

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 the needs of man-power 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 2003 and elevated as National Institute of Technology. NIT-T was registered under Societies Registration Act XXVII of 1975. During 2007 by the act of parliament, NIT-T became an Institution of National Importance. National Institute of Technology Tiruchirappalli 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 thirty-one disciplines of Science, Engineering & Technology besides M.S. (by Research) and Ph.D. in all the departments.

For details, please see: www.nitt.edu

ABOUT EEE DEPARTMENT, NIT TIRUCHIRAPPALLI

The Department of Electrical and Electronics Engineering, NIT, Tiruchirappalli was started in the year 1964. It offers one Under-Graduate programme (B.Tech.), two Post-Graduate programmes (M.Tech. in Power Systems and Power Electronics) and also research programmes (M.S. and Ph.D.) in the various fields of Electrical and Electronics Engineering. After the institute became NIT, the department has grown not only in terms of student and faculty strength, but also in improving the laboratory facilities for the teaching and research purposes. Thus, the department has dedicated and state of the art teaching/research laboratories. The department is recognized for excellence in research (First Department in NIT-T to be accorded QIP status for Ph.D. programme), teaching and service to the profession. The faculty members have strong sense of responsibility to provide the finest possible education for both graduate and undergraduate students. The academic strength of the faculty is reflected by the alumni, many of whom are in the top echelons of industry and academia both in India and abroad.

For details, please see:
<https://www.nitt.edu/home/academics/departments/eee/>

Objective of the Workshop

In recent times, the demand for electrical power is rapidly increasing both for industrial and domestic applications. The dependent on the conventional sources has to be necessarily reduced since such sources are depleting fast and pollute the environment. So, the exploitation of renewable energy sources for the generation of electrical power is being emphasized, either to augment the grid power or for supplying certain isolated loads.

ABOUT THE INSTITUTION OF ENGINEERS (INDIA)

The Institution of Engineers (India) [IEI] is the largest multi-disciplinary professional body of engineers, established in 1920 with its Headquarters located in Kolkata and incorporated under Royal Charter on 9th September, 1935 by the then His Majesty of King George V. The Royal Charter endowed the Institution with the responsibility to promote the general advancement of engineering amongst its members and persons attached to the Institution. After Independence, the Institution is a "Body Corporate" protected under Article 372 of the Constitution of India. The Institution of Engineers (India) is administered by a National Council with the President as its Head. The Institution has been serving the engineering fraternity for over a Century with its national and international presence through 125 Centres spread all over India, 6 Overseas Chapters, 7 Fora and an Organ namely Engineering Staff College of India (ESCI), Hyderabad. The Institution encompasses 15 (fifteen) engineering disciplines with a Corporate membership of over 2 lakhs.

IEI is the first professional body to represent India in several International Bodies, such as the World Mining Congress (WMC), the World Federation of Engineering Organizations (WFEO), the Commonwealth Engineers' Council (CEC), the Federation International du Beton (fib), and the Federation of Engineering Institutions of South and Central Asia (FEISCA). It also has bilateral agreements with a number of professional societies across the globe.

For details, please see: 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 for past 27 years 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 in 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)

"A Century of Service to the Nation"

**All India Workshop
on
"Operation and control of
Solar PV Electric Conversion Systems"
18th – 22nd December, 2023**

Organized by



"The Institution of Engineers (India)

**Tiruchirappalli Local Centre
under the aegis of**

**Electrical Engineering Division, IEI
in association / collaboration with**



**National Institute of Technology,
Tiruchirappalli.**

VENUE

**Department of Electrical and Electronics
Engineering
National Institute of Technology
Tiruchirappalli, Tamil Nadu – 620 015**

In this context, solar energy is the most likely choice for a tropical country like India, since it has abundant in solar energy for at least 10 months in a year and should be effectively made use of.

Solar Photovoltaic (PV) panels give dc power directly from sunlight. Such Solar PV Electric Conversion Systems (SPVECS) are broadly classified into two categories namely (i) stand-alone systems for supplying isolated loads and (ii) grid connected systems for feeding power to the grid. Power electronic converters are essential for supplying the electric power to the grid or isolated loads from such solar PV panels. So, this workshop aims to present the technologies related to SPVECS through comprehensive lectures and laboratory classes. about (30-40) % of the workshop period involves practical sessions. Practical session includes the simulation studies, conducting experiments using solar PV panels, solar PV emulator and certain power electronic controllers. Field visit to the Solar PV power plants are also identified as part of the training program.

The following topics will be covered in the course:

- Operational aspects of solar PV panels.
- Various power electronic configurations employed in SPVECS.
- Closed-loop control of grid-connected and stand-alone .
- Practical exposure in the operation of SPVECS & visit to a 5 MW solar power plant.

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	IEI members in Rs.	Non-IEI members in Rs.
Industries & Govt. organizations	2000	2500
Academic Institutes – faculty	1500	1700
IEI members	1200	1500
Students / Research Scholars	1200	1500

- Registration fee includes workshop kit, Tea & working lunch during sessions. Presentation material will be shared through G drive for limited period for downloading by participants.
- The Registration form in the prescribed format to reach us on or before **09.12.2023**.
- The number of participants will be limited to 60. Hence participants are advised to register early.
- The registration form along with DD/Cheque has to be sent to **“The Honorary Secretary, The Institution of Engineers (India), Tiruchirappalli Local Centre, BHEL Main Office Road, Tiruchirappalli – 620014”** by post/courier.. In case of online payment, please send the scanned copy of the registration form along with deposit slip for online payment by email to **ieitlc2016@gmail.com** with a copy to **407119005@nitt.edu**

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:

Delegates will have to make their own arrangements for travel. Hostel accommodation may be provided to delegates on payment on **first come first served** basis. Requirement may be informed to <407119005@nitt.edu>

ORGANISING COMMITTEE

Patron	Dr. G. Aghila, Director, NIT Tiruchirappalli
Chairman	Er. B. Balasubramanian, FIE, Chairman, Tiruchirappalli Local Centre, IEI
Conveners	Dr. N. Kumaresan, FIE, Professor, EEE, NIT Tiruchirappalli. Dr. S. Dharmalingam, FIE, Council member and member ELDB, IEI
Coordinators	Dr. M Venkata Kirthiga, FIE, Professor, EEE, NIT Tiruchirappalli. Dr. P. Raja, Associate Professor, EEE, NIT Tiruchirappalli.
Members	Dr. S.Titus, Committee member, EL, IEI TLC Dr. P. R. Venkateswaran, Committee member, EL, IEI TLC Dr. V. Sankaranarayanan, Dean (R&C), NIT Tiruchirappalli. Dr. M.P. Selvan, HoD, EEE, NIT Tiruchirappalli. Ms. Suhanya M S, Ph.D. Scholar Mr. Kesari Hanumanthu, Ph.D. Scholar Mr. Mandadhi Venkateswarlu, Ph.D. Scholar Ms. Divya S, Ph.D. Scholar, NIT Tiruchirappalli.
Secretary	Dr Kevin Ark Kumar, MIE, Hon. Secretary, Tiruchirappalli Local Centre, IEI Deputy Manager, BHEL, Tiruchirappalli

CONTACTS

Name of the contact person	Dr Kevin Ark Kumar	Mr. Kesari Hanumanthu (NITT)
Phone	9489202825	9916326446
Email	<Kevin@bhel.in>	<407119005@nitt.edu>
Address	Hon. Secretary, Tiruchirappalli Local Centre- IEI, BHEL Main Office Road, BHEL, Tiruchirappalli 620014	Ph.D. Scholar, EEE, NIT Tiruchirappalli 620015

ALL INDIA WORKSHOP

on

Operation and control of Solar PV Electric Conversion Systems

18th – 22nd December 2023

IEI – TLC & NIT Tiruchirappalli

REGISTRATION FORM

1. Name (In block letters) :

.....

2. Designation:.....

3. Organization:.....

4. Address for Communication:

.....

.....

5. Mobile:.....

6. E-mail id :.....

7. IEI Membership Number :.....

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

☐ Industries & Govt. organizations

☐ Academic institutes – faculty

☐ IEI Members

☐ Students / Research Scholars

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.: 10691417887, IFSC NO: SBIN 0001363, State Bank of India, Heavy Electricals, Kailasapuram, Tiruchirappalli 620014.

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/courier. In case of online payment, please send the scanned copy of this form along with deposit slip for online payment by email to **ieitlc2016@gmail.com** with a copy to **407119005@nitt.edu**