About VIT

Vellore Institute of Technology (VIT) was founded in 1984 as Vellore Engineering College by the Chancellor Dr. G. Viswanathan. VIT attracts students from all the 29 states of India and more than 50+ countries because of its academic excellence. The credentials of VIT in academics and research, has placed VIT in the 13th position among the engineering institutions and VIT Business School has placed 17th position among the business schools in India by NIRF, Govt. of India Ranking. The world ranking body namely the QS has given 4 STAR rating to VIT, with that VIT becomes the first institution in India to have the 4 STAR rating. In addition to this, the consortium of industries, FICCI has adjudged VIT as the "Excellence in Faculty". VIT has the record of publishing maximum number of SCOPUS Indexed Research Journal papers in 2016, among Indian Universities, overtaking all the premier institutions. VIT has also completed 3 cycles of NAAC accreditation and has been rated as "A" grade institution. In addition, VIT also has obtained for the coveted ABET accreditation by US agency. VIT has introduced many innovations in academic processes, which adds value to every student. FFCS (Fully Flexible Credit System), PBL (Project Based Learning) for better learning, fully digitized academic portals that assists students in equipping themselves for 2020 market place, Hackathons / Makeathons as part of curriculum exercise which kindles the interest and the curiosity of students, which moulds them to be better problem solvers, 8th module in every subject being handled by industry experts, making the students contextualize the concepts they study in the classroom, are a few of the innovations that VIT has introduced.

About SMEC

The School of Mechanical Engineering 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 the Indian Institute of Science. The pride of the school lies in the significant research funding received from several government agencies such a DRDO, BRNS, ISRO, UGC, AICTE, and DST. Memoranda of Understanding (MoUs) with various industries, research, organisations and leading universities have been signed. The school has regularly benefited from international linkages facilitated by University-level MoUs with a number of leading foreign Universities. Industrial relationships with various industries have helped enhance teaching and research in the school.

Resource Person

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High Temperature Research Centre (HTRC)
School of Mechanical Engineering,
Machining Research Group,
University of Birmingham,
Birmingham B15 2TT,
United Kingdom

Important Dates

Registration starts on 4th March 2019

Registration Closes on 25th March 2019

Workshop date : 30th March 2019

Registration Fees

Industry participants	:	Rs. 2000
Research students/Faculty	:	Rs. 1500
Undergraduate students	:	Rs. 1200

Registration fee is to be paid only by Demand Draft taken in favour of VIT, Vellore payable at Vellore.

Convenor

Dr. R. Vasudevan, Dean SMEC, VIT

Organizing Secretaries

Dr. M. Anthony Xavior, Professor, SMEC, VIT
Prof. P. Jeyapandiarajan, SMEC, VIT
Prof. J. Joel, SMEC, VIT

Contact Details

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Mobile No. : +91 79049 06917

VIT®
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

One Day International Workshop on Digital Manufacturing towards Industry 4.0

30th March 2019

Organized by
School of Mechanical Engineering
Vellore Institute of Technology
Vellore - 632 104

Introduction

Digital Manufacturing

Today, automation is all the rage. The day-to-day activities of the businesses are automated and then easily monitored as well as managed from devices like smartphones, laptops, etc. The automation or digital revolution has struck the manufacturing sector by storm. It has streamlined the processes, reduced both time and human efforts, minimized errors and enhanced the overall productivity. From this perspective, digital manufacturing cannot be just considered an advancement in the process of manufacturing but it is rather a transformation. It has transformed almost every single process of manufacturing including research and development, factory procedures, supply chain, marketing, and sales.

Digital Manufacturing can be rightly defined as a cohesive approach to manufacturing. It majorly focuses on manufacturing using machines and computer systems. It involves the use of a number of automated tools to simplify, quicken and optimize the processes. Digital Manufacturing allows companies to analyze the information, environment, raw materials, and other factors before formulating apposite processes. The process is first created virtually, then its feasibility is analyzed and finally, it is implemented physically. Therefore, the process can be modified before its implementation to cater to the constrained environment and other factors. There are various reasons for the companies to embrace or plan to embrace digital manufacturing. Technologies are affecting the daily lives to a great extent in many ways. A major industrial revolution has been witnessed in the past and now, the commencement of the fourth industrial revolution has begun. It is driven by the emergence of digital and physical technologies that come hand in hand.

Industry 4.0

The latest trend of automation and exchange of data used in manufacturing which includes cyber-physical systems, cloud computing, IoT and other internet features is known as the INDUSTRY 4.0 or the Fourth Industrial Revolution. Industry 4.0 was first proposed by the Government of Germany in 2013. It includes a rich amalgamation of traditional manufacturing processes with state-of-the-art technology. This revolution extends and elaborates the impact of digitalization in many ways.

Cloud computing, IoT and cyber-physical systems are the enablers which will influence the world and also initiate in changing the behavior. It is predicted that the IoT ecosystem will aid both the consumers and manufacturers by facilitating enhanced communication, improved automation, better monitoring, self-diagnosis, better analysis, and a progressive future. The machines would have the ability to communicate with one another and the humans; dig valuable insights; and analyze the feasibility of processes, which would lead to seamless processes and spare workers time which can be used for other important tasks. A number of technologies are emerging day by day which tends to affect the human lives. It indicates that a stage has been reached to understand the cusp of the fourth industrial revolution. Therefore, it becomes essential to take out some time to understand the kind of technological shifts that are being experienced. In this direction this one day international workshop on Digital Manufacturing towards Industry 4.0 is being organized in VIT, Vellore.

Topics to be discussed

1) Digital Manufacturing
2) Industry 4.0
3) Cloud Manufacturing
4) Virtual Manufacturing
5) Subtractive Manufacturing

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School of Mechanical Engineering
Vellore Institute of Technology, Vellore - 632 104

REGISTRATION FORM

Name of the Participant : _____

Affiliation: _____

Mailing Address : _____

_____

_____

Phone / Mobile : _____

Email : _____

Registration Fee Details : _____

Amount : _____

Demand Draft / Cheque No : _____

Bank Details : _____

Date : _____

ALL CORRESPONDENCE SHOULD BE ADDRESSED TO

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