

## National Institute of Technology, Tiruchirappalli

The National Institute of Technology (formerly known as Regional Engineering College) Tiruchirappalli, situated in the heart of Tamil Nadu on the banks of river Cauvery, was started as a joint and co-operative venture of the Government of India and the Government of Tamil Nadu in 1964 with a view to catering to the needs of manpower in technology for the country. The college has been conferred with autonomy in financial and administrative matters to achieve rapid development. Because of this rich experience, this institution was granted Deemed University Status with the approval of the UGC/AICTE and Govt. of India in the year 2003 and renamed as National Institute of Technology. NIT-T was registered under Societies Registration Act XXVII of 1975. National Institute of Technology Trichy is one of the 31 National Institutes of Technology established by the Government of India. The institution offers Under Graduate Courses in ten branches and Post Graduate Courses in twenty-one disciplines of Science, Engineering & Technology besides M.S. (by Research) and Ph.D. in all the departments.

### Objective of the Workshop

The objective of this workshop is to equip the participants with various developments in fiber optics, photonic integrated circuit and devices including speciality optical fiber designs, applications of optical waveguides, optical wireless communication, high-speed modulators, couplers, photo detectors, optical signal processing and optical imaging for compact and ultra-bandwidth optical communication system design. It will also provide platform to discuss the applications of fiber based devices, lasers, vehicle fiber optics and sensors for communication and industrial applications.

### Theme and sub-themes of the Workshop

**Theme: "Optical Fiber Technology and Photonic Integrated Devices for Communication and Industrial Applications"**

The exponential growth of data traffic is a result of unlimited high-speed and ubiquitous broadband wireless access to accommodate the ever-increasing utilization of Internet and multimedia services. In order to transport the increasing amount of data to the end users within an acceptable delay, the current system is experiencing severe congestion of the radio frequency (RF) system and wireless traffic bottleneck. Complementing the existing wireless RF solutions, optical communications is an affordable and attractive high-data rate technology. Optical communication is a dynamically evolving domain that requires continual update of knowledge. The utilization of fiber-optic and photonic devices, semiconductor lasers, LEDs, fiber amplifiers, fiber gratings, fiber lasers, speciality fibers, photo detectors, and fiber optic couplers are rapidly growing as an invaluable tool in realization of optical communication systems. Recent years, the high-index contrast optical waveguides, directional couplers, array waveguides, fiber-waveguide interfaces, electro-optic modulators, and systems-level devices are explored to implement photonic integrated circuits for the development of compact, high-speed and ultra-bandwidth optical communication systems. As advancements in fiber technology, optical fiber based lasers and sensor devices are also used in healthcare, material processing industries, defense and sensing applications.

## ABOUT THE INSTITUTION OF ENGINEERS (INDIA)

The Institution of Engineers (India) or IEI is the largest multidisciplinary professional body that encompasses 15 engineering disciplines and gives engineers a global platform from which to share professional interest. IEI has membership strength of over 0.8 million. Established in 1920, with its headquarters at 8 Gokhale Road, Kolkata - 700020, IEI has served the engineering fraternity for over nine decades. In this period of time it has been inextricably linked with the history of modern-day engineering.

In 1935, IEI was incorporated by Royal Charter and remains the only professional body in India to be accorded this honour. Today, its quest for professional excellence has given it a place of pride in almost every prestigious and relevant organization across the globe. IEI functions among professional engineers, academicians and research workers. It provides a vast array of technical, professional and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating from 124 Centres located across the country. The Institution provides grant-in-aid to its members to conduct research and development on engineering subjects.

IEI conducts Section A & B Examinations in different Engineering disciplines, the successful completion of which is recognized as equivalent to Degree in appropriate field of Engineering of recognized Universities of India by the Ministry of Human Resources Development, Govt. of India. Every year as many as 90000 candidates appear for these exams. For details, please see: [www.ieindia.org](http://www.ieindia.org)

### ABOUT TIRUCHIRAPPALLI LOCAL CENTRE

Tiruchirappalli Sub-Centre of IE(I) was formed in 1973 and was elevated as Local Centre in 1987 after the membership crossed the 500th mark. Presently, the membership is more than 2000. Our Local Center is functioning in its own premises located in BHEL campus on the land leased by BHEL, Tiruchirappalli. The building was declared open by Shri P.S Gupta, CMD, BHEL in August 1990. The institution houses a library having more than 5000 books from various divisions for the benefit of Students and members. Our Centre celebrated its Silver Jubilee during the year 1998 to mark the completion of 25 years of its formation and its meritorious service to the Engineering community. The Local Centre has a very close liaison with leading engineering organizations, professional Institutions and sister professional bodies in the conduct of Technical activities. Tiruchirappalli Local Centre stands Second in our country, among all Local Centres based on the level of activities. We have been regularly receiving additional incentives and appreciation letters of the President and other top people of our institution, for the same. For details, please see: <http://ieitiruchi.org/>

## The Institution of Engineers (India)

**"99 years of relentless journey towards  
Engineering Advancement for Nation Building"**

**All India Workshop  
on  
"Optical Fiber Technology and Photonic  
Integrated Devices for Communication  
and Industrial Applications"**

**August 09-10, 2019, Tiruchirappalli**

**Organised by**



The Institution of Engineers (India)

**Tiruchirappalli Local Centre  
under the aegis of**

**Electronics & Telecommunication  
Engineering Division, IEI  
in association with**



**National Institute of Technology,  
Tiruchirappalli.**

**VENUE**

**National Institute of Technology,  
Tiruchirappalli, 620015.**

As a whole the workshop is planned to cover the following sub-themes in all the lectures and hands on sessions:

- Speciality optical fiber designs
- Applications of optical waveguides
- High-speed modulators, couplers, photo detectors
- Optical signal processing and optical imaging for compact and ultra-bandwidth optical communication system.

### **Registration Fees (Inclusive of GST as applicable):**

All delegates attending the workshop must register by filling the registration form available in the website of IEI-TLC and by paying registration fees as follows:

Category	EB* in Rs.	From 21 July 2019 in Rs.
Industries & Govt. organisations	1500	1700
Academic Institutes – faculty	1300	1500
IEI members	1000	1200
Students	800	1000

EB – Early bird registration up to 20<sup>th</sup> July 2019.

- Registration fee includes workshop kit, Tea & working lunch during sessions. Presentation material will be shared through Google drive for limited period for downloading by participants.
- The registration form along with documents of payment should be submitted to the Hon. Secretary personally or by post / courier on the following address:

**Hon. Secretary,  
The Institution of Engineers (India)  
Tiruchirappalli Local Centre,  
BHEL Main Office Road, BHEL,  
Tiruchirappalli 620014**

### **Payment :**

The payments can be made by

- A crossed Demand Draft / MICR Cheque, drawn in favour of “The Institution of Engineers (India), Tiruchirappalli Local Centre”, payable at Tiruchirappalli.
- Depositing the amount in our **SB A/c No. 10891417887** of The Institution of Engineers (India), Tiruchirappalli. The deposit slip will form the document for payment and will be exchanged with the receipt at the registration counter.  
**Our PAN NO.: AAATT3439Q & TAN No. CALT00825G.**  
Our Bankers: State Bank of India, Heavy Electricals, Kailasapuram, Tiruchirappalli – 620014, **IFS Code : SBIN0001363**, Branch code : Last six characters of IFS code represent branch code, **MICR code : 620002004**

### **Travel & Accommodation:**

The delegates will have to make their own arrangements for travel, boarding & lodging.

### **NATIONAL ADVISORY COMMITTEE**

**Chairman** Dr T M Gunaraja, FIE, President, IEI  
**Co-Chairman** Mr Santoshkumar S Mutha, FIE, Chairman, ETDB, IEI  
**Convener** Dr. D. Sriram Kumar, FIE, Professor, NIT, Tiruchirappalli  
**Members:** Prof (Dr) T S Kamal, FIE, Member, ETDB, IEI  
Mr Subhash Chandra Rudra, FIE, Member, ETDB, IEI  
Dr (Ms) Gunnu Padmavathi, FIE, Member, ETDB, IEI  
Mr T P Raveendran, FIE, Member, ETDB, IEI  
Mr Badduru Brahma Reddy, FIE, Member, ETDB, IEI  
Prof (Dr) G S Mundada, FIE, Member, ETDB, IEI  
Dr Mini Shaji Thomas, Director, NIT, Tiruchirappalli  
Dr N V S Narasimha Sarma, FIE, Director, IIIT, Tiruchirappalli  
Mr. J. Sankaran, FIE, Former Executive Director, BHEL, Vizag  
Dr S Dharmalingam, FIE, Former General Manager, BHEL, Tiruchirappalli  
Dr C Venkatesh, FIE, Principal, Sengunthar Engineering College, Tiruchengode  
Mr. A. Anand, MIE, Hon. Secretary, Tiruchirappalli Local Centre, IEI

### **ORGANISING COMMITTEE**

**Chairman** Dr. N. Kumaresan, Chairman, Tiruchirappalli Local Centre, IEI  
**Organizing Secretary** Dr N Sivakumaran, MIE, Professor, NIT, Tiruchirappalli  
**Members** Mr S Lakshmanan, MIE, Past Hon. Secretary, Tiruchirappalli Local Centre, IEI  
Dr N Gunavathi, ECE, Assistant Professor, NIT, Tiruchirappalli.  
Dr S Deivalakshmi, ECE, Assistant Professor, NIT, Tiruchirappalli

### **TECHNICAL COMMITTEE**

**Chairperson** Dr. D. Sriram Kumar, FIE, Professor, NIT, Tiruchirappalli  
**Members** Dr G Thavasi Raja, ECE, Assistant Professor, NIT, Tiruchirappalli  
Dr R Periyasamy, AMIE, ICE, Assistant Professor, NIT, Tiruchirappalli

### **CONTACTS**

<b>Name of the contact person</b>	<b>Mr. A. Anand (IEI)</b>	<b>Dr. G. Thavasi Raja (NITT)</b>
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<b>Address</b>	Hon. Secretary, Tiruchirappalli Local Centre- IEI, BHEL Main Office Road, BHEL, Tiruchirappalli 620014	Assistant Professor / ECE, NIT, Tiruchirappalli 620015

### **ALL INDIA WORKSHOP**

**on**  
**Optical Fiber Technology and Photonic  
Integrated Devices for  
Communication and Industrial Applications**  
*August 09-10, 2019, Tiruchirappalli*  
**REGISTRATION FORM**

1. Name(In block letters) :  
.....
2. Designation:.....
3. Organization:.....
4. Address for Communication:  
.....  
.....
5. Mobile:.....Land Line:.....
6. E-mail id :.....

Registration category(Tick the boxes as per your category). Delegate from

- Industries & Govt. organizations**  
 **Academic institutes – faculty**  
 **IEI Members**       **Students**

### **Payment Details:**

- DD/Cheque No** .....  
**Dt..... for Rs.....**  
 **Deposit slip for online payment Dt..... for Rs.....**

Beneficiary name: The Institution of Engineers (I), Tiruchirappalli Local Centre.  
Bank Account no.: **10891417887**, IFSC NO: SBIN 0001363, State Bank of India, Heavy Electricals, Kailasapuram, Tiruchirappalli 620014.

### **Signature**

Note: Please send this form along with DD/Cheque to “The Honorary Secretary, The Institution of Engineers (India), Tiruchirappalli Local Centre, BHEL Main Office Road, Tiruchirappalli – 620014” by post. In case of online payment, please send the scanned copy of this form along with deposit slip for online payment by email to **ieitlc1973@gmail.com** with a copy to **<thavasi@nitt.edu>**