Conferences attended by the Faculty

1. Dr. K. Raja Narender Reddy , "Bio-Composites: A Study On Behavior Of Oil Palm Mesocarp Fiber Reinforced Kgg" , International conference on Design, Automation and Control (ICDAC 2020), at Vellore Institute of Technology Vellore, during 6th-8th January 2020.

2. Dr. P. Prabhakara rao , "Production of CO2S and Casting Components Through Simulation", International Virtual Conference on "Mechatronics, Automation and Cyber Physical Systems"(MAC-2020), at Vellore Institute of Technology Vellore, during 26&27th June2020.

3. Sri A. Hari Kumar , "Design and NVH Analysis of Disc Brake System" , Fourth International Conference on Mechanical, Automotive and Aerospace Engineering (MAAE–2020), at Trivandrum, Kerala during 24th – 25thJanuary 2020.

4. Sri S. Ramesh , "Design and NVH Analysis of Disc Brake System" , Fourth International Conference on Mechanical, Automotive and Aerospace Engineering (MAAE–2020), at Trivandrum, Kerala during 24th – 25thJanuary 2020.

5. Sri V. Srikanth , "Bio-Composites: A Study On Behavior Of Oil Palm Mesocarp Fiber Reinforced Kgg" , International conference on Design, Automation and Control (ICDAC 2020), at Vellore Institute of Technology Vellore, during 6th-8th January 2020.

Journal Paper Publications of the Faculty

1. Dr. A. Devaraju, Dr. MD. Sameer, Dr. G. Sai Kumar ," Effect Of Distinct Parameters On The Mechanical Properties Of Solid-State Processed AA-2014" International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ", Vol. 10, Issue 3, Jun 2020, 5843–5848.

2. Dr. A. Devaraju, Dr. MD. Sameer, Dr. G. Sai Kumar "Effect of Tool Rotational Speeds on Friction Stir Welded AA6082-T6 Aluminium Alloy Joints" International Journal of Recent Technology and Engineering (IJRTE), Volume-9 Issue-1, May 2020.

3. Sri. S. Sripathy, "Preparation and Testing of Glass Powder Reinforced Polyester Resin Lamina", Materials today proceedings Science Direct (Elsevier), Volume 23, Part 3, 2020, Pages 608-612.

4. Sri P. Sreedhar, "Investigation on the tensile strength of friction stir welded joints of dissimilar aluminium alloys" Materials Today: Proceedings, Volume 23, pp 469-473.

KITSW

THE PRODIGY

DEPARTMENT OF MECHANICAL ENGINEERING

NEWSLETTER - JUNE 2020

Principal's Message:

I feel proud and honour to write this message because this newsetter is the testimonial of the commitment of the department towards the outcome based education and enhanced student-teacher learning process which is in line with the vision and mission of the department. I hope that the department will strive furthur to improve the quality of the education and bring laurels to the institute.

Dr. K.Ashoka Reddy

HOD's Message:

It is happy to bring out this newsletter and the best part of the newsletter is that students bagged many accolades and prizes not only in academics but also in extracurricular activities. This newsletter will provide few examples of achievements of the students and faculty in the academic year 2019-20. I am looking forward to more success from the department .

Dr. K. Sridhar

PROGRAM OUTCOMES (POs)

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, attnd the cultural, societal, and environmental considerations.
PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent re-

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Vision of the Department

- To be a centre of excellence in Mechanical Engineering, to provide the best teaching-learning and research environment, to produce high quality professionals and entrepreneurs to cater the needs of society.

Mission of the Department

M1: To impart quality education that builds strong ethical attitude, technical knowledge and professional skills by providing congenial teaching-learning environment.
M2: To nurture the reasoning, problem solving and research capabilities of learners by providing the state-of–the-art facilities, to meet the changing needs of society.
M3: To inculcate life-long learning and leadership traits for successful professional careers, by counseling and mentoring.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1 : To provide comprehensive knowledge in basic sciences, mechanical engineering and multi disciplinary areas.

PEO2 : To apply modern tools and techniques to design analyze interpret and solve mechanical and allied engineering problems and communicate them effectively.

PEO3 : To impart responsibility towards socio-technical, economical, environmental and energy related issues.

PEO4 : To inculcate professionalism, ethical attitude, team spirit and lifelong learning to achieve career goals.

PROGRAM SPECIFIC OUTCOMES (PSOs)

Engineering Graduates will be able

PSO1 : To apply learned principles and knowledge in various applications of materials, design, thermal, production and industrial engineering.

PSO2 : To model, analyze, design, develop and implement advanced mechanical systems or processes.

Team Force Racing has been awarded with Light Weight Vehicle Award at NEKC 2020

Training & Placement Activities:

1. Byju's	-1
2. Cyient	-1
3. Infosys	-2
4. Inventio Robotics	-1
5. Just Dial	-1
6. Neudesic	-1
7. Prathiraj	-8
8. RAAM's Group	-4
9. Razen Moters	-1
10. XL Dynamics	-1

Total No. of offers received in even semester = 21

Mechanical Engineering Students Association (MESA) Activities

S.No.	Event Name	No. of Students Participate
1.	Session on Catis	100
2.	Interaction session on 3d Printing	50
3.	Session on importance of Ansys	65
4.	Session on Career Guidance	80
5.	Imporatnce of Research papers	105
6.	Bio Printing	50
7.	Interaction on Higher Studies	70

Training session on CATIA & ANSYS

FDP / STTP / WORKSHOPS ATTENDED BY THE FACULTY :

1. Majority of the Faculty have attended Faculty Development Programme on "NBA-National Accreditation and Teaching Learning in Engineering (NATE)" organized by NPTEL – SWAYAM during Jan – April, 2020.

2. Prof. K. Raja Narender Reddy attended "Domain Specific Internet of things and illustration of IoTs design using case studies" organized by KITSW during 9th – 21st January, 2020.

3. Majority of the Faculty have attended Faculty Development Programme on "Teaching engineering standards and intellectual property rights to academicians" organized by Teaching Learning Centre(TLC), National Institute of Technology Warangal during 13th – 18th February, 2020.

4. Prof. U. Shrinivas Balraj attended "Funding opportunities for engineering teachers and paper writing" organized by Rajarambapu Institute of Technology & Science, Rajaramnagar during 15th June- 19th June, 2020.

5. Dr. P. Prabhakara Rao attended "Manufacturing Process Technology I & II" organized by NPTEL – SWAYAM during Jan-April 2020.

6. Dr. A. Deva Raju attended "Modelling and optimization techniques for materials and Manufacturing processes" organized by Lakireddy bali reddy college of engineering (Autonomous) L.b.reddy nagar, mylavaram, Andhra Pradesh during 18 – 22 May 2020.

7. Sri P.S.S. Murthy attended "Implementation of Multi-objective optimization algorithm(NSGA-II) using MATLAB" organized Rajarambapu Institute of Technology, Kolhapur during 29-06-2020 to 03-07-2020.

8. Sri J. Laxman attended faculty development program on "Machining science" organized by NPTEL during Jan-Feb 2020.

9. Sri S. Chandra Mouli, Sri. S. Ramesh attended faculty development program on "LaTeX & Technical Report Writing" organized by Department of Mathematics, Kakatiya University, Warangal, Telangana, in association with Spoken Tutorial, IIT Bombay during 25 - 30 May, 2020.

10. Sri S. Chandra Mouli attended faculty development program on "International faculty Development Program on Research and Development in Behaviour, Processing and characterization Techniques" organized by Department of Mechanical Engineering , GLA University, Mathura in association with The Indian Institute of Metals(IIM) during 9 th to 14 June 2020.

11. Majority of the faculty have attended faculty development program "Materials for Thermal and Renewable Energy Research "organized by Department of Mechanical Engineering, Sri Sai Ram Engineering College during 20 to 24 May, 2020.

12. Sri G. Vinod Kumar, Sri S. Ramesh, Sri S. Anil Kumar attended "Heat Transfer And CFD Towards Industrial Applications" organized by Department of Mechanical Engineering Sri Sairam Institute of Technology , Chennai during 12th – 18th June 2020.

13. Sri G. Vinod Kumar, Sri S. Anil Kumar attended "Renewable Energy Systems" organized by IGEN (Institution of Green Engineers) and Department of EEE, Panimalar Institute of Technology, Chennai during 8th - 12th June 2020.

14. Sri G. Vinod Kumar, Sri S. Ramesh , Sri S. Anil Kumar attended "Advancements in Phase Change Material based Thermal and Renewable energy Technologies" organized by Department of Mechanical Engineering Lakireddy Bali Reddy College of EngineeringL.B.Nagar, Mylavaram, AP during 1st -5th June 2020.

15. Sri S. Ramesh, Sri A Hari Kumar, Sri S. Anil Kumar attended "Moodle Learning Management System" organized by JNTUH College of Engineering, Sultanpur, in association with Spoken Tutorial, IIT Bombay during 10-15 June, 2020.

16. , Sri A Hari Kumar, Sri. S. Anil Kumar, Sri K. Kishor Kumar attended "Advancements in Mechanical, Production and Civil Engineering and ICT in Teaching – Learning Process" organized by Sri Sai Ram Engineering College, Chennai, Tamil Nadu, Sponsored by MHRD, India. during 13.05.2020 to 26.05.2020.

JOURNAL PUBLICATIONS OF FACULTY

1. Dr. U. Shrinivas Balraj "An hybrid approach for multi-response optimization of rotary electrical discharge machining of nickel super alloy" Materials today: proceedings, Vol. 23, part 3, pp. 626-631, 2020.

2. Dr. U. Shrinivas Balraj "Investigation on the tensile strength of friction stir welded joints of dissimilar aluminium alloys" Materials today: proceedings, Vol. 23, part 3, pp. 469-473, 2020.

3. Dr. G. Ganesh Kumar "Simulation Studies on Conjugate Mixed Convection Perforated Fins" International Journal of Scientific Research and Review, Pp.79-86.

4. Dr. G. Ganesh Kumar "Exhaust heat recovery from compression ignition engines for power generation" International Journal of Scientific Research and Review, pp. 250-256.

5. Dr. G. Ganesh Kumar "Mathematical And Experimental Studies On Effect Of Number Of Blades On Centrifugal Pump Used In Left Ventricular Assisted Device (LVAD)" ASAIO Journal.
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6. Dr. A. Devaraju "Effect of Cryogenic Coolant on Mechanical Properties and Micrographs of Solid State Welding of 2014 Al Plates" Recent Advances in Material Sciences, Springer Nature Singapore Pte Ltd. 2019

7. Dr. A. Devaraju "Synthesis and Characterization of Functionally Graded Ceramic Material for Aerospace Applications" Intelligent Manufacturing and Energy Sustainability, Springer Nature Singapore Pte Ltd. 2019.

8. Dr. A. Devaraju "Effect Effect of Rotation speed on Tensile Properties & Microhardness of Dissimilar Al Alloys 6061-T6 to 2024 -T6 Welded via Solid State Joining Technique" Materials Today: Proceedings 18 (2019) 3286–3290.

9. Dr. A. Devaraju "Impact of Finer granules on Tensile & Micrograph characterization of Solid welded AA2014" Recent Materials Today: Proceedings 18 (2019) 3286–3290.

10. Dr. A. Devaraju, Dr. Md. Sameeer, Dr. G. Sai Kumar, Dr. G. Srinu "Effect of Tool rotational speeds on FSW AA6082-T6 Al alloys joints" International Journal of Recent Technology and Engineering (IJRTE), page no.62-68.

11. Dr. A. Devaraju "Effect of Distinct Parameters on the Mechanical Properties of Solid-State Processed AA-2014" International Journal of Recent Technology and Engineering (IJRTE).