## **REGISTRATION FORM**

One Day National Workshop on

# **Industry 4.0**

27, July 2019

Organized by

School of Mechanical Engineering and Institute of Industrial & Systems Engineers

Vellore Institute of technology, Vellore -632014

Name:
Category: Industry/Academic/Student
Name of the Institution/Employer:
Address for Correspondence:
Email (Mandatory):
Tel/Mobile number:
Online Payment Details
Registration fee:
Date of Payment :
Bank Name/Branch:
Reference Number:

**Signature of the Participant** 

#### NOTE

Participants can register in the following webpage and payment can be made through online only.

http://info.vit.ac.in/workshop/I4/apply.asp

## **CONVENOR**

Dr. R. Vasudevan, Dean SMEC, VIT

# **Organizing Secretaries**

Dr. K. Jayakrishna, Associate Professor, SMEC, VIT Dr. G. Rajyalakshmi, Associate Professor, SMEC, VIT

## **REGISTRATION FEES**

(Excluding Service Charges)

Participants from Industry: Rs. 500/-

Faculties and Research Scholars: Rs. 400/-

Post/Under graduate Students: Rs. 200/-

## **IMPORTANT DATES**

Last date for registration: 23<sup>th</sup> July 2019

Registration confirmation: 24<sup>th</sup> July 2019

Workshop date: 27<sup>th</sup> July 2019

# ALL CORRESPONDENCE SHOULD BE ADDRESSED TO

Dr. K. Jayakrishna

**Associate Professor** 

Department of Manufacturing Engineering

School of Mechanical Engineering

+91 9894968596

jayakrishna.k@vit.ac.in



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#### **ABOUT VIT**

VIT was founded in 1984 as Vellore Engineering College by the Chancellor Dr. G. Viswanathan. From its humble beginning, the institution has grown exponentially to that of having more than 33,000 students. Students from all the states of India and from more than 50 countries are studying at VIT. Currently, VIT has 4 campuses – Vellore, Chennai, Amravati (AP) and Bhopal (MP). The National Institutional Ranking Framework (NIRF) of the MHRD, Government of India, has identified VIT as the best Private Engineering Institution in India in the year 2016 and 2017. VIT has gone for accreditation by NAAC [India], IET [UK] & ABET[USA] and follows world class academic processes. VIT is the first and only University in India to get 4star rating from QS, the world universities ranking organization. The Industry consortium FICCI, has declared VIT as the "University of the Year" in 2016. Ranked 1<sup>st</sup> among selffinancing institutions in the Atal Ranking of Institutions on Innovation Achievements (ARIIA), 2019.

### **ABOUT THE SCHOOL**

The School of Mechanical Engineering (SMEC) comprises of the Mechanical Engineering and Automotive Engineering disciplines. The school has about 174 faculty members trained in reputed institutes such as the IITs and Indian Institute of Science. The pride of the school lies in the significant research funding received from several government agencies such as DRDO, BRNS, ISRO, UGC, AICTE and DST. Memorandums of understanding (MoUs) have been signed with various universities, CMTI Bangalore, IGCAR, IIT Madras and Anna University. The school has regularly benefited from international linkages facilitated by university-level MoUs with a number of leading foreign Universities. Industrial relationships with L&T, Hindustan Corporation Ltd., DLF, CCL, Indian Oil, Gammon India, TATA Consultancy and Godrej etc., have enhanced teaching and research in the school.

#### **OBJECTIVE OF THE WORKSHOP**

Industry 4.0 is a term often used to refer to the developmental process in the management of manufacturing and chain production. The term also refers to the fourth industrial revolution. The fourth industrial revolution takes the automation of manufacturing processes to a new level by introducing customized and flexible mass production technologies. This means that machines will operate independently, or cooperate with humans in creating a customeroriented production field that constantly works on maintaining itself. The machine rather becomes an independent entity that is able to collect data, analyze it, and advise upon it. This becomes possible by introducing self-optimization, self-cognition, and self-customization into the industry. The manufacturers will be able to communicate with computers rather than operate them. The rapid changes in the information and communication technologies (ICT) have broken the boundaries between virtual reality and the real world. The idea behind Industry 4.0 is to create 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). This way, machines can communicate with each other and with the manufacturers to create what we now call a cyber-physical production system (CPPS). All of 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. Industry 4.0 will truly revolutionize the way manufacturing processes work. However, it's important to weigh the advantages and the challenges that companies may face. This workshop targets at equipping the participants with the fundamentals of Industry 4.0 and its role in the present era of digital transformation.

#### **TOPICS TO BE COVERED**

- Introduction to Industry 4.0
- Digital transformation in manufacturing
- Industrial Internet of Things (IIoT)
- Cyber Physical Systems
- Digital Twins
- AR/VR in Manufacturing
- 3D printing in Industry 4.0
- Data Analytics

#### **RESOURCE PERSONS**

Considering the plethora of findings and developments in the field of manufacturing this workshop is aimed at providing complete knowledge on digital manufacturing.

### Mr. S. Jayakrishna

AGM, Passenger Car Engineering,

Hyundai Motors, Chennai

### Dr. K. Senthilkumaran

Assistant Professor, Department of Mechanical Engineering,

IIITDM – Kanchipuram

### **TARGET AUDIENCE**

Faculty member, research scholar, postgraduate and undergraduate students, participants from industries working in the field of engineering and applied sciences are eligible.

