# 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 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 twentyone disciplines of Science, Engineering & Technology besides M.S. (by Research) and Ph.D. in all the departments.

## **Objective of the Workshop**

The objective of the Workshop is to equip the participants with a technical knowhow on the power quality issues pertaining to Distributed Generation in specific due to the penetration of various DG units. This programme will help the participants to gain knowledge on the issues related to the power quality of Distributed Generation, the intricacies in integrating DGs, necessity to investigate the protection devices in the system on DG penetration, current research and critical issues. This programme will also provide the participants with recent advancements in the area of protection of DGs in micro grids.

# Theme and sub-themes of the Workshop

Theme: "Power Quality enhancement in Distributed Generation"

Distributed power generation systems comprising of small generation and storage units are gaining popularity due to increasing energy demand. Some of the focus areas of the programme will be various control challenges such as coordinated control, voltage and transient stability of micro grid, protection issues, energy management and solution of interconnection issues of DG. Also Electric Vehicles (EVs) are gradually gaining importance and it is expected to have more electric vehicles in practice in near future. Many researchers have already started to focus on the operational issues and charging of EVs. Also, effective charging and utility of these EVs need special attention as they would become a significant component of smart distribution systems in near future. This workshop also aims at focused discussions on optimal scheduling of loads including the impact of electric vehicles in smart distribution systems. In addition, the programme will include hands-on sessions related to the above topics which are the niche areas of research today.

#### 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. IEI 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 80000 candidates appear for these exams. 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 500<sup>th</sup> 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 Sliver 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)

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

All India Workshop on "Power Quality Enhancement in Distributed Generation"  $19^{th} - 20^{th}$  July, 2019

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

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

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

- Distributed generation and micro-grids a system approach and technologies
- Distributed Energy Resources and their integration in micro-
- Energy storage and energy management
- Protection and power quality issues related to Distributed Generation

Resource persons from NIT and various other academic institutions, industries and public sector institutions will be invited.

### 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	From 12 <sup>th</sup> July
	Rs.	2019 in Rs.
Industries & Govt. organizations	1500	1700
Academic Institutes – faculty	1300	1500
IEI members	1000	1200
Students	800	1000

- \*EB Early bird registration upto 12th July 2019.
- 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 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. R R Tanwar, FIE, Chairman, ELDB, IEI Convener Dr. M P Selvan, MIE, Associate Professor, NIT,

Tiruchirappalli

Members: Mr. P Rajamani, FIE, Member, ELDB, IEI

Prof. Himansu Bikas Goswami, FIE, Member,

Mr. Mahendra Ratanlal Kothari, FIE, Member,

ELDB, IEI

Mr. R K Sharma, FIE, Member, ELDB, IEI

Prof. (Dr) Sudhir Kumar Calla, FIE, Member,

ELDB, IEI

Mr. Rup Lal Mahajan, FIE, Member, ELDB, IEI

Mr. M Marbaniang, FIE, Member, ELDB, IEI Mr. K K Rout, FIE, Member, ELDB, IEI

Mr. N S Singh, FIE, Member, ELDB, IEI

Mr. N K P Sinha, FIE, Member, ELDB, IEI Mr. N M Rao Nadella, FIE, Member, ELDB, IEI

Mr. K K G Nair, FIE, Member, ELDB, IEI Mr. P R Natarajan, FIE, Member, ELDB, IEI

Mr. Donray Awungshi Shishak, FIE, Member,

ELDB, IEI

Dr. S Dharmalingam, FIE, Member, ELDB, IEI

Mr. J Sankaran, FIE. Former Executive Director.

BHEL, Vizag

Dr. Mini Shaji Thomas, Director, NIT,

Tiruchirappalli

Mr. A Balasubramanian, FIE, Chief General Manager, TNPL, Kagithapuram, Karur.

Dr. D Devaraj, Director, Academics, Kalasingam

University, Krishnankoil.

Mr. A Anand, Hon. Secretary, Tiruchirappalli

Local Centre, IEI

#### **ORGANISING COMMITTEE**

Chairman Dr. N Kumaresan, FIE, Chairman,

Tiruchirappalli Local Centre, IEI

Dr. P Raja, MIE, Associate Professor, NIT, Organizing Tiruchirappalli. Secretary

Members Er. E S Salai Kuberan, AGM, BHEL,

Tiruchirappalli

#### TECHNICAL COMMITTEE

Chairperson Dr. M Venkata Kirthiga, MIE, Associate

Professor, NIT, Tiruchirappalli

Dr. S Moorthi, MIE, Associate Professor, NIT, Members

Tiruchirappalli

Dr. Kevin Ark Kumar, Deputy Manager,

BHEL, Tiruchirappalli

#### CONTACTS

Name of the contact person

Mr. A Anand (IEI) Dr. M P Selvan

(NITT)

Phone 9442236476 Email <a.anand@bhel.in>

9629930432 <selvanmp@nitt.edu>

Address Hon. Secretary. Tiruchirappalli Local

Associate Professor / EEE, Tiruchirappalli 620015

Office Road, BHEL, Tiruchirappalli 620014

Centre- IEI, BHEL Main

#### ALL INDIA WORKSHOP

# **Power Quality Enhancement in Distributed** Generation

 $19^{th} - 20^{th}$  July, 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:	
Re	gistration category(Tick the boxes as per your	
category). Delegate from		
☐ Industries & Govt. organizations		
	Academic institutes – faculty	
	IEI Members Students	
P	ayment Details:	
	DD/Cheque No	
C	t for Rs	
☐ Deposit slip for online payment Dt		
f	or Rs	

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 selvanmp@nitt.edu

Beneficiary name: The Institution of Engineers (I),

0001363. State Bank of India. Heavy Electricals.

10691417887, IFSC NO: SBIN

Tiruchirappalli Local Centre.

Kailasapuram, Tiruchirappalli 620014.

Bank Account no.: