

# Yanthrika

*A Newsletter by the Department of ME*

Vol: 3 Issue: 1

Year: 2017-18



**SHRI MADHWA VADIRAJA  
INSTITUTE OF TECHNOLOGY AND MANAGEMENT**

(A Unit of Shri Sode Vadiraja Mutt Education Trust®, Udupi)

Approved by AICTE, New Delhi; Recognized by Govt. of Karnataka and Affiliated to VTU, Belagavi  
**Vishwothama Nagar, Bantakal - 574115, Udupi District, Karnataka.**

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## **A BRIEF OVERVIEW OF THE DEPARTMENT**

The Department of Mechanical Engineering started in the year 2010 with an intake of 60 students, was increased to 120 in the academic year 2011-12. The department offers an undergraduate program in Mechanical Engineering; also the department has been recognized as a Research Centre by VTU to offer PhD Degree. Mechanical Engineering is the discipline that applies the principles of engineering physics and material science for the design, analysis, manufacturing and maintenance of mechanical systems. It is the branch of engineering that pertains to the design, production and operation of machinery.

Academic activities in the department are designed with student-centric learning approach in such a way that intellectual curiosity and creativity of students is simulated and spirit of innovation is instilled in them. The department provides state of art infrastructure and well equipped laboratories in various disciplines of mechanical engineering.

The department has well qualified, competent and committed team of faculty members who have their specializations in different areas of mechanical engineering. The dedicated and experienced faculty guide the students with the projects and industry assignments. Some of the projects are funded by Government agencies like VGST, KSCST and have been selected for exhibitions. The effort of faculty, well experienced supporting staff, enabling learning environment and availability of modern facilities are reflected in the excellent performance of the students.

The department has established a R & D centre for "Technical Up gradation of Cashew Processing Equipments" in association with Karnataka Council for Technology Upgradation Bengaluru. The R & D centre provides a platform to the students to take up real time projects and interact with industries. The department also has a "Creativity Centre" in order to trigger the innovation and enhance the creative skills of the students. The department is always engaged in motivating students to take up challenging research and development activities for the welfare of society.

### **VISION**

To become a center of excellence in Mechanical Engineering and contribute to technological and socio-economic developments.

### **MISSION**

1. To develop state of the art facilities related to Mechanical Engineering.
2. To build a team of qualified and motivated faculty members.
3. To impart quality engineering education with ethics to students.
4. To promote collaboration with industries/institutes for academic, research and consultancy catering to societal needs.

# Yanthrika

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## **Program Educational Objectives**

The graduates of Mechanical Engineering Program should have:

- 1)The fundamental knowledge of Science and Engineering to work in diverse fields of mechanical engineering domain.
- 2)The technical and analytical skills to design and develop mechanical engineering components and systems.
- 3)The professional competency to function effectively in multi-disciplinary environment.
- 4)The ethical values and inculcate integrity for social and environmental developments.

## **DEPARTMENTAL ACTIVITIES DURING THE CURRENT ACADEMIC YEAR**

The department of Mechanical Engineering organized a 1 day INDUSTRIAL VISIT for registered 38 students of IV Semester Mechanical Engineering students on 26 May 2017 at Lamina Foundries Limited, Nitte, Karkala, Udupi.

Shri Madhwa Vadiraja Institute of Technology and Management Bantakal successfully organized a three day workshop on 'CNC PROGRAMMING & HANDS-ON SESSIONS ON CNC MACHINING CENTERS' for Polytechnic students of Udupi and Dakshina Kannada districts during 31st July -02nd August 2017.

The Workshop was organized by Mechanical Engineering Department and 43 students of various polytechnic colleges took advantage of it. The Departmental teaching and non-teaching staff were the resource persons in this workshop and taught the students the basics of CNC program writing and also gave hands-on demonstration on R&D center vertical milling center and CNC Lathe. Students were found enthusiastic throughout the sessions in learning various concepts and operating high end VMC and CNC lathes.

The Principal of the institute, Prof. Dr. Thirumaleshwar Bhat and the Head of the department, Prof. Dr. Sudarshan Rao congratulated the students who participated in the workshop and made this event successful.



The institute successfully organized a one-day seminar on DESIGN FOR MANUFACTURE AND ASSEMBLY for engineering students of Udupi-Mangalore districts on 16th September 2017 in association with ISTE student chapter.

The Seminar was organized by Mechanical Engineering Department and 131 students of various Engineering college students took part in it.

# Yanthrika

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Mr Gaurav K G, final year mechanical engineering student welcomed the gathering. Dr. Sudarshan Rao, Professor and Head of the Department of Mechanical Engineering presented the introductory session on DFMA, Mr. Anand Hegde, research scholar, MIT Manipal, faculty members of the institute Mr. Adithya Kudva, Mr Sudhir and Mr. Kiran Bhat presented the session on various aspects of DFMA.

The Principal of the institute Prof. Dr. Thirumaleshwar Bhat congratulated the students who participated in the workshop and made the event successful. The program was coordinated by Mr. Pavan Kumar and Mr Vijendra Bhat and event was organized by Mr. Narayan Nayak.



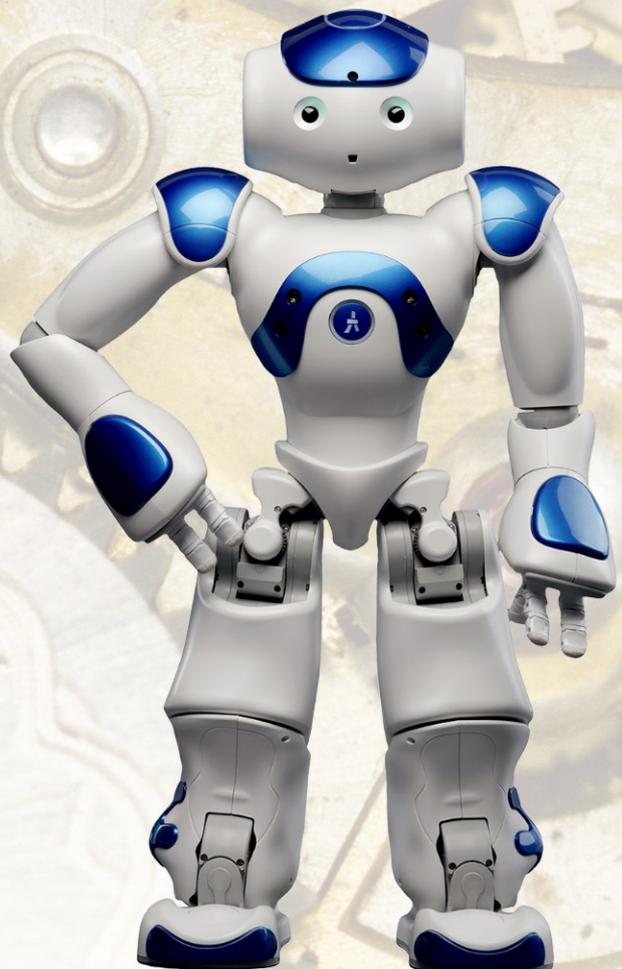
The Department of Mechanical Engineering organized a CAREER GUIDANCE PROGRAM by Mr. Manjunath S, Asst. Professor, SMVITM for V Semester Mechanical Engineering students to orient the students regarding present career opportunities on 18 August 2017.

The Department of Mechanical Engineering organised a CATIA V5 TRAINING PROGRAM (Course Duration : 72 hours) by Mr. Prashanth, MSM Consultancy Services, Bengaluru for VII & V Sem Mechanical Engineering Students from 4 September -10 November 2017.

The Department of Mechanical Engineering organized a 2 day Workshop on CNC PROGRAMMING & HANDS - ON SESSION ON CNC MACHINING CENTERS for registered 32 students of Govt. Polytechnic, Udupi on 11 and 12 September 2017.

The Department of Mechanical Engineering Organized FIRST ROUND ENGINEERIA 2017- AN INTERNATIONAL QUIZ COMPETITION organized by CADD CENTRE, UDUPI for Mechanical Engineering Students on 7 September 2017 in the college premises and nearly 300 students from the department are participated in the Quiz competition.

The Department of Mechanical Engineering organized a 2 day Workshop on "Basics of Energy Conversion and Heat Transfer in Mechanical Engineering" for registered 47 students of Govt. Polytechnic, Udupi from 12-13 October 2017.



# Yanthrika

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## FACULTY PUBLICATIONS

Dr Sudarshan Rao K, and Mr N. Kiran Bhat, Professor and Assistant Professor, Department of Mechanical Engineering have published a paper titled "Optimization Of Control Parameters For Mechanical And Abrasive Wear Behavior Of Graphite Filled Carbon Epoxy Composite Using Grey Relational Analysis", i-manager's Journal on Material Science, Vol. 4| No. 4| 2017, 31-41.

Mr. Narayan Nayak, Mr. Ganesh R Kalagi and Mr. V Vijendra Bhat, Assistant Professor, Department of Mechanical Engineering have published a paper titled "Electrical Insulating Properties of Natural Fibre Reinforced Polymer Composites; A Review", in International Journal of Engineering Research & Technology (IJERTV), ISSN: 2278-0181, Volume 6, Issue 08, August 2017, pp.166-171.

Mr. Raja Yateesh Yadav, Assistant Professor, Department of Mechanical Engineering has published a paper titled "Thermal Analysis of a Large Shaft in Housing for Shrink Fitting Used in SPM Tools- A FEM Approach", in MAT Journals- Journal of Industrial Mechanics, Volume 2, Issue 3, pp.1-10.

Mr. Lingaraj K Ritti, Mr. Pavan Kumar and Mr. Ganesh R Kalagi, Assistant Professor, Department of Mechanical Engineering have published a paper titled "Modal Analysis of a Small Wind Turbine Blade Made of Different Material", in International Journal of Analytical, Experimental and Finite Element Analysis, p-ISSN: 2394-5133, Volume 4, Issue 3, September 2017, pp.45-47.

## FACULTY ACHIEVEMENTS

ISTE India Certificate was awarded to Dr. Sudarshan Rao K, Professor, Department of Mechanical Engineering in the gratitude for outstanding contribution to Mechanical Engineering students TEAM TACHYONS which is participated in Hybrid Vehicle Challenge 2017 organized by Imperial Society of Innovative Engineers (ISIE) on 16-19 February 2017 at Buddh International Circuit, Greater Noida, New Delhi.

NPTEL Certificate of appreciation was awarded to Dr. Sudarshan Rao K, Professor, Department of Mechanical Engineering in recognition of his role as mentor for the NPTEL Online Certification course "Manufacturing of Composites".

NPTEL Online Certificate was awarded to Mr. Lingaraj K Ritti, Assistant Professor, Department of

Mechanical Engineering in October 2017 for successful completion of the course of "Introduction to Research".

NPTEL Online Certificate was awarded to Mr. Sudhir, Assistant Professor, Department of Mechanical Engineering in October 2017 for successful completion of the course of "Total Quality Management-1".

NPTEL Online Certificate was awarded to Mr. Aditya Kudva S, Assistant Professor, Department of Mechanical Engineering in October 2017 for successful completion of the course of "Total Quality Management-1".

NPTEL Online Certificate was awarded to Mr. Karthik V, Assistant Professor, Department of

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Mechanical Engineering in October 2017 for successful completion of the course of "Developing Soft Skills and Personality".

ICAR- NATIONAL ACADEMY OF AGRICULTURAL RESEARCH MANAGEMENT, TELANGANA has

issued a certificate to Mr. Praveen J Kalamdani, Assistant Professor, Department of Mechanical Engineering in November 2017 for successful completion of the course of "Massive Open Online Course (MOOC) on Teaching Management".

## **WORKSHOPS / FDPs ATTENDED BY FACULTY**

Dr. Sudarshan Rao K, Professor & Head, Department of Mechanical Engineering, Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal attended a Five day Faculty Development Program on "Research Methodology" and "Enhancing Teaching Methodology" held at Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal from 11-15 December 2017.

He also attended a two- day workshop on "Internationalization of Higher Education: Role of Research, Innovation, Quality Assurance and Grants" organized in collaboration with the University of Italy, Milan as a part of Bologna - In Project held at Manipal Academy of Higher Education (MAHE), Manipal from 20- 21 December 2017.

Mr. Madhukara Nayak, Assistant Professor, Department of Mechanical Engineering attended a Five day Hands on Workshop on "Advanced instrumentation" organized by Department of Instrumentation and Control Engineering held at Manipal Institute of Technology, Manipal on 12- 16 June 2017.

Mr. Karthik V, Assistant Professor, Department of Mechanical Engineering has attended a Two day 3rd National Conference (Mechmastic-2k17) / South India Project Exhibition (SIPE-2K17) and

presented a paper titled "Design & Analysis of Chassis for a Hybrid Vehicle" organized by Department of Mechanical Engineering held at Kalpataru Institute of Technology, Tiptur on 18-19 May 2017.

He attended a Five day Faculty Development Program on "Research Methodology" and "Enhancing Teaching Methodology" held at Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal from 11-15 December 2017.

He also attended TEQIP-III sponsored One Week Faculty Development Program on "Pedagogy Training in Technical Education" held at VTU Human Resource Development Centre (VTU-HRDC), Centre for PG Studies, Muddenahalli, Chikaballapur from 16-20 January 2018.

Mr. Ganesh R Kalagi, Assistant Professor, Department of Mechanical Engineering has presented a paper titled "Mechanical Properties & Sem Analysis of Flax/ SISAL /SIC Nano Powder Reinforced Hybrid Composites", in International Conference on Emerging Research Trends in Mechanical and Civil Engineering (ICERTMCE-2017) held at REVA University, Bengaluru on 6-7 July 2017.

# Yanthrika

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He attended a two day Science Academics Workshop on "Advances in Nano-Science and NANO- Technology" organized by Department of Engineering Physics held at Yenepoya Institute of Technology, Moodabidri on 30-31 October 2017.

He also attended a 5 day Short – term course on "Advances in Refrigeration and Air- Conditioning" organized by Department of Mechanical Engineering held at Pondicherry Engineering College, Puducherry under the sponsorship of Quality Improvement Programme, AICTE, Govt. of India on 11-15 December 2017.

Mr. Raja Yateesh Yadav, Assistant Professor (Sr.), Department of Mechanical Engineering has attended a Two day National Workshop on "Emerging Technologies in Solar and Wind Energy" organized by Department of Mechanical and Manufacturing Engineering held at Manipal Institute of Technology, Manipal on 21-22 July 2017.

Mr. Anantesha Rao K, Assistant Professor, Department of Mechanical Engineering has attended a Two day National Workshop on "Emerging Technologies in Solar and Wind Energy" organized by Department of Mechanical and Manufacturing Engineering held at Manipal Institute of Technology, Manipal on 21-22 July 2017.

Mr. Anantesha Rao K, Assistant Professor, Department of Mechanical Engineering has attended a Two day Faculty Development Program on "Basics of CFD Modelling & ANSYS- Fluent UDF Programming" organized by Department of Mechanical Engineering held at St. Joseph Engineering College, Mangaluru on 18-19 January 2018.

Mr. Ananth Mohan Mallya, Assistant Professor, Department of Mechanical Engineering has attended a Two day Faculty Development Program on "Basics of CFD Modelling & ANSYS- Fluent UDF Programming" organized by Department of Mechanical Engineering held at St. Joseph Engineering College, Mangaluru on 18-19 January 2018.

He also attended a five day Faculty Development Program on "Research Methodology" and "Enhancing Teaching Methodology" held at Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal from 11-15 December 2017.

Mr. Manjunath S, Assistant Professor, Department of Mechanical Engineering has attended a Two day National Workshop on "Emerging Technologies in Solar and Wind Energy" organized by Department of Mechanical and Manufacturing Engineering held at Manipal Institute of Technology, Manipal on 21-22 July 2017.

He attended a Two day Workshop on "Research Methodologies & Latex" jointly organized by Vivekananda College of Engineering and Technology, Puttur & Visvesvaraya Technological University, Belagavi held at Vivekananda College of Engineering and Technology, Puttur on 21-23 September 2017.

He also attended a Two day Faculty Development Program on "Basics of CFD Modelling & ANSYS- Fluent UDF Programming" organized by Department of Mechanical Engineering held at St. Joseph Engineering College, Mangaluru on 18-19 January 2018.

# Yanthrika

*A Newsletter by the Department of ME*

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Mr. Lingaraj K Ritti, Assistant Professor, Department of Mechanical Engineering has attended a two day Science Academics Workshop on "Advances in Nano-Science and NANO-Technology" organized by Department of Engineering Physics held at Yenepoya Institute of Technology, Moodabidri on 30-31 October 2017.

Mr. Praveen J Kalamdani, Assistant Professor, Department of Mechanical Engineering has attended Two Weeks Faculty Development Programme (FDP) on "Recent Advances and Challenges for Quality Assurance and Accreditation in the Higher Education for Modern World" organized by Department of studies in Mechanical Engineering held at University BDT College of Engineering, Davanagere under the sponsorship of All India Council for Technical Education (AICTE) on 11-23 December 2017.

Mr. Shreepannaga, Assistant Professor, Department of Mechanical Engineering, Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal has attended a Five day Faculty Development Program on "Research Methodology" and "Enhancing Teaching Methodology" held at Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal from 11-15 December 2017.

He also attended the AICTE sponsored 2 Weeks Faculty Development Program on "Industrial Automation using Hydraulics, Pneumatics and PLC" held at Manipal Institute of Technology, Manipal from 1-12 January 2018.

Mr. Y Shriraj Rao, Assistant Professor, Department of Mechanical Engineering, Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal

has attended a Five day Faculty Development Program on "Research Methodology" and "Enhancing Teaching Methodology" held at Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal from 11-15 December 2017.

He also attended the AICTE sponsored 2 Weeks Faculty Development Program on "Industrial Automation using Hydraulics, Pneumatics and PLC" held at Manipal Institute of Technology, Manipal from 1-12 January 2018.

Mr. Sandesh Bhaktha, Assistant Professor, Department of Mechanical Engineering, Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal has attended a Five day Faculty Development Program on "Research Methodology" and "Enhancing Teaching Methodology" held at Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal from 11-15 December 2017.

Mr. Ravinarayan R Rao, Assistant Professor (Sr.), Department of Mechanical Engineering, Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal has attended a Five day Faculty Development Program on "Research Methodology" and "Enhancing Teaching Methodology" held at Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal from 11-15 December 2017.

Mr. Kiran N Bhat, Assistant Professor, Department of Mechanical Engineering, Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal has attended a Five day Faculty Development Program on "Research Methodology" and "Enhancing Teaching Methodology" held at Shri

# Yanthrika

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Madhwa Vadiraja Institute of Technology and Management, Bantakal from 11-15 December 2017.

Mr. Kishore Kumar Aroor, Assistant Professor, Department of Mechanical Engineering, Shri Madhwa Vadiraja Institute of Technology and

Management, Bantakal has attended a Five day Faculty Development Program on "Research Methodology" and "Enhancing Teaching Methodology" held at Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal from 11-15 December 2017.

## STUDENT ACCOMPLISHMENTS

Mr. Abhinav Karaba K (4MW14ME002) VII Sem Student of Mechanical Engineering Department has awarded with "Best Student Award" by ISTE Student Chapter-Karnataka Section during the 14th ISTE State Level Student Convention- 2017 held at Gowdara Mallikarjunappa Institute of Technology (G M Institute of Technology), Davangere on 8 September 2017.

Mr. Shrinath Patkar (4MW14ME103), Mr. Aneesh Maiya G (4MW14ME022), Mr. Niranjan Karkera (4MW14ME071), Mr. Prajwal Poojary (4MW14ME078) and Mr. Manohar J K (4MW14ME062) successfully completed an NPTEL

Online Certificate Course on "Manufacturing of Composites" in October 2017.

Mr. Chinthan Karkera (4MW15ME016) and Mr. Pranam Gowda P (4MW16ME059) successfully completed an NPTEL Online Certificate Course on "Laws of Thermodynamics" and "Sustainability through Green Manufacturing Systems: An Applied Approach" respectively in October 2017.

Mr. Deekshith (4MW14ME037) and Mr. Karan Kumar (4MW14ME056) were got selected for Second Round of Engineeria Contest-2017, An International Quiz Competition organized by CADD CENTRE, Udupi in September 2017.

