MMM-2018 @VNIT

One Week Short Term Training Program (STTP)
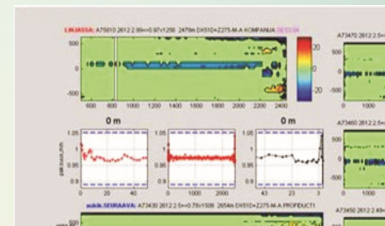On
Mechanical Manufacturing & Monitoring using MATLAB (MMM-2018)
December 06-11, 2018

About MMM-2018

The "Mechanical Manufacturing & Monitoring using MATLAB, MMM-2018" comprises of expert lectures followed by hands on training sessions using MATLAB tools (ANN, GA, OPTIMIZATION) for processing and monitoring of various manufacturing processes. The course contents include application of these tools in machining, forming, metal deposition processes, etc., with a dedicated HANDS ON session for data acquisition during manufacturing is also scheduled.

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).
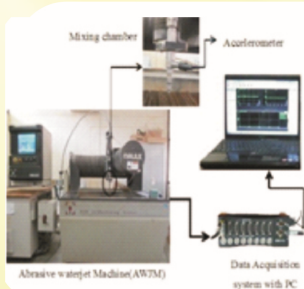
About E&ICT Academy, IIITDMJ

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 advanced (lighter, hard to cut) materials for aerospace, defense and other engineering applications has lead to significant technological advancements in the manufacturing processes. Enough work has been accomplished on these processes and established diversified relations between input parameters and corresponding responses. The need of the hour in not only to manufacture the component accurately, but also to control and monitor the process to achieve better desired performance with sensors and instrumentation.

Course Fee & Registration Details

For Faculty/Academia/Students: Rs. 2,000/- R&D Labs/Industry : Rs. 3,500/ -	Last date of registration: 30th November, 2018. 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

Tentative Schedule of MMM-2018

Day	LECTURE SESSIONS			HANDS ON SESSIONS	
	9:00-10:15	10:15-11:30	11:45-13:00	14:00-15:30	15:45-17:30
Day 1	Advanced Mfg. (TVKG)	Hybrid Manufacturing (PT)	Dieless Manufacturing (PT)	MATLAB for Mfg. (SSC)	Introduction to MATLAB tools (SSC)
Day 2	Deformation Machining (PT)	Geometry Based Design & Mfg. (GSK)	Monitoring with MATLAB (TVKG)	MATLAB for Design & Mfg. (GSK)	CAD & MATLAB (GSK)
Day 3	Rolling Process (RKK)	In-Process Monitoring (TVKG)	DAQ in Deburring (SSC)	Deburring Analysis in MATLAB (SSC)	Sample Characterization (RKK)
Day 4	App. of Lasers in Mfg.(TVKG)	Wear Monitoring in Mfg. (JK)	Temperature in Cladding (TVKG)	DAQ in Wear and Machining (JK)	Laser Cladding Data Analysis-(TVKG)
Day 5	Metal Additive Mfg. (TVKG)	Mfg. Data with MATLAB (SSC)	Application of ANN in Mfg. (SSC)	Micro Wave M/cing (NKL)	MWD with MATLAB (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

(Tea & Snacks between 10:15-11:30 and 11:45-13:00; Lunch Break between 13:00 and 14:00; Tea Break between 15:30 and 15:45)

Resource Persons & Expertise

Name	Institute/Organization	Area of Expertise
Dr. Puneet Tandon	IIITDM Jabalpur	Hybrid Manufacturing
Dr. Shital S Chiddarwar	VNIT Nagpur	Machining, MATLAB
Dr. G Saravana Kumar	IIT Madras	Manufacturing, MATLAB
Dr. D Madan Kumar	Rakuten, Bangalore	Optimization, GA
Dr. Jitendra Katiyar	SRM, Chennai	Tribology & Wear Monitoring
Dr. Nitin K Lautre	VNIT Nagpur	Micro-Wave M/cing, MATLAB
Dr. Rajesh K Khatirkar	VNIT Nagpur	Characterization, Rolling
Dr. T V K Gupta	VNIT Nagpur	Manufacturing, & Monitoring

Glimpse of **MMM-2017**

How to apply?
The total No. of seats is limited to 40. Selection will be done on First Come First Serve basis only. Participants can fill the **Registration Form** and send to the Coordinator along with DD/NEFT details. Research Scholars/Masters students can also apply but seats 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
Lunch and Tea (twice) will be arranged by the coordinators, but dinner has to be managed by the participants. Limited accommodation is available at VNIT Guest House for out-station participants on payment basis, (**Rs. 1200/- per day** on twin sharing basis). Accommodation for students is made available in student hostels, (**Rs. 300/- per day** for individual).

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 8 Km from Airport.

REGISTRATION FORM

Mechanical Manufacturing & Monitoring using MATLAB (MMM-2018)
December 06-11, 2018

- 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