MMM-2017 @VNIT

MMM-2017

The **"Mechanical Manufacturing & Monitoring using MATLAB, MMM-2017"** comprises of lectures followed by hands on sessions with MATLAB tools (ANN, GA, SWARM, OPTIMIZATION) for processing and monitoring of various manufacturing processes to enhance the performance. The course content include, application of these tools in machining, forming, metal deposition processes, etc., and online monitoring with sensors, etc.
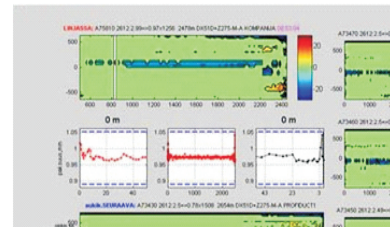

About VNIT

Visvesvaraya National Institute of Technology, Nagpur is one of premier NITs established in 1960. The Institute is a lush green campus spread over an area of 214 acres. The Govt. of India conferred on the Institute, the Deemed to be University status (under UGC Act, 1956 (3 of 1956)) with effect from 26th June, 2002. Subsequently, by the Act of Parliament (NITs Act, 2007 (29 of 2007)), VNIT Nagpur is declared as an Institute of National Importance. Earlier, the Institute was known as Visvesvaraya Regional College of Engineering (VRCE).

About E&ICT Academy, IIITDMJ

The Ministry of Electronics and Information Technology, Govt. of India, has instituted 7 Electronics and ICT Academies, with an aim to provide specialized training to Faculty of Engineering, Polytechnics, etc., in the advanced areas of engineering disciplines. The E & ICT Academy, established at PDPM-IIITDM Jabalpur, envisages to induct activities on training, consultancy work and entrepreneurship programmes that will cover the states of Madhya Pradesh, Maharashtra & Chhattisgarh.
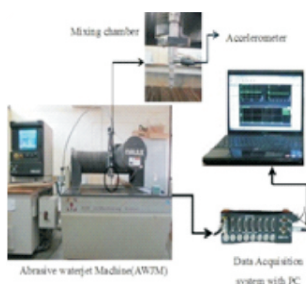
Manufacturing & Monitoring

The increased demand for lighter and hard to cut materials for aerospace, defense and other engineering applications has lead to significant changes in advanced manufacturing processes. Accomplished work on these manufacturing processes established diversified relations between parameters and corresponding responses. The present need in not only to manufacture the component correct, but to control and monitor the manufacturing processes, with sensors and instrumentation, to achieve better desired performance.

Course Fee & Registration Details

For Faculty/Academia/Students: Rs. 1,500/- R&D Labs/Industry : Rs. 3,000/-	Last date of registration: 30th November, 2017. More details can be found at http://www.vnit.ac.in
Registration Fee can be paid in DD in favor of **'Director-VNIT Nagpur'** or NEFT transfer to SBI, VRCE Branch-Nagpur, A/c No. : 10259420288, IFSC Code: SBIN0006702	

Coordinators

Dr. T V K Gupta, VNIT Nagpur	**Dr. Puneet Tandon, IIITDM Jabalpur**

Jointly Organized by

Department of Mechanical Engineering, VNIT Nagpur, South Ambazari Road, Nagpur- 440010, India	**Electronics & ICT Academy,** PDPM IIITDM, Jabalpur - Dumna Airport Road, 482 005, M. P. India

Schedule of MMM-2017

Day	9:00-10:00	10:00-11:00		11:30-13:00		14:00-15:30		15:45-17:30
Day 1	Super Alloys Mfg. (SJ)	Advanced Mfg. Processes (PT)	Tea Break	Machining & Monitoring (TVKG)	Lunch Break	MATLAB for Mfg. (SSC)	Tea Break	Introduction to MATLAB (SSC)
Day 2	Hybrid Manufacturing (PT)	Geometry Based Design & Mfg. (GSK)		Monitoring Processes (TVKG)		MATLAB for Des. & Mfg. (GSK)		CAD & MATLAB (GSK)
Day 3	Deburring Process (SSC)	In-Process Monitoring (TVKG)		DAQ in Deburring (SSC)		DAQ in M/cing (TVKG)		Data Analysis in MATLAB (SSC)
Day 4	App. of Lasers in Mfg.(TVKG)	Laser Cladding as Additive Mfg. (TVKG)		Temp. Monitoring in Cladding (TVKG)		DAQ in Laser Cladding (Demo)		Laser Cladding Analysis (TVKG)
Day 5	Metal Additive Mfg. (TVKG)	Mfg. Data with MATLAB (SSC)		Application of ANN in Mfg. (SSC)		Micro Wave Drilling-I (NKL)		Micro-Wave Drilling Analysis (NKL)
Day 6	Introduction to GA (DMK)	Data Science in Mfg. (DMK)		Application of GA in Mfg. (DMK)		GA with MATLAB (DMK)		Exam/Quiz; & Closure

Resource Persons & Expertise

Name	Organization /Institute	Area of Expertise
Dr. Shital S Chiddarwar (SSC)	VNIT Nagpur	Machining, Matlab
Dr. D Madan Kumar (DMK)	Phenom People, Hyderabad	Optimization, Data Analytics
Dr. G Saravana Kumar (GSK)	IIT Madras	Additive Manufacturing, Matlab
Dr. Shrikant Joshi (SJ)	University of West, Sweden	Laser based Manufacturing
Dr. Nitin K Lautre (NKL)	VNIT Nagpur	Micro Wave Machining
Dr. Puneet Tandon (PT)	PDPM-IIITDM Jabalpur	Hybrid Manufacturing, Digital Mfg.
Dr. T V K Gupta (TVKG)	VNIT Nagpur	Manufacturing, Monitoring

How to apply?

The total No. of seats is limited to 40. Selection will be done on First Come First Serve basis only. Participants should fill the **Registration Form** and send to the Coordinator along with DD/NEFT details. Seats for Research Scholars/PG students are limited. Working professionals from Industry/R&D labs can also apply.

Address for Correspondence

Dr. T V K Gupta, Assistant Professor, Mob: +91-7024505515, Tel: +91-712-2801168, Email: tvkgup@gmail.com

Accommodation Details

Limited accommodation is available at VNIT Guest House to out-station participants on payment basis, (Rs. 1200/- per day on twin sharing basis). Accommodation is available in student hostels, (Rs. 250/- per day).

Reaching VNIT

Nagpur belonging to the state of Maharashtra is in the centre of India. It is well connected by Air/Rail/Road from various parts of the country. VNIT is located about 7 Km from Nagpur Railway Station and about 5 Km from Airport.

REGISTRATION FORM

Mechanical Manufacturing & Monitoring using MATLAB (MMM-2017)
December 11-16, 2017

? Name: _____

? Designation: _____

? Department: _____

? Institution/Organization: _____

? Address: _____

? Email:_____

? Mobile:_____

? Educational Qualification (M.E/M.Tech/PhD): _____

? Areas of Research Interest: _____

Registration fee Details:

DD: No._____

Date: _____

Amount in Rs. _____

Bank Details _____

Signature of applicant

Signature & Seal of Head of the Dept./Organization