj Dhemla, Vice Principal, PCE, Jaipur, Dr. Garima Mathur, Coordinator, PCE, participants along with the faculty members. The event started with the lamp lighting and felicitation of the Chief Guest Prof. R. P. Yadav by Dr. Mahesh Bundele, Director PCE. Dr. Garima Mathur put light upon workshop and its content.

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In welcome address Dr. Mahesh M. Bundele, director, PCE, motivated the students to adopt the new techniques related Security and smart antenna. Prof. R.P Yadav presented his expert talk on the topic "Concepts behind LTE and LTE-Advanced and 5G Security". Another Talk was delivered by Dr. Kanad Ray, Professor, Amity University on Topic "Biomaterial Inspired Antenna and Development of Humanoid Bot.



After Lunch Hands on Session on Compact Antenna Planner Design with the help of CST studio was conducted by Dr. Payal Bansal and Mr. Tarun Mishra.

• Day 2: 7th March: Dr. Sanyog Rawat, Manipal University Jaipur, delivered his talk on "Compact Planar Antennas and their Applications" at 8.45 am. In his two

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hour long talk he explained about various configurations of antennas and smart antenna applications. Next eminent speaker was Dr. Kota Soloman Raju, Senior Principal Scientist, CEERI Pilani. He expressed his views on Mobile & Cyber Security Threats & their Countermeasures.



After Lunch valedictory session was held Dr. Kota Soloman Raju Chief Guest, Dr. Mahesh M Bundele, Director, PCE, Jaipur, Mr. Pankaj Dhemla, Vice Principal, PCE, Jaipur, Dr. Garima Mathur, Coordinator, PCE, participants and faculty members attended the session.

It started with the felicitation of Chief Guest Dr. Kota Solomon Raju, by Dr. Mahesh M Bundele, Principal & Director, PCE, Jaipur. A brief report on workshop was

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presented by Dr. Garima Mathur. Valuable feedback was taken from the participants. The Certificate of participation was awarded to all the participants who successfully completed the Program.



Dr. Mahesh M Bundele congratulated the participants for taking keen interest in learning the new technologies in his address. He also appreciated the organizing team. Dr. Kota Soloman Raju said that active involvement of most prominent speakers and delegates and their innovative ideas will create a stimulating atmosphere for the further development of multi-disciplinary and convergent research in the area of mobile network security and smart antenna. Dr. Anila Dhingra, Associate Professor, ECE Deptt., PCE proposed the Vote of Thanks. At the end of the session a group photograph was taken with the Dignitaries including participants.

CONTENT DELIVERY / PRACTICAL SESSIONS:



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CERTIFICATION DISTRIBUTION



VALEDICTORY SESSIONS

Q- Sheet Saturday, 7th March, 2020 Venue: CG 05, PCE, Jaipur

S. No	Activity	Duration	Time
1	 Welcome of Dignitaries by the anchors A. Chief Guest: Dr. Kota Solomon Raju, Senior Principal Scientist, CEERI, Pilani B. Dr. Mahesh Bundele, Director, PCE, Jaipur C. Mr. Pankaj Dhemla, Vice Principal, PCE, Jaipur 	3 Min	1:30 PM – 1:33 PM
2	D. Dr. Garima Mathur , Coordinator, PCE, Jaipur Felicitation of Chief Guest Dr. Kota Solomon Raju , by Dr. Mahesh M Bundele, Principal & Director, PCE, Jaipur	3 Min	1:33 PM – 1:36 PM
3	Feedback of Workshop	5 Min	1:36 PM – 1:41 PM
4	Words of Wisdom by Dr. Mahesh M Bundele, Director, PCE	5 Min	1:41 PM – 1:46 PM
5	Address by Chief Guest Dr. Kota Solomon Raju , Senior Principal Scientist, CEERI, Pilani	5 Min	1:46 PM – 1:51 PM
6	Certificate Distribution	10 Min	1:51 PM – 2:01 PM
7	Vote of Thanks by Dr. Anila Dhingra , Associate Professor, ECE, PCE	2 Min	2:01 PM – 2:03 PM
8	Group Photograph	2 Min	2:03 PM – 2:05 PM

Dr. Mahesh Bundele B.E., M.E., Ph.D. Silesura, JAIPUR



LIST OF PARTICIPANTS:

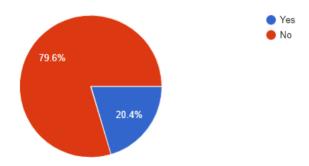
S. No.	Name of Participants	Name of Organization
1	Kirti Vyas	Arya College of Engineering and IT
2	Surendra Singh Dua	Global Institute of Technology
3	Lakshya Rustagi	Poornima College of Engineering
4	Himani Goyal Sharma	Poornima College of Engineering
5	Vikas Verma	Jaipur National University, Jaipur
6	Dr. Sandeep Vyas	JECRC College of Engineering
7	Prachi Mathur	Poornima College of Engineering
8	Dr. Pramod Shrama	Poornima College of Engineering
9	Mohd Asif Khan	Jaipur National University Jaipur
10	Shreya Asthana	Jaipur National University
11	Saloni Jain	Jaipur National University
12	Abhinandan Kumar	Poornima University
13	Dr. Pankaj Dadheech	SKIT, JAIPUR
4.4	Vivek Bhojak	Anand International College of
14		Engineering, Jaipur Anand International College of
15	Vineet Chhabra	Engineering, Jaipur
	Gaiandra Sinah	Anand International College of
16	Gajendra Singh	Engineering, Jaipur
	Rakshita Singhal	Anand International College of
17		Engineering, Jaipur
18	Sukhdarshan Vinayak	Global Institute of Technology
19	Mohammad Idrish Rajja	Global Institute of Technology
20	Ravi Prajapat	Global Institute of Technology
21	Dristi Ranjan	Global Institute of Technology
22	Surendra Kumar Saini	Jaipur National University, Jaipur
23	Sourav Singh	Global Institute of Technology
24	Abhishek Gupta	Poornima College of Engineering

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25	Rahul Gothwal	Jaipur National University
26	Manaal Mishra	Poornima College of Engineering
27	Yogendra Kumar Katiyar	Regional College For Education Research and Technology
28	Bhoopendra Sharma	Suresh Gyan Vihar University Jaipur
29	Monika Mathur	SKIT, JAIPUR
30	Dr. Pramod Sharma	Regional College For Education Research And Technology, Jaipur.
31	Ankur	SKIT, JAIPUR
32	Shreya Mathur	Poornima College of Engineering
33	Arvind Singh	Poornima College of Engineering
34	Aman Agarwal	Poornima College of Engineering
35	Bhavana Addania	Poornima College of Engineering
36	Aman Sharma	Poornima College of Engineering
37	Itee Soni	Poornima College of Engineering
38	Siddhant Mundra	Poornima College of Engineering
39	Srishti Meena	Poornima College of Engineering
40	Arpit Sharma	Poornima College of Engineering
41	Gopesh Yadav	Poornima College of Engineering
42	Ishita Shivran	Poornima College of Engineering
43	Mohit Jangir	Arya College of Engineering and IT
44	Lokesh Chandra Lohar	Arya College of Engineering and IT
45	Mandeep Singh	Arya College of Engineering and IT
46	Lavish Chouhan	Arya College of Engineering and IT
47	Tapan Nahar	Manipal University Jaipur
48	Ishika Jain	Poornima College of Engineering
49	Kunal Singh Ranawat	Poornima College of Engineering
50	Harshit Khandelwal	Poornima College of Engineering

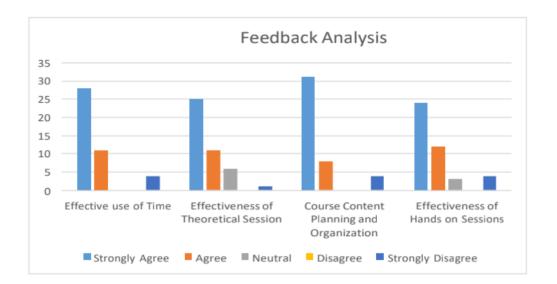
FEEDBACK ANALYSIS:

1) Do you want these types of FDP in Future?



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Poornima College of Engineering- Activity Report – 2019-20



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