

A New Director leads IIITDM Kancheepuram



Prof. Banshidhar Majhi received his Bachelor's degree in Physics with honours from G.M. College under Sambalpur University in 1984. He completed Master of Computer Applications in 1988 and subsequently M.Tech. in Computer Science and Engineering in 1998 both from REC Rourkela, Sambalpur University. He obtained his Ph.D. in Computer Science and Engineering in 2003 from the same institute.

Prof. Majhi has a wealth of teaching and research experience spanning over 25 years. He served in various administrative positions at NIT Rourkela such as Head of the Department, Professor incharge of Examinations, Dean - Academics, and Chairman - Automation Cell. He has been instrumental in setting up two centers of research, namely, Centre of Data Analytics and Decision Sciences, and Centre of Computer Vision and Pattern Recognition at NIT Rourkela. He has also served as a member to various technical committees like NBA and AICTE. He was a visiting faculty at King Khalid University, Saudi Arabia and AI-Hussein Bin Talal University, Ma'an, Jordan. Recently, Prof. Majhi was felicitated with a prestigious "Samanta Chandra Sekhar Award – 2016" under Engineering and Technology category by the Government of Odisha for his outstanding research contributions.

With over two decades of teaching and research experience, Prof. Majhi has conducted a number of conferences, workshops, short-term courses and, published book chapters related to his area of research. He received J C Bose Gold medal for best engineering paper in 2001 from IETE, India and Gold medal from Odisha engineering congress in 2002. In his long teaching career, Prof. Majhi has taught many courses such as soft computing, digital signal processing, image processing, computer vision, operating systems and algorithms. His numerous research outputs pertain to image restoration, video compression, biometrics, soft computing, optical character recognition, image super-resolution, biomedical image processing, wireless sensor and actor networks. Under his guidance, 15 scholars have completed their Ph.D. in Computer Engineering. He has also guided numerous students in their M.Tech. and M.S. program.

Prof. Banshidhar Majhi has been deputed by MHRD from his parent institute NIT Rourkela to IIITDM Kancheepuram recognizing his expertise in Computer Science and Information Technology. He is entrusted with the task of taking IIITDM Kancheepuram to greater heights which has evolved as a design centric institute in Information Technology, Design and Manufacturing.

Launch of new M.Tech Program - Smart Manufacturing

Since its inception, our institute has continued to take slow yet firm steps towards molding its students in preparation to tackle today's growing industry. Another such step is the Smart Manufacturing master's program that was introduced this year. A course of two years, it is structured to provide a 21st century workforce for "smart" factories and highly skilled engineers to manage the increasing complexity industry consisting of interconnected and intelligent, automated manufacturing systems.

Future manufacturing engineers need to have basic knowledge on IT, which is exactly what this course aims on doing. It incorporates information technology into concepts of manufacturing, the first course of its kind. It's curriculum is novel, having courses ranging from Internet of Things and Big Data Analytics to Machine to Machine communication and Manufacturing systems. Thus, the program gives equal importance towards basic science and engineering courses, unit manufacturing processes, assembly, electronic manufacturing, virtual manufacturing, and information systems technology. A student graduating from this course can serve in smart factories of the automobile, defense and any consumer good industry. Further to improve the choice based credit system, more electives are offered by the institute to specialize in data, sensor, network or system integration side of the Smart Manufacturing.

The new M.Tech. Program was inaugurated by the then Director, Prof. R. Gnanamoorthy. The industrial view point was shared by Mr. Arun S Shetty, Senior Assistant VicePresident, from TII, Murugappa Group. Dr. V. Sudhir, Dean of Design, Innovation and Incubation welcomed the audience, and Dr. K. Senthilkumaran, Division Leader of Smart Manufacturing delivered the vote of thanks.











International Yoga Day Celebrations

United Nations General Assembly has declared June 21st as the International Day of Yoga. Yoga is a rich and ancient Indian tradition and it is an invaluable gift of our forefathers that embodies unity of mind and body, thought and action and harmony between man and nature. Supported by a whopping 170 nations vote across the globe, the event is celebrated in around 192 countries on a grand scale. IIITDM celebrated the international yoga day in the campus, and several students, faculty and staff participated enthusiastically.

A one hour Interactive Yoga Demonstration was conducted on June 21, 2017 for the benefit of the students, staff and faculty members of the institute. The session was coordinated by the institute physical training instructor and demonstrations of various asanas ranging from padmasana, bhujangasana, sarvangasana, etc. were given by practitioners from Saradha Yoga Academy. For each asana that was demonstrated an interactive description was given and the audience also joined in performing the asana under the guidance of the instructor. The session was well attended with over 70 members and was well received.

The demonstration session was followed up by a session wherein the protocol video circulated by the Ministry was played for the benefit of the audience. A Handbook of Basic Asanas was prepared by the Institute for circulation amongst the institute fraternity.













Events by Teaching Learning Centre

- TLC staff conducted a Hands-on Workshop on Arduino for local school students and teachers on April 1, 2017 as part of Arduino Day, which is a world-wide celebration of the open source microcontroller Arduino. Dr. S R Pandian, Coordinator, gave an introductory talk, and Mr. Kamal Balaji, Senior Project Engineer, was the lead resource person, supported by other TLC staff.
- Prof. MRG Apparao, formerly faculty at IIM Ahmadabad, and former Director of Thiagarajar School
 of Management, Madurai, gave a talk on "IOT for Precision Agriculture: A Farmer's Perspective" on
 April 7, 2017. The talk was co-organized by IEEE Students Branch.
- Captain Suresh Kumar Thakur, Deputy Director General (Naval Projects), previously with Naval Research Board, DRDO, visited TLC on April 11, 2017. He appreciated the innovative design and development of practical education modules to promote create creating manufacturing education in the country.
- Teachers from SRV Matriculation School, Tiruchi, visited the TLC on April 20, 2017. They
 appreciated the community and schools outreach activities of the TLC.
- Several students from local and regional engineering colleges did summer internship projects in TLC. The students were from Indian Institute of Information Technology, Sri City; Sri Krishna College of Engineering & Technology, Coimbatore; SRM University, Chennai; and Rajalakshmi College of Engineering, Chennai.
- Dr. C Ramesh, Head, MPCS, and Dr. R Sudha, Scientist-F, Indira Gandhi Centre for Atomic Research, Kalpakkam, visited the TLC on June 1, 2017.
- Coordinator Dr. S R Pandian delivered a talk on IOT and Smart Product Design at the STTP, organized in IIITDM, for college and university engineering teachers on July 11, 2017. The participants also visited the TLC facilities.
- Two students of Indian Institute of Information Technology-Sri City, Ms. Monica Palla and Ms. Surekha Ananthapally carried out their summer internship in TLC with financial support of TrakltNow, USA on smart mosquito trap design using image processing techniques.



PhD Defences

- Mr. Abdul Majeed K. K., under the guidance of Dr. Binsu J. Kailath, defended his PhD thesis titled "Composite PFD based Low Power Low Noise Fast Locking PLL with Dynamic Loop Bandwidth" on May 8, 2017
- Mr. Phani Kumar K. V., under the guidance of Dr. S. S. Karthikeyan, defended his PhD thesis titled "Design, Analysis, and Implementation of RF/Microwave Planar Passive Deives for Wireless Applications" on July 13, 2017
- Mr. Senthil Kumar R., under the guidance of Dr. S. Jayavel, defended his PhD thesis titled "Numerical and Experimental Study of Heat Transfer Enhancement in Electronic Systems" on July 13, 2017
- Ms. Sandhya T. P., under the guidance of Dr. M. A. Shalu and Dr. S. Vijayakumar, defended her PhD thesis titled "Graph Coloring and its Variants" on July 27, 2017.

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



EDITORIAL TEAM

Dr. Jayabal K Suyog Garg

P Anakha Suresh

FACULTY CONTRIBUTORS

Dr. Sudhir Varadarajan

Dr. Prem Kumar K

Dr. Sivaselvan B

Dr. Priyanka kokil

Dr. Shanmugam R Pandian

Dr. K Senthilkumaran

STUDENT CONTRIBUTOR

Karambor C. Sriya