

**IIITDM
Kancheepuram
presents**

MARG DARSHAN

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Inauguration of MaDeIT Facility

The pre-incubation facility of MaDeIT Innovation Foundation (IIITDM's Technology Business Incubator) was inaugurated on 5 November 2016 by Prof. M.S.Ananth, Chairman, Board of Governors of IIITDM Kancheepuram, in the presence of other members. About 10 seats for pre-incubation and 8 seats for incubation are now ready for occupation. Phase-I of the main facility is currently being furnished and will be ready for occupation by February 2017. IIITDM BoG also helped MaDeIT access the services of Ogilvy & Mather, a global brand consultant, to finalize the MaDeIT Logo. MaDeIT also selected the first cohort of three incubatees out of five applicants. The companies are expected to start the incubation work by February 2017. MaDeIT has also started engaging the representatives of the Entrepreneurship Development Institute to collaboratively target potential startups and MSMEs in Tamilnadu.





IIITDM Kancheepuram organised a one-day workshop on Smart Manufacturing at IIITDM Kancheepuram on December 3, 2016. The objective of this workshop is to highlight the opportunities smart manufacturing brings to small and medium scale manufacturers in terms of improvements in performance. The workshop began



with opening remarks by the Director, Prof. R. Gnanamoorthy, and a curtain-raiser by Dr K. Senthilkumaran on introduction to Smart Manufacturing/Industry 4.0. Following that, resource persons from reputed universities and industry delivered interactive talks on areas relevant to smart manufacturing such as big data analytics, machine to machine communications, additive manufacturing, and Industrial Internet of Thing (IIOT). The final session of this workshop brainstormed on how to get involved, and contribute to advancing the smart manufacturing. Dr V. Sudhir Varadarajan summarised the workshop activities and suggested further action plans and possible future collaborations with the participants of the workshop.



IConDM 2016

The fourth edition of the International Conference on Design and Manufacturing (IConDM), the iconic conference of the Indian Institute of Information Technology, Design and Manufacturing (IIITDM), Kancheepuram, was conducted during December 16-17, 2016. IConDM is emerging as a premier forum for exchange of ideas and knowledge related to Design and Manufacturing that spans across the disciplines of Computer Science, Electronics and Mechanical Engineering. This edition of the conference was technically co-sponsored by IEEE Madras section. Several keynote addresses and invited talks from eminent academicians from Japan and India featured in the conference. Of the received submissions, each paper was reviewed by a set of three reviewers chosen from a pool of 100 qualified reviewers. As a result of these efforts, the technical program finally featured 82 papers from different geographical regions, viz China, Italy, Japan, Singapore, UK, and India. There were three parallel sessions covering four tracks: Design Thinking, Computer stream, Electronics stream, and Mechanical stream. There was also a lightning talk session. The conference was inaugurated by Prof. K Anantha Padmanabhan, a pioneer in technical education in India, and the closing ceremony was presided by the Chairman of IConDM 2016 and the Director of IIITDM, Prof. R. Gnanamoorthy.



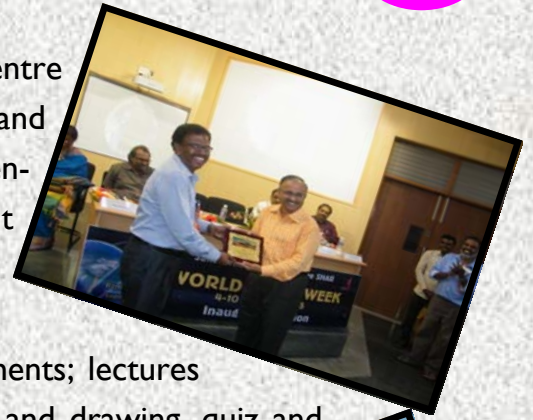
World Space Week 2016 at IIITDM Kancheepuram

IIITDM Kancheepuram along with the Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota, organized a two-day event on 9th and 10th October 2016 as part of the World Space Week 2016 to generate awareness of the benefits of space exploration. The event attracted a large contingent of students and teachers from several academic institutions in Chennai and Kancheepuram.

The event included an exhibition of ISRO models and achievements; lectures by leading scientists; space awareness walk by school children; and drawing, quiz and elocution competitions. Students actively participated in the events and not only took home prizes and souvenirs from SDSC, but also memorable experiences and greater awareness of the potential benefits of space technologies.

One of the key highlights of the event was the space design challenge for students from IIITDM and other engineering colleges. It covered three important aspects of space exploration, namely, reusable rockets, space debris reduction and lunar lander. SDSC scientists who evaluated the concept designs were impressed with the quality of thinking exhibited by the students.

The collaborative effort of student and faculty volunteers from IIITDM and SDSC scientists made the event memorable for all the participants and set a new benchmark for events in IIITDM.



Design for Manufacturing and Assembly (DFMA) Workshop

On 15 December 2016 IIITDM Kancheepuram organised a workshop on campus regarding Design for Manufacturing and Assembly (DFMA). The workshop was set up in association with d-ESPAT Pvt. Ltd. A total of fifteen participants, from SRM University, DRDO, NAL Bengaluru, and our own institute attended it. Design for Manufacture and Assembly (DFMA) techniques enable the designer to create products that are economical to manufacture and assemble. They interlink quality, cost, function, and time to market, thus enabling participants to design the product more effectively. The DFMA process consumes much less time than the conventional design processes do. The one-day workshop focused on the basic theoretical concepts of DFMA and also included a training session on the Boothroyd Dewhurst DFMA software. Faculty members from premier academic institutions and business establishments delivered lectures and provided hands-on training. The program ended with an analysis of case studies in addition to the concepts discussed. The program was beneficial to UG and PG students of Engineering Design, Mechanical, CAD/CAM, Production, as well as several faculty members and research scholars. All the participants were provided with certificates and reading material.

IIITDM Kancheepuram IEEE Student Branch Inauguration

IIITDM Kancheepuram, inaugurated its IEEE Student Branch on 27 October 2016. The highlight of the event was the presence of Mr. H. R. Mohan (Vice Chair of IEEE Madras Section Student Activities, IEEE Madras Section Chair, IEEE PCS, Madras) as the Chief Guest, and Mr.P.Sakthivel (Treasurer and Secretary of IEEE Madras Section) and Mr.S. Koteeswaran (Member of Executive Committee) as the Guests of Honour. Dr. Selvaraj, IIITDM IEEE Student Branch Counsellor, gave an informal introduction to the gathering before beginning the event. Dr.S.R.Pandian, Dean (Planning) of IIITDM delivered the welcome address. The addresses of the guests were invaluable to the expansion of knowledge of IEEE students at IIITDM. The talks covered a myriad of topics pertaining to IEEE that a newly formed Student Branch should be expert in. The hour long session was very informative and helpful. The guests were given mementos following the session, as tokens of gratitude and appreciation. The event concluded with the vote of the thanks delivered by Ms. Sangamalika, the Chair of IIITDM IEEE Student Branch. The event was a huge success and a good start to the journey that the Student Branch began that day.



Stellar Student Achievements

PhD Scholar Mr. Abdul Majeed's paper on Analysis and Design of Low Power Nonlinear PFD architectures for a Fast Locking PLL with Paper ID - 248 was awarded "The Best Paper for Industry Ready Technology Award" at the 2016 IEEE Students Technology Symposium (TechSym 2016), held at IIT Kharagpur, from 29 September to 1 October 2016.

Activities of Teaching Learning Centre



TLC staff conducted a *Hands-on Workshop on Raspberry Pi* for IIITDM students on September 13, 2016. Three visiting student interns from Nagaoka University of Technology, Japan, also presented their work on autonomous robotics at the workshop.

TLC Coordinator Dr S R Pandian participated in Stanford University's Extreme Affordability Design Program and visited the University's Product Realization Lab and Mechatronics Lab on October 10, 2016. He also visited the University of California-Berkeley Blum Center for Developing Economies and held discussions on collaborations on October 12, 2016. Further, he visited the Citris Invention Lab in the University. Dr S R Pandian presented a research paper "Educational Outdoor Mobile Robot for Trash Pickup" at the 2016 IEEE Global Humanitarian Technology Conference in Seattle, WA, USA, on October 13-16, 2016. Mr Kiran Pattanashetty and Mr Kamal Balaji, TLC project engineers, co-authored the paper.

Dr Pandian also presented a poster on the activities of the TLC at a session of the IEEE Special Interest Group on Humanitarian Technology (SIGHT).

EDM2012 student Mr K Giridharan presented his paper "Design of a Compact and Economical Remotely Operated Vehicle for Aquatic Monitoring" at the IEEE TENCON International Conference on Smart Technologies for a Smart Nation in Singapore, during November 22-25, 2016.

2014 EDS student Mr Chetan Soni and Dr S R Pandian co-authored the paper. Student interns Ms. V. S. Harini and Ms. M. Dharani presented their paper "Robots for the Bottom of the Pyramid: Mobile Robot Racing over the Internet" at the IEEE TENCON International Conference on Smart Technologies for a Smart Nation in Singapore, during November 22-25, 2016. TLC Engineer Mr Kamal Balaji and Dr S R Pandian co-authored the paper.

30 students and three faculty of the PACR Polytechnic College, Rajapalalyam did a 5-day internship at the TLC during November - December, 2016, and built four desktop CNC mills for their academic use with the help of the TLC staff. Dr S R Pandian gave a talk on *Smart Product Design* in the Design Innovation Centre at Indian Institute of Information Technology, Sri City, during December 5-6, 2016.

Professor Hisayuki Suematsu and Dr Taichi Sugai of the Extreme Energy-Density Research Institute, Nagaoka University of Technology, Japan, visited the TLC on December 7, 2016 and held discussions with the staff and students working in the centre.

Dr S R Pandian gave a presentation on *Innovations in Robotics and Beyond* to a workshop jointly organized by the IIITDM Design Innovation Centre and Entrepreneurship Development Institute, Chennai, on December 15, 2016. The participants had a tour of the TLC facilities and technologies developed.



Activities of Vidhai

Vidhai was inaugurated by the Director of IIITDM Kancheepuram, Professor Gnanamoorthy, on the institute's campus on 22 September 2016. "Vidhai", meaning a "seed" in Tamil, has been involved in various non-profit activities. Student-volunteers have taught interactive digital-sessions of subjects in the neighbouring government schools on topics such as basic sciences, and soft skills that are crucial for multidimensional development of a student. There has been contribution to the development of the infrastructure in the same schools with the help of the funds raised by the tender-hearted student community under the supervision of the socially conscious Director and Deputy Registrar (Admin) of IIITDM Kancheepuam. With the existing strength of 76 registered-volunteers and many others indirectly contributing to it, Vidhai is envisaging an increase in the multifarious support from the students, the staff and faculty associated with the IIITDM to organise further activities for the welfare of the under-privileged under the esteemed guidance of administrative officials.



1st Inter IIIT Sports Meet

The first edition of the Inter-IIIT Sports Meet (CFTI & PPP mode IIITs) was held in IIITDM Kancheepuram on 12-15 December 2016. The sports meet is an annual event that is to be hosted by the IIITs on a rotational basis. The first sports meet at IIITDM Kancheepuram was a four-day event structured on a League cum Knockout basis. 12 IIITs participated in various Men's and Women's categories. In total 315 male students and 42 female students participated in the Inter IIIT Sports Meet. The Overall Championships, for both the Men's and Women's categories, were won by IIITDM Kancheepuram. The Runner up place was secured by IIIT Jabalar. All event regulations were modeled on Indian Sports Federation guidelines.





INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN AND MANUFACTURING, KANCHEEPURAM

Melakottaiyur
Off Vandaloor-
Kelambakkam Road
Chennai-600127, India
Tel: +91 44 2747 6300
Fax: +91 44 2747 6301
Website: www.iiitdm.ac.in
Email: office@iiitdm.ac.in



Editors:

Dr Divya A
Dr Prem Kumar K

Faculty Contributors:

Dr Shunmugam.R.Pandian
Dr Sudhir Varadarajan
Dr Selvaraj M D
Dr Jayabal K
Dr Senthil Kumaran K

Student Contributors:

Nithilavathi T. Arasu
Arya E