

# e-Newsletter

Volume 1, Issue 2 April 20, 2017

# **Odyssey of the second decade**

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"Inter-IIIT fest"

The Inter IIIT Techno-Cultural Fest. being launched this year, is an amalgam of two inimitable fests of IIITDMJ, namely TARANG ABHIKALPAN. The fest will come as a vast pool of inspiring events enabling participants from all over India to promulgate their talent and explore their passion in the field of culture as well as technology.

More details:

http://www.iiitdmjfest.org/

 $\P$ elebrating the 10th anniversary of the establishment of our institution, Pandit Dwarka Prasad Mishra Indian Institute of Technology Design and Manufacturing, Jabalpur (PDPM IIITDMJ) in its collaboration with Japan under JENESYS programme is committed and dedicated to its brighter and promising future. Established in 2005 by MHRD, Govt. of India as an Institute of National Importance, the institute has been delivering outstanding education and research directions in several domains. Over the past decade, the institute has welcomed new majors and pioneered advancements in both engineering and disciplines. It also created some of the most productive engineers and placement



opportunities. Since the beginning, the institute is thriving a multidisciplinary academic environment to prepare and train manpower of excellence for nurturing and promoting knowledge-based activities and innovations in design, fabrication and manufacturing of products by bringing together a collaborative and mutually stimulating mix of different fields of science and engineering.

# Organizing Conference: CICT'17



The Conference on Information and Communication Technology (CICT) is planned by the four MHRD

funded IIITs (ABV-IIITM Gwalior, IIIT Allahabad, PDPM IIITDM Jabalpur, and IIITDM Kancheepuram). The CICT will be jointly organized by the four IIITs annually on rotation basis.

The CICT-2017 will be hosted by ABV IIITM Gwalior, India during 3-5 November 2017. The CICT-2017 is technically sponsored by the IEEE Bombay Section and technically co-sponsored by the IEEE UP Section, IEEE Madras Section, IEEE MP Subsection, and IEEE UP Section SP/C Joint Chapter. The papers will be submitted to IEEE Xplore®.

More derails:

http://cict2017.org/

# Encouraging STARTUP-INDIA

This initiative aims at fostering entrepreneurship and promoting innovation by creating an ecosystem that is conducive for growth of Start-ups. The objective is that India must become a nation of job creators instead of being a nation of job seekers.

Under this programme, the institute, recognised as a start-up centre had invited proposals for possible funding. Of several project ideas submitted by Jun 26, 2016, ten were selected and funded.

More details:

http://startup.iiitdmj.ac.in/

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# Message for students

#### **DIRECTOR'S MESSAGE**

Dear Alumnus/Alumni,

The alumni office in its current shape is trying its best to connect all the graduated students of the institute across the world. It is really a matter of pleasure to note the individual success you have accrued in such a short span of leaving the portals of this institute.

The institute is now taking several initiatives to uplift the academic and research level so as to compete globally. The 69<sup>th</sup> rank in the NIRF ranking paves a way for achieving new targets and bestows new responsibility to live upto the dreams which you all have for the institute.

I wish to seek your constant support and expect that all of you shall contribute towards the overall development of the institute and its students.

Looking forward in strengthening the bonds with you all.

Best Regards,



Prof. Pramod Kumar Jain

#### MESSAGE FROM FACULTY IN-CHARGE

Dear Proud Alumni.

It is an immense pleasure to release the IInd issue of the first volume of the e-Newsletter. It is always a pride to know the alumni of the institute performing so well in all their respective spheres. While many are pursuing Higher studies, pursuing their career in their respective jobs, some have also taken the leadership to prove themselves as successful entrepreneurs. It is also worthy to note that the institute was ranked 77 in Engineering stream under National Institute Ranking Framework (NIRF) for 2016 and has improved to 69 for the year 2017.

I would like to inform all that the society registration process has already been initiated for recognizing the IIIITDM Alumni association under the MP Society Act. All documents have already been revised and resubmitted to the Registrar of the Socities, Govt. of MP. After due approval of the society formation, PAN registration of the alumni account shall also be done and subsequently request to recognize this account for Income Tax exemption for any financial contribution made by an alumni in India shall also be initiated. In this connection, I am extremely glad to inform that the alumni raised Rs. 98,000/- for the Car Racing Team SUPRA -17.

I would humbly request the alumni that for making any financial contribution to any student/infrastructural activity of the institute, please contact us on alumni@iiitdmj.ac.in. All are requested to avoid transferring funds directly to the accounts of any individual associated with the institute.

With the culmination of the current academic session, I hope that each one of you would in her/his own way shall contribute towards the growth and development of your alma mater.

Once again, I wish each one of you my sincere wishes.

REMAIN CONNECTED & STAY BLESSED.

Best Regards.



Dr. Biswajeet Mukherjee

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### Recent Events







The Inter IIIT Techno-Cultural Fest, being launched this year, is an amalgam of two of inimitable fests of IIITDMJ, namely TARANG & ABHIKALPAN. The fest will come as a vast pool of awe inspiring events enabling participants from all over India to promulgate their talent and explore their passion in the field of culture

as well as technology. The fest hosted both cultural and technical events during 23rd - 26th March.



Finite Element Method and Applications. Coordinated by Prof. Vijay Kumar Gupta and Prof. Aparajita Ojha, this course provided exposure to the fundamentals and applications of Finite Element Methods using a simulation and analysis package of industry standard. Held during May 11-16, 2017, the course aimed to enrich the participants' understanding of how the method works in obtaining approximate solutions to bounda-

ry value problems. Starting with the basic principles of FEM, the course covered finite element construction, convergence, and different types of finite elements suitable for a variety of applications. Some specific applications were also covered to help participants gain hands-on experience of working on FEM package ANSYS.



Workshop On Network Simulation & Tools (NS3 and Omnet++). The course was conducted during February 4-9, 2017 under coordination of Dr. Vinod Kumar Jain and Dr. Matadeen Bansal with the goal to provide knowledge on basic fundamentals of network simulators NS3 and Omnet++, generation of different network scenarios in these network simulators, understanding and implementation of existing as well as

new modules and protocols of different networks like Wireless Sensor Network, Vehicular Ad-hoc Network, Internet of Things using frameworks like Veins, Castalia etc. in NS3 and Omnet++. The course also covered the simulation environment of these simulators and performance analysis of these protocols. etc.

## Welcome to CICT 2017



The Conference on Information and Communication Technology (CICT) is planned by the four MHRD funded IIITs (ABV-IIITM Gwalior, IIIT Allahabad, PDPM IIITDM Jabalpur, and IIITDM Kancheepuram) with an aim to provide a forum for researchers, industry professionals, and academicians to present and exchange their ideas in latest technological advancements and innovations in the field of ICT. The CICT will be jointly organized by the four IIITs annually on rotation basis.

It will be hosted by ABV IIITM Gwalior, India during 3-5 November 2017. The conference will feature technical paper sessions, poster sessions, Ph.D. symposium, tutorials, and workshops. Eminent researchers from around the world will be invited to deliver keynote speeches and invited talks on recent trends and advances in ICT.

The CICT-2017 is technically sponsored by the IEEE Bombay Section and technically co-sponsored by the IEEE UP Section, IEEE Madras Section, IEEE MP Subsection, and IEEE UP Section SP/C Joint Chapter. IEEE conference record number is 41774. The accepted and presented papers will be submitted to IEEE Xplore®, which is indexed by major databases.

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# Welcome to our new faculties...

#### Sachin Kumar



Dr. Sachin Kumar is an Assistant Professor in the Department of Mechanical Engineering. Prior to joining, he was working as a Research Fellow at National University of Singapore. He received his PhD in computational mechanics from Mechanical and Industrial Engineering Department at Indian Institute of Technology Roorkee.

His research interests are broadly related to numerical aspects of solid, fracture and damage mechanics. In numerical aspects, he is mainly interested to proposed new numerical techniques or modification in the already existing techniques for the modeling of fracture and damage mechanics problems.

#### Samrat Rao

Samrat Rao has received his PhD form the Department of Mechanical Engineering, Indian Institute of Science. He did his Master of Engineering and Bachelor of Engineering from IIEST Shibpur, W.B. and NMAMIT Karnataka respectively.

His academic interests include Geophysical Fluid Dynamics, Atmospheric Clouds and Cooling of Nuclear Fuel Reactors. During his spare time his main indulgence is books.



# Guest Lectures by Alumnus in Design Discipline

#### Neeraj Jasmathiya



Formerly Stanford Bio-design Fellow at AIIMS, Mr. Neeraj Jasmathiya is currently consultant to Stanford-AIIIMS Bio-design Initiative. He taught an EMF course, viz., 'Medical Equipment Design' under Design discipline. Mr. Neeraj Jasmathiya graduated from the Master of Design Course of the institute in 2011.

# Visiting Faculties

#### Electronics & Communication Engineering

- VLSI Design for ECE by Prof. Masahiro Fujita (Professor, University of Tokyo)
- Wireless Communication for ECE by Prof. Kiyomichi ARAKI(Emeritus Professor, Tokyo Institute of Technology)
- Nanophotonics and its application for ECE by Prof. Kiyoshi Asakawa, (Emeritus Professor, Tsukuba University)

#### Computer Science & Engineering

- Principle of Artificial Intelligence and its Application Akinori Ito (Professor, Tohoku University)
- Cyber Security Kouichi Sakurai (Professor, Kyushu University)
- Curves and Surfaces for Computer Graphics Yasushi Yamaguchi(Professor, (University of Tokyo)
- Software Quality ASSURANCE Hironori Washizaki (Assoc. Professor, Waseda University)
- Advanced Computer Architecture Hisa Ando (retired from Fujitsu)
- Dependable Computing Takashi Nanya (Emeritus Professor, University of Tokyo / Tokyo Institute of Technology)

#### Design Discipline

- Neeraj Jasmathia
- Rajeev Prakash Khare Publication Designer, associated with Women's era magazine.
- Prof. Sumer Singh IIT Delhi
- Prof. Sugandh Malhotra IIT Bombay
- Dr. D Uday Kumar IIT Guwahati
- Prof. Phani Tetali IIT Bombay

## Faculty Achievements

- 1. IMTEX 2017 Second Consolation Prize for the Research Work on EDM of Non-Conductive Materials. [Prof. Puneet Tandon]
- 2. Member, International Programme Committee, 6th International Conference on Research into Design (ICoRD' 17), January 9-11, 2017, Indian Institute of Technology Guwahati, India. [Prof. Puneet Tandon]
- 3. Guest Editor, Design for All, (Special Issue on: "Design from Waste"), February 2016, Vol. 11, No. 2, 2016. [Prof. Puneet Tandon]
- 4. Won best paper award in ICETiME 2016 held at IFHE University Hyderabad. [Sunil Agrawal]
- 5. Awarded IEI Young Engineers in the field of Electronics and Telecommunication Engineering by The Institution of Engineers (India) on the occasion of Thirty-Second National Convention of Electronics and Telecommunication Engineers at Andhra Pradesh State Centre. Vijayawada. October 24-25. 2016. [Dr. Biswaieet Mukheriee]
- **6.** Awarded Young Faculty Research Fellowship grant under Visvesvaraya PhD Scheme for Electronics & IT for year 2015-16. [**Dr. Ayan Seal**]
- 7. Member, The National Advisory Committee of International Conference on Evolutions in Manufacturing: Technologies and Business Strategies for Global Competitiveness, organized by Institution of Engineers (India), Jharkhand in association with Department of Production Engineering, Birla Institute of Technology, Mesra, Ranchi, November 12 13, 2016. [Prof. Puneet Tandon]
- 8. Research paper of Mohammad Taufik and Prashant K. Jain on "Accurate and Adaptive FDM Post Finishing Approach" has been awarded as the "Best Technical Paper" in in 6th International Conference on Additive Manufacturing Technologies AM 2016, October 7-8, 2016, Bengaluru, India. [Dr. Prashant Kumar Jain]
- **9.** Awarded Indian National Science Academy (INSA) International Travel Grant, to attend the URSI, Asia-Pacific Radio Science Conference (AP-RASC) at Seoul, South Korea, 2016. [Dr. Biswajeet Mukherjee]
- 10. Selected for showcasing of rural technologies at 2<sup>nd</sup> IISF December 7-11,2016 in Unnat Bharat Abhiyan at IIIT Delhi under the technology "Head Gear" and "Locomotion Device". [Dr. Prabir Mukhopadhyay, Dr. Sujoy Mukherjee, and Mr. Shekhar Chatterjee]
- **11.** Research paper, "Product design concept evaluation using rough sets and VIKOR method", Advanced Engineering Informatics, 2016, Vol. 30, pp. 16–25 doi:10.1016/j.aei.2015.11.005, One of the most downloaded articles from Advanced Engineering Informatics in the last 90 days, http://www.journals.elsevier.com/advanced-engineering-informatics/most-downloaded-articles. [Prof. Puneet Tandon]
- 12. IMTEX 2016 First Prize for the Research Work on Dieless Manufacturing. [Prof. Puneet Tandon]
- 13. Member, Research Degree Committee (RDC) of Mechanical Engineering , Dr. APJ Abdul Kalam Technical University (AKTU), (Formerly UP Technical University), Lucknow, India. [Prof. Puneet Tandon]

# Research Projects

S.	Title	Duration	PI & Co-PIs	Sponsoring Agency	Status
No.					
1	Implementation of Sigma Delta Modula- tor Using Nanowire Electrically Doped Hetero Material Tunnel Field Effect Tran- sistor (TFET) for Ultra Low Power Appli- cations	2016-19	Pl: Dr. Dheeraj Sharma	Science and Engineering Research Board (SERB)/DST	On going
2	Design and Analysis of Multiplierless Multirate Filterbank with Low Complexity	2016-19	PI: Dr. A. Kumar	Science and Engineering Research Board (SERB)/DST	On going
3	High Sensitive MEMS Piezoresistive Microcantilever Sensor	2016-19	PI: Dr. M.Z. Ansari	Science and Engineering Research Board (SERB)/DST	On going
4	Fractal Based Dielectric Resonator Antennas for compact wideband and High Gain Applications	2015-18	PI: Dr. B. Mukher- jee	Science and Engineering Research Board (SERB)/DST	On going
5	Special Manpower Development Pro- gramme for Chips to System Design	2015-16	PI: Prof. P.N. Kon- dekar Co-PI(s): Dr. Jawar Singh and Dr. Dheeraj Shar- ma	CEERI, Pilani (Dept. of Elec- tronics and Information Technology)	On going
6	Design and Development of RF Energy Harvesting Circuits For Low-Power elec- tronics Devices	2015-19	PI: Dr. Jawar Singh	Science and Engineering Research Board (SERB)/DST	On going
7	Electronics and Spintronics properties of Halogen Functionalized Graphene Nano- ribbons	2015-18	Pl: Dr. Neeraj Ku- mar Jaiswal	Science and Engineering Research Board (SERB)/DST	On going
8	Electrodeposition of Magnetic film in the presence of external magnetic field	2015-18	Pl: Dr. Amaresh Chandra Mishra	Science and Engineering Research Board (SERB)/DST	On going
9	Development of Additive-Subtractive Integrated RP System for Improved Part Quality	2014-17	Pl: Dr. P.K.Jain Co-Pl: Prof. Puneet Tandon	Science and Engineering Research Board (SERB)	On going
10	Time -Varying Harmonics and Interhar- monics Estimation In Real Time for Online Applications	2013-16	PI: Dr. Sachin Ku- mar Jain	Science and Engineering Research Board (SERB)	On going
11	Process Development for the Fabrica- tion of Free Form Component Through Incremental Sheet forming	2012-15 (Extended till December 31, 2017)	PI: Prof. Puneet Tandon, Co-PI: Dr. P.K. Jain	BRNS, Department of Atomic Energy, Government of India	On going
12	Investigation of Compact and Miniatur- ized Dielectric Resonator Antenna load- ed with Metamaterial based structures for wireless applications	2016-18	PI: Dr. B. Mukher- jee	MPCST, Govt. of MP	On going

## Students' Achievements

- U.Sneha Lekha secured Second position at DigiBeti: India's Best presentation contest 2017
- Yash Raizada and Yasaswini Ravuri participated in global innovation challenge "Go Green in the City '16" hosted by Schneider Electric at Le Hive (Schneider's HQ in Paris, France)
- Miss IIa Sharma and Nikhil Agrawal have been awarded the certificate of Travel Bursary Award for Best papers in IEEE international conference on signal and information processing (ICONSIP 2016)
- ◆ Sweden-India Nobel Memorial Quiz, 2016 (Qualifying Round, IIM-I) won by Nishant Chowdhri, Ameya Datar, Saad Ahmed
- Mr Siddhartha Kumar (ME) has been granted MEXT Scholarship in Tokyo Institute of Technology, Japan.

## IIITDMJ Racing Team: Registered for SUPRA 2017



IIITDMJ-RACING is IIITDMJ's SUPRA SAEINDIA racing team which came into inception in the year 2013 and has well over 20 members filled with passion and the ability to make a mark in the SUPRA SAEINDIA competition. Through this venture, the students have implemented the process of engineering design, manufacturing and business strategy. It is a matter of great pride for the institute as IIITDMJ-Racing Team has qualified for the virtual round of SUPRA-17.

Mr. Anilesh Sharma & Mr. Anirban Mitra contributed Rs. 33,000 & Rs. 65,000 respectively for IIITDMJ Racing Team .

# Selective Alumni Achievements

Name	Roll Number	Batch	Achievements
Pushpraj Singh	2005065	2004-2009	Indian Police Service, NTPC Ltd., Govt. of India.
Vikas Khanna	2009138	2009-2013	Assistant Commandant, ITBP.
Anshul Rathore	2012034	2012-2016	Current: Self Driving Car Engineer, Uurmi Solutions; Past: Research Assistant, Robotics Research Center at IIIT Hyderabad.
Adarsh Abhinav	2009003	2009-2013	Placed at Mitsubishi Heavy Industries India Private Limited - New Delhi.
Om Prakash Yadav	2007031	2007-2011	Project Associate at National Wind Tunnel Facility, IIT Kanpur, 2011-2013; Masters from IIT ROORKEE in 2015; Project Engineer, Aerospace Department, IIT Kanpur 2015-2016.
Pranav Shukla	2012283	2012-2016	Project Associate (Ad-hoc), IIT Kanpur, India; Currently Visiting Research Scholar, Virginia Tech, USA.
Shubham Tiwari	2008141	2008-2012	Senior Engineer, Avantha power and infrastructure, Scientist-B at Bureau of Indian standards.
Ujjawal Kumar	2009133	2009-2013	Placed at Indian Railways.
Vishakha Singh	2011176	2011-2015	Masters from IIT(ISM) Dhanbad in 2017.
Pankaj Gupta	2009073	2009-2013	Tredence Analytics, Mu-Sigma Analytics.



# IIITDMJ Alumni Association

ALUMNI BODY					
Faculty-in-charge	Dr. Biswajeet Mukherjee				
Office of Alumni Affairs	Ms. Tulika Ruth Nelson Mr. Anil Kumar				
Executive committee	Sameer Saurabh – President  Dr. Apoorv Vasal - Vice President  Somesh Singh – Secretary  Suteerth Tripathi - Treasurer cum Joint Secretary				
Executive members	Dr. Mohd. Rajik Khan Ankit Shukla Dr. Rajlaxmi Chouhan				

#### **Student Coordinators**



**Apoorv Bhadoriya** 



Vishal Bhojak



Neeraj Gupta apoorv.mitsgwl@gmail.com vishalbhojak107 @gmail.com neerajgupta592@gmail.com

Student Senate Representative



Navinder Singh Bhamra nav7.singh@gmail.com

For any financial contribution towards Students/Infrastructure activities, please contact us at: alumni@iiitdmj.ac.in



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