

Brief Report : Two-Week Equivalent Blended Faculty Development Programme (FDP)" on "Recent Trends in Communication and Computational Technologies", 12th Sep - 10th Oct 2022.

Archana Yadav <archana@iul.ac.in>
To: ithelpdesk@iul.ac.in, ithd@iul.ac.in
Cc: "Head Elec. & Comm." <headec@iul.ac.in>, shrish <shrish@iul.ac.in>

Thu, Oct 20, 2022 at 3:34 PM

**Brief Report on Two-Week Equivalent Blended
Faculty Development Programme
(FDP)**

on

“

“Recent Trends in Communication and Computational Technologies”

Organized by

Department of Electronics & Communication Engineering

Sep 12 -Oct 10, 2022

Google meet Link for the Program: <https://meet.google.com/zqy-qqjtj-pxf>

Activities:

face-to-face session (72 hours-9 days) equivalent followed by online active engagement of (16+hours-01-day) equivalent.

Convener- Dr. Shrish Bajpai & Ms. Archana Yadav, Assistant Professors, Department of Electronics & Communication Engineering, Integral University, Lucknow.

Co-Convener- Mr. Mohd. Javed Khan & Mr. Saif Ahmad, Assistant Professors, Department of Electronics & Communication Engineering, Integral University, Lucknow.

Preamble:

The Ministry of Education (MoE) has mandated the Teaching Learning Centre (TLC) to organize Faculty Development Programmes (FDPs), Faculty Orientation and Induction Programmes (FIPs), focusing the discipline-specific and interdisciplinary Refresher Courses, conferences, and workshops in both modes offline and online as well. Thus, in view of the above, The Department of Electronics and Communication Engineering, Integral University Lucknow, has organized a Faculty Development Programme in an online mode. The primary goals of this program are (1) enhancing the academic, technological, and intellectual capacities of Faculty members and Research Scholars by providing enough resources and input by the **learned academician & industry experts**, (2) strengthening the professional development of the Faculty members and Professionals who deal directly with students, and (3) providing a platform for learning recent advances in communication and computational technologies with their application in various domains and help them to integrate these ideas into their current courses. This programme also caters to the **United Nations Sustainable Development Goals (SDG) 4 and 9**. This programme will definitely acquaint the participants with the latest developments & trends in the sector at all levels including regional, national and international development.

FDP:

The FDP began with the inaugural session on September 12th, 2022. Prof. S.H. Saeed, Head of the department, ECE, Integral University, Lucknow, welcomed all the Resource Persons, Faculties, Research scholars & Students. Further, he discussed the need for Education 4.0 under the backdrop of Industry 4.0. He also motivated all the participants to proactively adapt to the new ecosystem and New Normal and make the entire teaching-learning process flexible enough to meet the expectations of students in the digital era.

The last day of the FDP witnessed Valedictory Session. Ms. Archana Yadav, Assistant Professor, Department of ECE, Integral University, Lucknow presented a brief report on all the sessions covered during the FDP and thanked all the Speakers & participants for making this FDP a successful program with positive outcomes.

In the end, a few participants shared their experiences of attending FDP sessions and gave their valuable feedback. The entire FDP was well coordinated, with the help of all faculties of the ECE department.

74 participants were registered for the programme and 68 participants have completed all the activities. All the successful participants were awarded certificates of participation electronically.

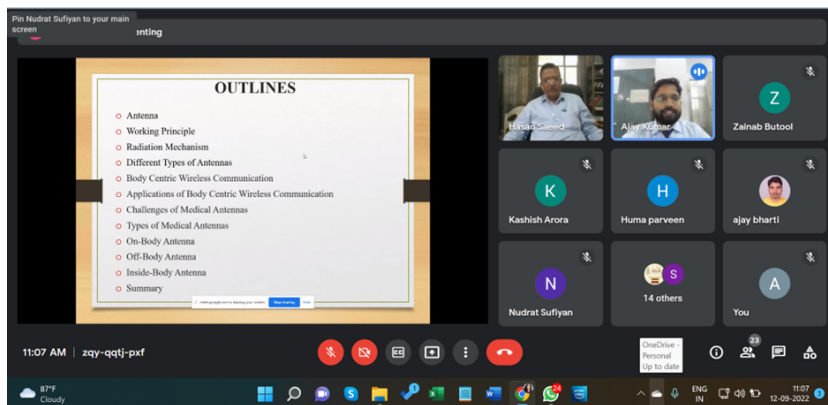
There were face-to-face 72 hours-9 days equivalent, interesting and knowledge imparting online sessions covered during Two-Week Equivalent Blended Faculty Development Programme followed by online active engagement of 16+hours-01-day equivalent. Day-Wise sessions have been summarized below:

Week-1	Resource Person	Topic
Day-1	Dr. Ajay Kumar Gangwar, IMS Ghaziabad	He had given his valuable insights on "Multiband antenna for wireless applications".
Day-2	Dr. Ajay Yadav, C.V. Raman Global	He delivered a talk on "A hybrid of precoding and companding approach for PAPR suppression in OFDM system".

	University, Bhubaneswar, Odisha	
Day-3	Dr. Anurag Updhyay, REC Azamgarh, U.P.	He shared his thoughts on "Recent Advances in PCF for nonlinear and biomedical applications".
Day-4	Mr. Sushant Khare, Data Strategy and Analytics Protiviti B. V., Amsterdam	He delivered his talk on "Process Mining: A Primer".
Day-5	Dr. Vivek Rajpoot, Aditya College of Engineering and Technology, East Godavari District, Andhra Pradesh	He shared his views on "Cognitive Radio: The Future of Wireless Communication Technology".
Week-2		
Day-1	Dr. Indrasen Singh, SR University, Hanumakonda, Telangana, India	He delivered a talk on "5G Technology for IoT Applications".
Day-2	Miss Benazir Usmani, Tata Consultancy Services, Lucknow	She shared her talk on "People Analytics and automation".
Day-3	Miss Sajida Siddiqui, Tata Consultancy Services, Bangalore	She delivered her insights on "Digital Marketing ".
Day-4	Mr. Shagil Akhtar, Data Quality Analyst Thomson Reuters International Services Pvt Ltd, Bangalore	He shared his thoughts on "Data Management".
Day-5	Dr. Prashant Upadhyay Chandigarh University, Mohali Punjab, India	He shared his thoughts on, "Augmented Reality (AR)".
Week-3		
Day-1	Ms.Suchandana Mishra, Assistant Professor, The Oxford College of Engineering, Bangaluru	Health monitoring of rail wheel for Indian Railways using FBG Sensors
Day-2	Mr. Shanawaz Sheikh, Institute of Ireland	He delivered his thoughts on "Fog Computing ".
Day-3	Mohammad Saad, Software Engineer, Oracle Cerner, Bangalore	He delivered his talk on "Database Administration and Automation".
Day-4	Miss Ayushi Dwivedi Partner Operations Manager, New York, United States	She shared her experiences on "Ensuring Operational Success of major TV/Film Studios on YouTube".

Day-5	Mr. Sushant Khare, Data Strategy and Analytics, Protiviti B. V., Amsterdam	He has given his insights on "Cloud Data Analytics".
Week-4		
Day-1	Dr. Tasneem Ahmad Department of Computer Application Integral University, Lucknow	He Has shared his thoughts on "Role of Satellite Images in Strategies for Sustainable Urban Development".
Day-2	Mr. Prabhat Ranjan Sarkar, Department of Electrical Engineering Integral University, Lucknow	He Has shared his thoughts on "Recent trends in Green Technology towards Sustainable Development".
Day-3	Mr. Sudeep Sharma HSBC Canada	He has given his insights on, "Emerging Technologies for Financial Market".
Day-4	Dr Man Mohan Singh, MIET, Meerut, U.P.	He has shared his insights on, "Recent development in III-V heterostructures for high frequency applications".
Day-5	Dr. Yogendra Upadhyay Chandigarh University, Mohali Punjab, India	He delivered his talk on, "Design of Nano Devices & Sensor Applications".
Week-5		
Day1	Ms. Amita Asthana, Assistant Professor, Ajay Kumar Garg Engineering College, Ghaziabad	She has given talk on "Reversible Logic quantum Gates".
Day 2	Dr. Ajay Kumar Gangwar, IMS Ghaziabad	Biomedical Antennas
	Valedictory Session	An event Summary was presented and a vote of thanks!

Glimpse of Events:



Dr. Ajay Kumar Yadav is presenting

PAPR Calculation

- Complex base band OFDM signal with N subcarriers and sub-carrier spacing Δf_c can be written as

$$x(t) = \frac{1}{\sqrt{N}} \sum_{k=0}^{N-1} X_k e^{j2\pi k \Delta f_c t} \quad (6)$$

- Where X_k denotes modulating symbols.
- The OFDM signals with oversampling factor S in complex form can be expressed as

$$x(t) = \frac{1}{\sqrt{NS}} \sum_{k=0}^{NS-1} X_k e^{j2\pi k \Delta f_c t}, \quad 0 \leq n \leq (N.S - 1) \quad (7)$$

- The PAPR of above OFDM signals can be written as

$$PAPR[x(t)] = 10 \log \frac{\max(|x(t)|^2)}{\text{avg}(|x(t)|^2)} \quad (8)$$

11:21 AM | zqy-qqtj-pxf

Ayushi Dwivedi is presenting

Operational Support

- Onboard & thrive**
 - Align tools and techniques to creator strategy
 - Craft unique feature combinations for all types of verticals
 - Platform tutorials and headhunting
- Operational Strategy**
 - Partner health
 - Right Management
 - Feature activation
 - 1M workshops
 - Risk mitigation
 - Partners
 - Community
- Inclusion & Advocacy**
 - Feature requests
 - Feedback for feature enhancement
 - Manual short-term solutions
 - Fuel XFN excellence

9:30 AM | zqy-qqtj-pxf

anurag upadhyay is presenting

Proposed PCF

- The properties can also be varied by varying the number of holes the core of PCF.
- Fig. 2 has been designed and simulated using COMSOL Multiphysics software 5.1 for analysing the its properties by varying the operating wavelength.

Fig. 2: 2D schematic diagram of the proposed PCF core with varying hole diameters and transversely perforated core.

11:09 AM | zqy-qqtj-pxf

suchandana mishra is presenting

Freight Wagons in Railways

Different types of freight wagon are

- Open wagon
- Covered wagon
- Tank wagon
- Flat wagon
- Hopper wagon
- Well wagon
- Brake van

Fig.5. Freight wagon

11:09 AM | zqy-qqtj-pxf

Prof.S.H.Saeed.
 Head, ECE
 Integral University, Lucknow

Thanks & Regards
 Ms.Archana Yadav
 Assistant Professor,
 Electronics & Communication Engineering Department,
 Faculty of Engineering, Integral University, Lucknow.



Sender notified by
Mailtrack