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The Institution of Engineers (India)

“100 years of relentless journey towards Engineering Advancement for Nation Building”

All India Workshop on

“Opportunities for Industry 4.0 applications in Indian Industries”

Organized by

The Institution of Engineers (India) -Tiruchirappalli Local Centre under the aegis of Interdisciplinary Coordination Committee, IEI
in association / collaboration with



www.ieindia.org

National Institute of Technology, Tiruchirappalli.

Date: 3rd – 4th January, 2020 Venue : Siemens Centre of Excellence in Manufacturing, NIT, Tiruchirappalli

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

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.

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/>

Objective of the Workshop

The objective of the Workshop is to provide an exposure to Industry 4.0 concepts which revolutionize the modern manufacturing practices. This concept incorporates interdisciplinary knowledge in artificial intelligence, machine learning, sensors and actuators, cloud computing, cognitive computing and Internet of Things. Through the workshop, the participants will get a holistic information on various disciplines and their contributions, in realizing the concept of Industry 4.0. The recent trends in technological developments that form the building blocks of Industry 4.0 will be covered in detail. The design principles, challenge and the future of employment will also be addressed in the workshop.

NATIONAL ADVISORY COMMITTEE

Chairman Dr. T M Gunaraja, FIE, President, IEI
Co-Chairman Mr. Pradeep Chaturvedi FIE, Chairman, ICC, IEI
Convener Dr. M Duraiselvam, FIE, Professor, NITT.

Members:

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Mr Janak Raj Garg, FIE, Member, ICC, IEI
Dr (Ms) G Padmavathi, FIE, Member, ICC, IEI
Mr B Brahma Reddy, FIE, Member, ICC, IEI
Prof (Dr) Ms G Thilagavathi, FIE, Member, ICC, IEI
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Mr Narendra Singh, FIE, Member, ICC, IEI
Prof (Dr) Suresh R, FIE, Member, ICC, IEI
Mr P R Natarajan, FIE, Member, ICC, IEI
Dr. S Dharmalingam, FIE, Former GM, BHEL, Tiruchirappalli
Dr. Mini Shaji Thomas, Director, NIT, Tiruchirappalli
Dr. L Karunamoorthy, Registrar, Anna University, Chennai
Dr. T Senthilkumar, Dean, Anna University, BIT Campus, Tiruchirappalli
Mr. A Anand, Hon. Secretary, Tiruchirappalli Local Centre, IEI

ORGANISING COMMITTEE

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Mr. S. samidas, Past Chairman, Tiruchirappalli Local Centre, IEI
Organizing Secretaries
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Members Dr. V Anandkrishnan, FIE, Associate Professor, NITT.
Dr. V Sankaranarayanan, Associate Professor, NITT.

CONTACTS

Contact person	Mr. A Anand (IEI)	Dr. M Duraiselvam (NITT)
Phone	(M) 94422 36476	(M) 94860 01131
Email	(E) a.anand@bhel.in	(E) durai@nitt.edu
Address	Hon. Secretary,	Prof. Production Engg.
Tiruchirappalli Local Centre- IEI		NIT Tiruchirappalli - 620 015
BHEL Main Office Road, BHEL Tiruchirappalli – 620 014		

Theme and sub-themes of the Workshop

Theme: “Opportunities for Industry 4.0 applications in Indian Industries”

The fourth industrial revolution (Industry 4.0) primarily operates on cyber physical systems. The rapid changes in the information and communication technologies (ICT) have broken the boundaries between virtual reality and the real world. Industry 4.0 mainly creates a social network where machines can communicate with each other, called the Internet of Things (IoT) and with people, called the Internet of People (IoP). Machines communicate with each other and with the manufacturers to create a cyber-physical production system (CPPS). This helps industries integrate the real world into a virtual one and enable machines to collect live data, analyze them, and even make decisions based upon them. Advanced digital technology already used in manufacturing, would also transform production with Industry 4.0, which makes it possible to gather and analyze data across machines, increase productivity, shift economics, foster industrial growth, and modify the profile of the workforce, ultimately changing the competitiveness of companies and regions. This workshop would throw light on these issues and a knowhow on the nuances of Industry 4.0 in Indian Industries.

Content

- Introduction to Industry 4.0 technology
- Machine Learning and Artificial Intelligence in Indian Industries
- Cyber Physical Systems – An insight
- Cognitive Computing and Internet of Things in Industries

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	Early bird registration (Rs.)	From 16th Dec. 2019 onwards (Rs.)
IEI Members	1000	1200
Non IEI Members	1500	1700
Research Scholars / Faculty	1300	1500
Students	800	1000

*EB – Early bird registration upto 15th December 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.

Scan the QR code / Link for registration

https://docs.google.com/forms/d/e/1FAIpQLSeJhM-ei-H8QuZgEXG0QoosC8AgvLoG0PWJ_jNHnEuCqvecQ/vie_wform



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

Venue : Siemens Centre of Excellence in Manufacturing
National Institute of Technology, Tiruchirappalli
(E) nittcoe@gmail.com
(M) +91 94860 01131
(W) <http://siemenscoe.nitt.edu/>



Location