ONLINE FACULTY DEVELOPMENT PROGRAM (FDP)
ON
LI-FI TECHNOLOGIES AND APPLICATIONS
(13th – 22nd April, 2021)

Organized by

E & ICT Academy, National Institute of Technology, Warangal.
in association with

SRM Institute of Science and Technology College of Engineering and Technology Kattankulathur -603 203, Chengalpattu District, Tamil Nadu

Preamble:

"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, GoI. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry, and Andaman & Nicobar Islands. This academy role is to offer faculty development programs in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

About the FDP:

The Faculty Development program will help to disseminate the knowledge in the domain of Light Fidelity (Li-Fi) technologies and applications. It empowers the participants to understand Li-Fi technology that offers a new transmission medium for high-speed communications, significantly increasing the data rate capacity of optical wireless communication, while re-using LED lighting infrastructure as the transmission channel. The participants will be trained with a hands-on approach to have an in-depth insight into the domain of Li-Fi Technologies & future scope. Li-Fi is a visible light communication (VLC) system, where LEDs used for illumination are used for optical wireless data communication at the same time. The widespread future use of LED lamps for illumination creates an opportunity for VLC. These Li-Fi applications are varied as a result of its key features, such as directional lighting, energy efficiency, intrinsic security, high data rate capability, signal blocking by walls, and integrated networking capability. This workshop deals with all aspects of Li-Fi from research to applications, as well as providing an insight into the supply change from device vendors to system providers and end-users.

Major Course Contents:

- **Li-Fi technology – an overview and current research status**
- **Li-Fi - a standardization overview**
- **Modulation Schemes for Li-Fi technologies**
- **VLC for IoT Networks**
- **NOMA for VLC**
- **SLIPT Receiver for Energy Harvesting**
- **Li-Fi technology demonstration**
- **Light Communication Alliance**
- **Optical Camera Communication**
- **Hybrid Li-Fi and Wi-Fi System**
- **Li-Fi Applications:**
  - **Indoor**
  - **Outdoor**

Faculty conducting this program:

The program will be conducted in online mode by the faculty members from NIT Warangal in association with SRM Institute of Science and Technology, Kattankulathur, Chengalpattu district, Tamil Nadu; Academicians in the concerned field from IITs/NITs/IIITs are invited to deliver lectures in the program. Speakers from industries are also expected to deliver as part of the course.

Eligibility:

The program is open to faculty of Engineering Colleges and other allied disciplines in India. Industry personnel working in the concerned /allied discipline can also attend.

Registration Fee Particulars:

The fee is to be paid either in the form of DDs or online transfer using the following details:

Faculty and Research Scholars	Rs. 750/-
Industry Participants	Rs.2250/-

Online Transfer Details
Account Name: **Electronics & ICT Academy NITW**
Account No: **62423775910**
IFSC: **SBIN0020149**
Bank and Branch: **State Bank of India, NIT (REC) Warangal**

How to apply:

Participants are required to fill the online registration form by clicking on the following link: https://forms.gle/CXifvKkkNawF8bjN9

Selection Criteria:

Selection will be done based on a first-come-first-serve basis to a maximum number of 100. Additionally, 10 participants from the industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

Important dates:

Last date (Application & DD)	30.03.2021
Selection List by E- mail	05.04.2021
FDP Duration	13th – 22nd April 2021

About NIT Warangal:

National Institute of Technology, Warangal is the first among 17 RECs setup as a joint venture of the Government of India and the state government. Over the years the college has established itself as a premier Institute imparting technical education of a remarkably high standard leading to the B.Tech degrees in various branches of engineering, M.Tech. and Ph.D. programs in various specializations. All B. Tech and M. Tech program of NIT Warangal are NBA accredited.

About SRM IST:

SRM Institute of Science and Technology (SRMIST) is one of the top ranked universities in India with over 50,000 plus students and 3,000 plus faculty members, offering a wide range of UG, PG, and Doctoral Programs in Engineering, Medicine & Health Sciences, Management, Science & Humanities, Law, and Agricultural Sciences. SRM IST is the first private university in India to launch a nano-satellite, named SRMSAT, into space, on board the PSLV-C18 from Sriharikota on October 12, 2011. The institution has grown up through international alliances and collaborative initiatives to achieve global excellence. Over 200 students are sponsored for 35-foreign Universities like MIT, Carnegie Mellon, UC Davis, Warwick, and Western Australia annually. SRM IST is accredited by NAAC with the highest Grade of 'A++'. QS, the world-renowned international ranking agency, has rated SRMIST as 'Four Star, Institute and QS-IGAUGE has awarded Diamond Rating to SRMIST. SRMIST is classified as Category I University by UGC/MHRD and enjoys 12B status too under the UGC Act.

APPLICATION FORM
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1. Name   :
2. Designation   :
3. Institution   :
4. Email   :
5. Mobile No.   :
6. Payment Details   :

Reference No. :	
Amount :	
Bank :	
Branch :	
Date :	

7. Address for Correspondence:

8. Education Qualification :
9. Subjects taught so for   :
10. No. of refresher course/ workshops attended:
11. Experience in years   :
Teaching: Research: Industry:
12. Do you belong to SC ☐   ST ☐

Declaration:

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Date   **Signature of the Applicant**

SPONSORSHIP CERTIFICATE

Dr. /Mr. /Ms. …………………………….... is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on "**LI-FI TECHNOLOGIES AND APPLICATIONS**", sponsored by Electronics & ICT Academy during 13th – 22nd April, 2021.

Signature of Head of Institution
(with seal)

It is requested to all the delegates, after completion of the application form, all the payment details, a Screenshot of the payment, and scanned application form has to be uploaded in the following online registration link.

Registration Link:

https://forms.gle/CXifvKkkNawF8bjN9

For more details about Electronics & ICT Academy, NIT, Warangal, please visit:
https://nitw.ac.in/eict

For more enquiries please contact:
deepat@srmist.edu.in / fdpeictsrm@gmail.com

Address for correspondence
Dr. T. DEEPA,
Associate Professor,
Department of Electronics and Communication Engineering,
SRM Institute of Science and Technology (SRM IST), Kattankulathur 603203,
Chengalpattu District, Tamil Nadu
Email:fdpeictsrm@gmail.com

Coordinators

1. Dr. T. Deepa, Dept. of ECE,
SRM Institute of Science and Technology,
Kattankulathur-603203,
Chengalpattu District, Tamil Nadu
Email: deepat@srmist.edu.in

2. Dr. V. V. Mani, Dept. of ECE,
NIT Warangal
Email: vvmani@nitw.ac.in