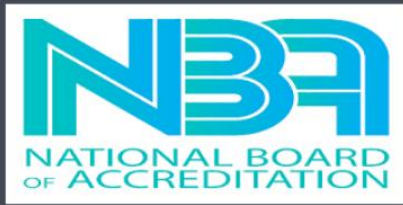
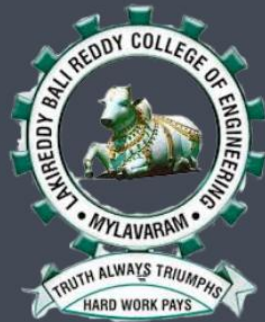


Edition III, Volume IV 2019-20

Mechanical Engineering E-Magazine (LBRCE)



(TIER-I)



MECH PULSE

(APRIL-JUNE 2020)

DEPARTMENT OF MECHANICAL ENGINEERING
LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING
(Autonomous)

Accredited by NAAC & NBA (CSE, IT, ECE, EEE & ME) under Tier - I
Approved by AICTE and Permanently Affiliated to JNTUK, Kakinada

Mechanical Engineering E-Magazine (LBRCE)

MESSAGE FROM HEAD OF THE DEPARTMENT

I am very happy to inform you that the department of mechanical engineering is bringing **MECH PULSE-an e-magazine** its edition III and volume IV. The department of mechanical engineering is Accredited by **National Board of Accreditation (NBA) under Tier-I** and is started in the year 1998 with an intake of 60 students. At present the department is offering B.Tech Mechanical Engineering with an intake of 180 students and M.Tech – Thermal Engineering with an intake of 18 students. The department has thirteen state of art laboratories worth of 2.8 crores, with advanced computing facilities, software and research equipment. Advanced **Research Laboratories** in the area of **Cognitive Science, Material Testing, Tribology and Thermal Engineering** are available. Sophisticated **ANSYS Skill Development Centre** with 110 users of ANSYS 18.1 and **Dassult 3D Experience centre** (in association with APSSDC) is available. The department has 30 faculty members with 10 Doctoral degrees. 12 faculty are actively pursuing for their Ph.D in various universities and nine research scholars are working for their doctoral under the department faculty. The department faculty constantly upgrade their knowledge in the area of their domain by attending various Faculty Development Programs, workshops, seminars etc. The faculty are actively engaged in their research work and are active in publishing papers in journals and conferences.

VISION OF THE DEPARTMENT

- To impart knowledge in Mechanical Engineering with global perspectives for the graduates to serve the society and industry.

MISSION OF THE DEPARTMENT

- To enable the graduates technically sound with the state- of- the –art curriculum and innovative teaching methods
- To provide training programs that bridge the gap between academia and industry
- To create a conducive environment and facilities to improve overall personality development of the graduates
- To make the graduates aware of role and responsibilities of an engineer in society.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO1: To build a professional career and pursue higher studies with sound knowledge in Mathematics, Science and Mechanical Engineering.

PEO2: To inculcate strong ethical values and leadership qualities for graduates to become successful in multidisciplinary activities.

PEO3: To develop inquisitiveness towards good communication and lifelong learning.

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

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.

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, and the cultural, societal, and environmental considerations.

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.

Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

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.

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

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.

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.

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.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: To apply the principles of thermal sciences to design and develop various thermal systems.

PSO2: To apply the principles of manufacturing technology, scientific management towards improvement of quality and optimization of engineering systems in the design, analysis and manufacturability of products.

PSO3: To apply the basic principles of mechanical engineering design for evaluation of performance of various systems relating to transmission of motion and power, conservation of energy and other process equipment.

ONGOING RESEARCH PROJECTS

S.No.	Name of the Faculty	Title of the Project	Funding Agency	Amount Sanctioned	Sanctioned Year
1.	Dr.K.Appa Rao	MODROBS for Thermal Engineering Laboratory	AICTE	12, 50,000	2016
2.	Dr.K.Appa Rao	Experimental Investigation on Homogeneous Charge Compression Ignition Engine	UGC	1, 55,000	2018
3.	Dr.N.SunilNaik	Evaluation of engine parameters affecting the performance of enzymatic transesterification process using test fuel blends	DST/SERB/EEQ	22,81,000	2019
4.	Dr.P.Vijay Kumar	Prerana scheme	AICTE	4,80,000	2019

RESEARCH PROPOSALS SUBMITTED

S.No.	Name of the Faculty	Title of the Project	Funding Agency	Amount	Submitted Year
1.	Dr.P.Vijay Kumar	Experimental studies on Phase change material based cooling in residential buildings	FIST	13,80,000	June 2020
2.	Dr.P.Ravindra Kumar	Solar Assisted Hybrid Liquid Desiccant air conditioning system Solar Panels, Absorber, Regenerator, Accumulator, Compressor, Solution heat exchanger, Refrigerant, Valves, Pumps, Sensors		10,00,000	
3.	Dr.N.SunilNaik	Noise & Vibrational Analysis of CI Diesel Engine		8,00,000	

CONFERENCES ATTENDED BY FACULTY

1. **Dr.P.Ravindra Kumar**, “Comparative Experimental Performance Analysis on Heat Transfer Characteristics of (Acetone +Water) And (Ethylene Glycol + Water) Mixtures Using Hybrid Heat Exchanger”, National e-Conference on Recent advances in Science Engineering and Technology, Sagar Institute of Research and Technology, Bhopal, Madhya Pradesh on 25.06.2020.
2. **Sankararao.V**, “Fabrication of Al Alloy Composite Reinforced With Silicon Carbide and Graphite Through Stir Casting Process and Wear Analysis” National e-conference on Recent Advances in Mechanical Engineering (NCRAME-2020) in PVP Siddhartha Institute of Technology, Kanuru, Vijayawada from 26.06.2020 to 27.06.2020.
3. **Snigdha.S**, “Novel CFD Analysis on Heat Transfer Characteristics of Nano Coolants for Automobile Radiators” National e-conference on Recent Advances in Mechanical Engineering (NCRAME-2020) in PVP Siddhartha Institute of Technology, Kanuru, Vijayawada from 26.06.2020 to 27.06.2020.

JOURNALS PUBLISHED BY THE FACULTY

Mr.Ch.Siva Sankara Babu,

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Title of the Paper: Exact Damage Identification of Plate-Like Structure Using Mode Shapes

Name of the Journal: International Journal of Innovative Technology and Exploring Engineering

Publication on: April 2020

ISSN No: 2278-3075

Doi: 10.35940/ijitee.F4066.049620

Abstract: In this paper, Mode Shape Based Damaged Detection Technique (MSBDT) has been applied for plate-like structures to recognize the damage location and quantify the damage length. Two alternative approaches are exclusively used to extract damage indexes through mode shapes of undamaged plate (i.e. reference data) and damaged plate. The absolute difference of mode shapes used in first approach and mode shape curvatures used in second approach of undamaged and damaged plates. Healthy Aluminium plate was tested in the laboratory for accurate material properties and considered three different damage cases by changing the crack orientation and location for successful implementation of above approaches. In order to make certain the sensitivity of the proposed approaches, natural frequencies and corresponding mode shapes for first six modes in transverse direction of a plate are obtained by Finite Element Modal Analysis (FEMA) in ANSYS 18.1 and validated by Experimental Modal Analysis (EMA) in virtual instrumentation environment using LabView software.

JOURNALS PUBLISHED BY THE FACULTY

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Title of the Paper:Effect of Condenser Length on Performance of Water Cooling Refrigeration System cum Air Cooler

Name of the Journal: International Journal of Innovative Technology and Exploring Engineering

Publication on: April 2020

ISSN No:2278-3075

Doi: 10.35940/ijitee.F4182.049620

Abstract: Now a days Air conditioning system has become a need for everyone to feel comfort in hot and humid condition and everyone feels comfortable to drink chilled water for quenching the thirst of the people. According to American Society of Heating, Refrigerating and Air conditioning Engineers in short ASHRAE Human comfort is defined as the condition of mind which expresses satisfaction with surrounding air. In this project, we developed the water cooling refrigerator and air cooling system by combining both the systems through which water is chilled by an eco-friendly refrigerant R-134a and then the air is cooled by this chilled water. Performance analysis of the water cooling refrigeration system was done and analyzed with varying condenser length. By combining these both systems we can reduce the compressor work, cost, save the electrical energy and environment too..

JOURNALS PUBLISHED BY THE FACULTY

Dr.V.Dhana Raju,

Associate Professor

ghanaraju1984@gmail.com



Title of the Paper: Experimental assessment on the regulated and unregulated emissions of DI diesel engine fuelled with Chlorella emersonii methyl ester (CEME)

Name of the Journal: Renewable Energy

Publication on: MaY 2020

ISSN No:0960-1481

Doi: <https://doi.org/10.1016/j.renene.2019.11.010>.

Abstract: This work examines the feasibility of fuelling methyl ester derived from green algae, Chlorella emersonii in a compression ignition engine. This work also proposes Chlorella emersonii methyl ester (CEME) as a potential alternative energy source since the above species is available extensively in fresh water, marine and aquatic ecosystems throughout the world. CEME was blended with petroleum diesel fuel at various volume proportions of 10%, 20%, 30%, 40% and 100% and their properties were analyzed as per ASTM standards for its application as biofuel. The prepared test fuels were analyzed experimentally in a single cylinder diesel engine at constant speed (1500rev/min) for its performance, combustion and emission (regulated and unregulated) characteristics. Test results projected that, the characteristics of 20% CEME+80%diesel fuel blend was in par with diesel fuel in terms of thermal efficiency, THC, CO and smoke emissions. However, CEME blends resulted in slightly higher levels of CO₂ and NO_x emissions. In terms of unregulated emissions, CEME blends in diesel showed lowered toluene and acetaldehyde emissions. However, acetone and formaldehyde emissions increased with higher percentage of CEME in diesel blend. At full load, the attained cylinder pressure and heat release rate of CEME were comparatively lower than diesel fuel.

JOURNALS PUBLISHED BY THE FACULTY

Ms. Snigdha Surapaneni,

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Title of the Paper: Analysis of CI Engine Performance By Thermal Barrier Coating On Piston Under Different Cooling Rates

Name of the Journal: International Journal of Advanced Science and Technology

Publication on: May 2020

ISSN No: 2005-4238

Doi: <http://sersc.org/journals/index.php/IJAST/article/view/14919/7564>.

Abstract: To analyze performance of a twin cylinder four stroke CI engine whose piston is coated with a ceramic material and experiments are carried out at different cooling rates. Research & Development technique is used for decreasing costs and consumption of fuel in internal combustion engines and technological innovation studies are going on continuously. Through various constructional changes engine efficiency development efforts are augmented day by day; for instance, parallel to development of advanced technology ceramics, ceramic coating applications in IC engines grows fast. In order to get better engine performance, fuel energy must be converted to machine energy at the most possible rate. Lower heat rejection from combustion chamber through thermally insulated components leads to increase in available energy that will raise the cylinder work and total energy carried by the engine exhaust, which could be also utilized. The research engine was a four stroke, direct injection, twin cylinder, water cooled CI engine. It was tested at constant speed and different load conditions before coating. Also piston was coated with 0.5mm size of Zirconia (ZrO_2) over a 150 μm thickness of NiCrAlY bond coat. The engine was tested at standard conditions to study the effect of coated surfaces of piston on its performance and emissions of the engine. The ceramic-coated engine performance is to be compared with conventional uncoated engine performance. Engine exhaust such as NO_x , CO, CO_2 and Unburned Hydro Carbons are to be determined with the aid of exhaust gas analyzer by conducting several experimental cycles at various loads i.e., at 0.5, 1, 1.5, 2, 2.5 & 3 K.W load after piston is coated by ceramic material.

JOURNALS PUBLISHED BY THE FACULTY

Mr.S.Rami Reddy,

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Title of the Paper: Influence of decanol as fuel additive on the diverse characteristics of the diesel engine powered with mango seed biodiesel blend

Name of the Journal: International Journal of Recent Technology and Engineering

Publication on: June 2020

ISSN No: 0143-0750

Doi: <https://doi.org/10.1080/01430750.2020.1783356>

Abstract: India being a predominantly farming country requires major attention for the fulfilment of energy demands for agriculture applications. Biodiesel is a clean burning renewable fuel. In this proposed work, mango seed biodiesel is extracted from the waste mango seeds through transesterification process. The thermophysical properties are evaluated as per ASTM standards. Base tests are conducted with diesel and different blends of mango seed biodiesel. From the base test results, it is found that MSME20 shows better performance parameters. In order to improve the engine performance further, decanol is added to MSME20 at three concentrations such as 5%, 10% and 15% on volume basis. The results revealed that 5% addition of decanol to the MSME20 shows a significant enhancement in brake thermal efficiency by 3.19% and considerable reductions in the exhaust emissions such as HC, CO and smoke. However, slight increment in NOX emissions is observed at full load.

JOURNALS PUBLISHED BY THE FACULTY

Mr. V. Sankararao,

Assistant. Professor

Sankar.356@gmail.com



Title of the Paper: Fabrication of Al Alloy Composite Reinforced With Silicon Carbide and Graphite Through Stir Casting Process and Wear Analysis

Name of the Journal: International Journal of Mechanical and Production Engineering Research and Development

Publication on: June 2020

ISSN No: 2249-6890

Doi: [10.24247/ijmperdjun2020128](https://doi.org/10.24247/ijmperdjun2020128)

Abstract: Aluminum silicon carbide got wide range of applications in various sector, fields and in many industries. Aluminum matrix composites (AMCs) and Hybrid aluminum matrix composites (HAMCs) have become a great choice and various reinforcements had prospective meeting the criteria of recent aerospace and automobile industries. This aluminum is replacing some of the positions like steels, wood, graphite etc. They are stronger, stiffer and they also act like heat sink which subtracts for power electronics. At present we are going to study the 6351 hybrid aluminum metal matrix composite which reinforced with graphite and silicon carbide. For this we took the method of stir casting. Although we have several methods are there for making Al-SiC composite but we preferred this technique for its simplicity and economical and then followed by wear test on the material. So, as we want different types of properties when we conducted the wear test on AMCs (aluminum matrix composites) at different weight fractions of 2%, 4%, 6% and 8% of silicon carbide and graphite which compared with Al 6351 alloy. It studies on tri-biological properties of the materials at different composites. Lastly we found that if the weight fraction increases the wear properties are improved of graphite and silicon carbide in aluminum matrix.

JOURNALS PUBLISHED BY THE FACULTY

Ms. Snigdha Surapaneni,

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Title of the Paper: Novel CFD Analysis on Heat Transfer Characteristics of Nano Coolants for Automobile Radiators

Name of the Journal: International Journal of Mechanical and Production Engineering Research and Development

Publication on: June 2020

ISSN No: 2249-6890

Doi: [10.24247/ijmperdjun2020172](https://doi.org/10.24247/ijmperdjun2020172)

Abstract: The research on the heat transfer efficiency of an automobile radiator is gaining more interest not only to increase automobile efficiency and also to increase the fuel economy. In this research work, the radiator heat transfer efficiency is evaluated by using the nano-based coolants. For the nano-based coolants, Al₂O₃ and CuO nanoparticles are used and these particles are mixed with water and the resulting nanofluids influence on the radiator heat transfer. The heat transfer analysis models are created in Ansys fluent solver. By varying the different concentration of nanoparticles in the base fluid, different radiators made with steel, copper, aluminium are evaluated for the performance of the radiator in terms of Nusselt number, thermal conductivity, and rate of heat transfer.

JOURNALS PUBLISHED BY THE FACULTY

Mr. A. Naresh Kumar,

Sr. Assistant. Professor

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Title of the Paper: Optimization of Diesel Engine performance by Taguchi Grey Relational analysis using fuel blends

Name of the Journal: International Journal of Recent Technology and Engineering

Publication on: Mar 2020

ISSN No: 2277-3878

Doi: [10.35940/ijrte.F9249.038620](https://doi.org/10.35940/ijrte.F9249.038620)

Abstract: In this present investigation an attempt was made to explore the effect of fuel injection timing (FIT), fuel injection pressure (FIP), Load and exhaust gas recirculation (EGR) for various fuel blends (Palm Oil, cotton Seed oil, n-Butanol) as input parameters on SFC, BTE, CO, HC, NO_x and with a minimum number of experiments. In order to reduce the experimental efforts, Taguchi's L27 orthogonal array was employed for design of experiments. An algorithm involving the combination of grey relational analysis with Taguchi technique was proposed for the optimization of engine emission and performance. The optimum combination for more brake thermal efficiency is obtained for n-butanol-IT of 270 bTDC-IP of 200 bar- EGR of 10% load percentage of 100. At the same time optimum combination for minimum nitrogen oxide emission is obtained for CSO-IT of 190 bTDC-IP of 220 bar-EGR of 20 percentage- load percentage of 50. The optimum combination considering all the output parameters was obtained using grey relational analysis and output values for optimum combination was also calculated experimentally. Based on ANOVA, engine load be the most influencing factor (Contribution of load was 57.8 %) for the selected objective of improvement in BSFC and BTE with lesser penalty on emissions (HC, CO, NO_x) based on equal weight ages.

EVENTS ORGANIZED BY THE DEPARTMENT

FACULTY DEVELOPMENT PROGRAMS

MODELLING AND OPTIMIZATION TECHNIQUES FOR MATERIALS AND MANUFACTURING PROCESSES

- The Dept. of Mechanical Engineering, organized a Faculty Development Program on “**Modelling and Optimization Techniques for Materials and Manufacturing Processes**” through online from 18/05/2020 to 22/05/2020 by various faculty from reputed institutions. Dr.K.Murahari and J.Subba Reddy coordinated the event.



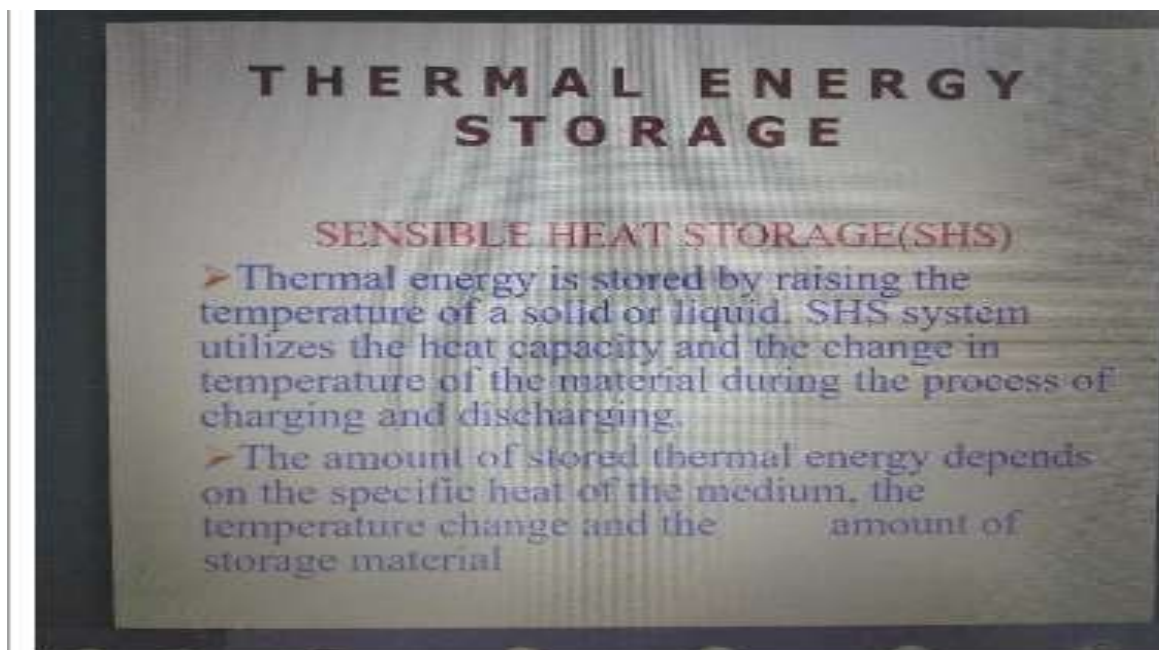
Addressed by Principal Dr.K.Appa Rao



Additive Manufacturing in Medical Applications by Dr.A.Manmadha Chary

ADVANCEMENTS IN PHASE CHANGE MATERIAL BASED THERMAL AND RENEWABLE ENERGY TECHNOLOGIES

- The Dept. of Mechanical Engineering, organized a Faculty Development Program on “Advancements in Phase change material based Thermal and Renewable Energy Technologies” through online from 01/06/2020 to 05/06/2020 by various faculty from reputed institutions. Dr.P.Vijay Kumar and Dr.V.Dhana Raju coordinated the event.



Thermal energy storage: sensible heat storage type



Solar thermal cooker plant at Germany

WEBINARS

- The Dept. of Mechanical Engineering, organized an online webinar on “Welding as a career” on 30/05/2020 by Mr. Narayana Moorthy, Mr. Raghavendra M/S Fronius India Pvt. Ltd. Dr. K. Murahari and J. Subba Reddy coordinated the event.



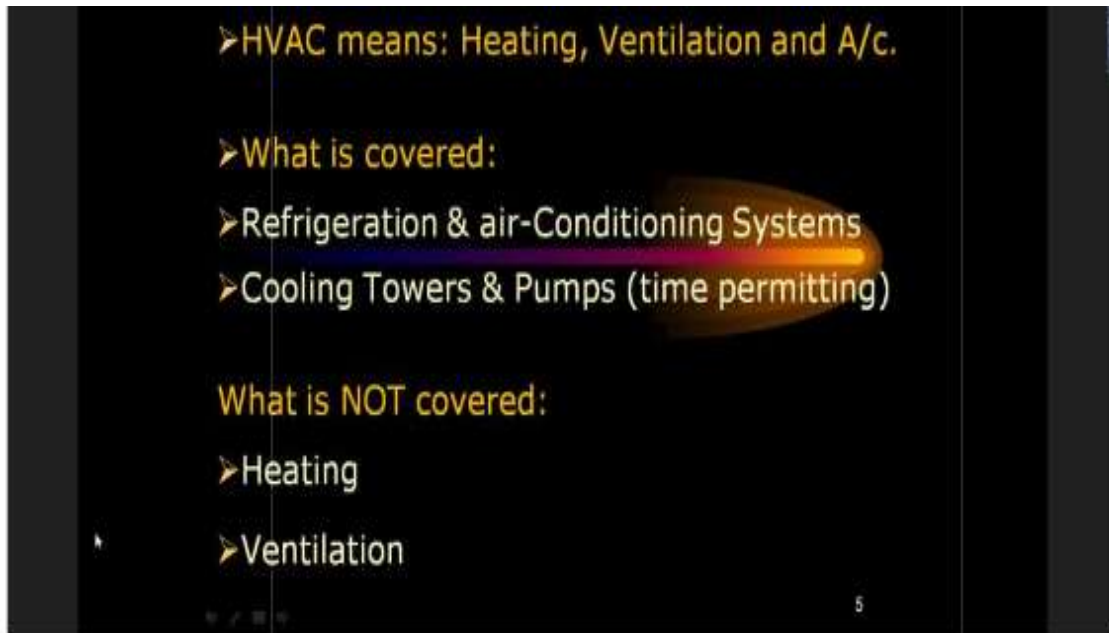
Importance of welding



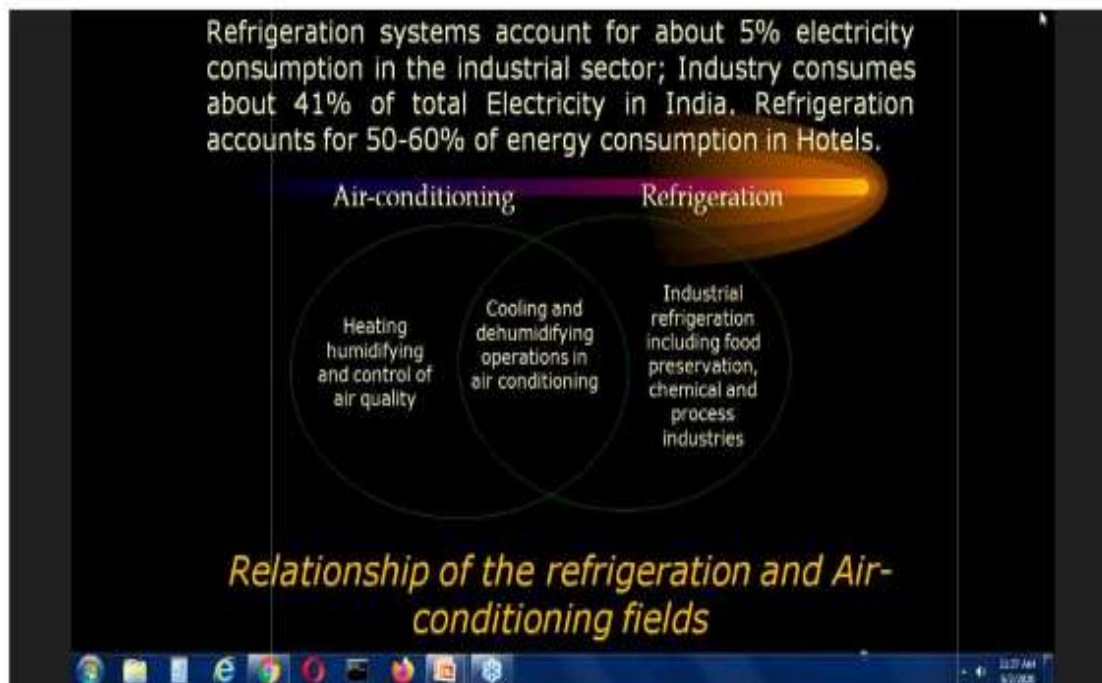
Applications of welding

ENERGY CONSERVATION IN HVAC SYSTEMS

- The Dept. of Mechanical Engineering, organized an online webinar on “Energy Conservation in HVAC Systems” on 02/06/2020 by Dr.K.V.Narasimha Rao, Professor, K.L.University, Vaddeswaram, Guntur. Mr.SK.Muneer, Mr.P.Sobhan Kumar, and Dr.P.Vijay Kumar coordinated the event.



Scope of the HVAC systems



Relationship between refrigeration and air-conditioning fields

STUDENT WORKSHOP

- The Dept. of Mechanical Engineering, organized a student workshop on “Introduction to Robotics and Automation” from 18/06/2020 to 20/06/2020 by J.Subba Reddy, Associate Professor, Lakireddy Bali Reddy College of Engineering, Mylavaram. J.Subba Reddy, Dr.K.Murahari, A.Nageswara Rao, R.Praveen Kumar coordinated the event.

Industrial Robots

1921

The term “*robot*” (robota) was used the first time by the Czechian writer **Karel Capek** in his play “Rossum’s Universal Robot”.

→ “Man creates a robot as a forced labour to serve him. But in the end the robot kills man!”

1941

The science fiction writer **Isaac Asimov** first used the word “**robotics**” to describe the technology of robots.

He proposed also the “**Laws of Robotics**” :

→ Law 1: *Robots may not injure a human!*
 → Law 2: *Robots must obey orders given by human beings!*



Karel Capek, 1936



Isaac Asimov

Introduction to industrial robots

Cylindrical Coordinate Robots





Source: Pendo Industrial

Spherical Coordinate Robots





Source: Omnicore



Kinematic structures of robots

ALUMNI INTERACTIONS

- The Department of Mechanical Engineering, organized a alumni interaction program on “Career guidance towards core sector” for B.Tech final year students on 11/05/2020 by S.Santhosh Kumar (13761A0351), Loco pilot Engineer, South Central Railway, Secunderabad coordinated by Dr.V.Dhana Raju and D.Mallikharjuna Rao.



Participants interaction with alumni



List of participants attended

- The Department of Mechanical Engineering, organized a alumni interaction program on “Job opportunities and higher education” for B.Tech final year students on 13.05.2020 by alumni V.Sethu Ram (01761A0326), Lead Engineer, Quest Global, Bangalore coordinated by Dr.V.Dhana Raju and D.Mallikharjuna Rao.



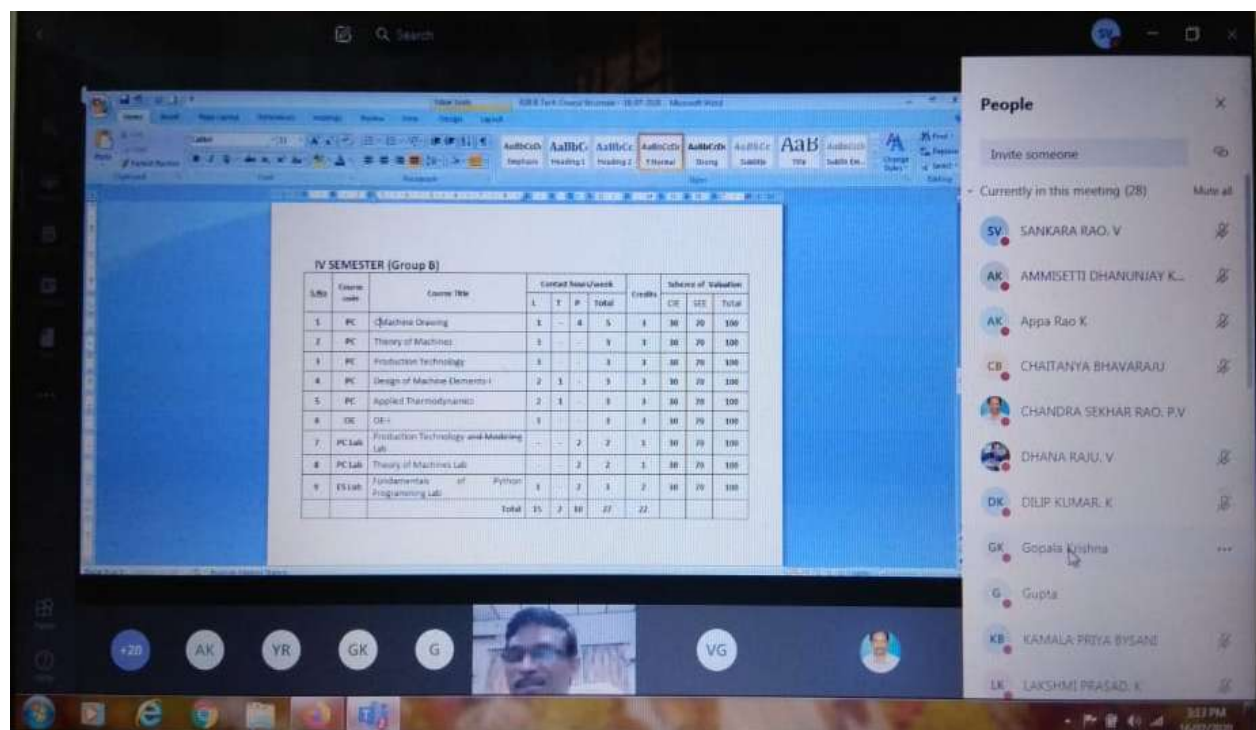
Participants interaction with alumni



List of participants attended

BOARD OF STUDIES MEETING

- The Department of Mechanical Engineering conducted Board of Studies meeting on 16.07.2020 through online for preparation of R20 UG and PG regulations and syllabus. The external BoS members Dr.A.Gopala Krishna, A.V.S.S.K.S.Gupta, Dr.A.Venu Gopal, R.Yogananda Reddy, V.Sethu Ram and all the internal faculty members are attended.



Discussion on R20 UG Syllabus in External BOS meeting

SUMMARY OF COLLOQUIUMS ORGANIZED

S. No	Name of The Faculty	Topic	Date
1.	Mr.A.Dhanunjay Kumar	Applications of Composites in Engineering	10.04.2020
2.	Mr.G.Naresh	Introduction to Engineering Materials	17.04.2020
3.	Mr.S.Srinivasa Reddy (Jr)	Introduction to Machine Design	01.05.2020
4.	Ms.S.Snigdha	Influence of cognitive distraction on driving errors among young drivers	08.05.2020
5.	Dr.N.SunilNaik	Introduction to self healing materials	15.05.2020
6.	Dr.P.Ravindra Kumar	A Colloquium on NBA- Criterion 3 Course Outcomes and Program Outcomes in connection with AICTE- Examination Reforms	14.06.2020
7.			26.06.2020
8.			27.06.2020

FDP's/STTP's/STC's/WORKSHOP's ATTENDED BY FACULTY

1. Dr.K.Appa Rao, Dept. of Mechanical Engineering has participated in five days faculty development program on “Inculcating Universal Human Values in Technical Education” organized by AICTE, New Delhi during 25.04.2020 to 29.04.2020.
2. Dr.S.Pichi Reddy, Dept.of Mechanical Engineering has participated in one week faculty development program on “Practical Aspects of Finite Analysis Using ABAQUS” organized by APSSDC, Guntur during 18.04.2020 to 24.04.2020.
3. Dr.P.Ravindra Kumar, Dept. of Mechanical Engineering has participated in one week faculty development program on “Practical Aspects of Finite Analysis Using ABAQUS” organized by APSSDC, Guntur during 18.04.2020 to 24.04.2020.
4. Dr.P.Ravindra Kumar, Dept. of Mechanical Engineering has participated in a faculty development program on “Examination Reforms” organized by AICTE, New Delhi during 22.04.2020 to 25.04.2020.
5. Mr.J.Subba Reddy, Dept.of Mechanical Engineering has participated in one week faculty development program on “Practical Aspects of Finite Analysis Using ABAQUS” organized by APSSDC, Guntur during 18.04.2020 to 24.04.2020.
6. Mr.J.Subba Reddy, Dept.of Mechanical Engineering has participated in a faculty development program on “Automotive Structures Design Using CATIA” organized by APSSDC, Guntur during 30.04.2020 to 02.05.2020.
7. Dr.Murahari Kolli, Dept.of Mechanical Engineering has participated in a faculty development program on “OpenFOAM training” organized by Prakasam Engineering College, AP from 17.04.2020 to 23.04.2020.
8. Mr.B.Sudheer Kumar, Dept.of Mechanical Engineering has participated in one week faculty development program on “Practical Aspects of Finite Analysis Using ABAQUS” organized by APSSDC, Guntur during 18.04.2020 to 24.04.2020.
9. Mr.B.Sudheer Kumar, Dept.of Mechanical Engineering has participated in a faculty development program on “Automotive Structures Design Using CATIA” organized by APSSDC, Guntur during 30.04.2020 to 02.05.2020.
10. Mr.Ch.SivaSankaraBabu, Dept.of Mechanical Engineering has participated in one week faculty development program on “Practical Aspects of Finite Analysis Using ABAQUS” organized by APSSDC, Guntur during 18.04.2020 to 24.04.2020.
11. Mrs.B.KamalaPriya, Dept.of Mechanical Engineering has participated in a faculty development program on “Automotive Structures Design Using CATIA” organized by APSSDC, Guntur during 30.04.2020 to 02.05.2020.
12. Mr.A.Dhanunjay Kumar, Dept.of Mechanical Engineering has participated in a faculty development program on “Machine Learning and Data Analytics Using Python” organized by IIT Roorkee during 27.04.2020 to 05.05.2020.

13. Dr.S.Pichi Reddy, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
14. Dr.P.V.ChandraSekhara Rao, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
15. Dr.P.Vijay Kumar, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
16. Dr.P.Ravindra Kumar, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
17. Dr.Y.Appala Naidu, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
18. Dr.K.Dilip Kumar, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
19. Mr.S.Srinivasa Reddy, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
20. Mr.J.Subba Reddy, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
21. Mr.B.Chaitanya, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.

22. Dr.K.Murahari, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
23. Dr.V.Dhana Raju, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
24. Dr.N.SunilNaik, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
25. Mr.S.Srinivasa Reddy (Jr), Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
26. Mr.B.Sudheer Kumar, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
27. Mr.Ch.SivaSankaraBabu, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
28. Mr.K.V.Viswanadh, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
29. Mr.A.Naresh Kumar, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
30. Mr.K.Narayana, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
31. Mr.S.Rami Reddy, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
32. Mr.A.Nageswara Rao, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
33. Mr.K.Lakshmi Prasad, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.

34. Mr.V.Sankararao, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
35. Mrs.B.Udaya Lakshmi , Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
36. Mr.D.Mallikharjuna Rao, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
37. Mr.R.Praveen Kumar, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
38. Mrs.B.KamalaPriya, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
39. Mr.A.Dhanujay Kumar, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
40. Mr.G.Nares, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
41. Mrs.S.Snigdha, Dept.of Mechanical Engineering has participated in a faculty development programon“Modelling and Optimisation Techniques for Materials and Manufacturing Processes” organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram from 18.05.2020 to 22.05.2020.
42. Dr.S.Pichi Reddy, Dept.of Mechanical Engineering has participated in a faculty development programon“Outcome Based Education and Accreditation” organized by IILM, Greater Noida from 25.05.2020 to 29.05.2020.
43. Dr.P.Vijay Kumar, Dept.of Mechanical Engineering has participated in a faculty development programon“Materials for Thermal and Renewable Energy Research” organized by Sri Sai Institute of Technology, Chennai from 20.5.2020 to 24.5.2020.
44. Dr.P.Ravindra Kumar, Dept.of Mechanical Engineering has participated in a faculty development programon“Moodle Learning Management System” organized by Sinhgad Institute of Technology, Pune from 01.05.2020 to 6.05.2020.
45. Dr.K.Dilip Kumar, Dept.of Mechanical Engineering has participated in a faculty development programon“Renewable Energy Sources” organized by Cummins Engineering College, Nagpur from 15.5.2020 to 21.5.2020.
46. Dr.V.Dhana Raju, Dept.of Mechanical Engineering has participated in a faculty development programon“Outcome based Education and Accreditation” organized by IILM College of Engineering and Technology, Kerala from 25.5.2020 to 29.5.2020.
47. Dr.V.Dhana Raju, Dept.of Mechanical Engineering has participated in a faculty development programon“Innovations and Research Trends in Mechanical Engineering” organized by KallamHarinadhareddy Institute of Technology, Guntur from 18.05.2020 to 22.05.2020.

48. Dr.V.Dhana Raju, Dept.of Mechanical Engineering has participated in a faculty development programon“Online Teaching Etiquette and Best Practices” organized by Santhiram Engineering College from 10.5.2020 to 15.5.2020.
49. Mr.S.Srinivasa Reddy, Dept.of Mechanical Engineering has participated in a faculty development programon“Outcome Based Education and Accreditation” organized by IILM, Greater Noida from 25.05.2020 to 29.05.2020.
50. Dr.P.Vijay Kumar, Dept.of Mechanical Engineering has participated in a faculty development programon“Materials for Thermal And Renewable Energy Research” organized by Sri Sai Institute of Technology, Chennai from 20.5.2020 to 24.5.2020.
51. The following are the list of faculty attended a five day faculty development program on “Advancements in Phase change material based Thermal and Renewable Energy Technologies” from 01.06.2020 to 05.06.2020 organized by Dept.of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram.

S.No	Name of the Faculty	Designation
1.	Dr.K.Appa Rao	Professor & Principal
2.	Dr.S.Pichi Reddy	Professor &HoD
3.	Dr.P.V.ChandraSekar Rao	Professor & COE
4.	Dr.P.Vijay Kumar	Professor
5.	Dr.P.Ravindra Kumar	Professor
6.	Dr.Y.Appala Naidu	Professor
7.	Dr.K.Dilip Kumar	Professor
8.	S.Srinivasa Reddy	Assoc. Prof.
9.	J.Subba Reddy	Assoc. Prof.
10.	B.Chaitanya	Assoc. Prof.
11.	Dr.MurahariKolli	Assoc. Prof.
12.	Dr.V.Dhana Raju	Assoc. Prof.
13.	Dr.N.SunilNaik	Assoc. Prof.
14.	S.Srinivasa Reddy	Sr.Asst.Prof.
15.	B.Sudheer Kumar	Sr.Asst.Prof.
16.	Ch.SivaSankaraBabu	Sr.Asst.Prof.
17.	K.V.Viswanadh	Sr.Asst.Prof.
18.	A.Naresh Kumar	Sr.Asst.Prof.
19.	S.Rami Reddy	Asst.Prof.
20.	K.Narayana	Sr.Asst.Prof.
21.	A.Nageswara Rao	Asst.Prof.
22.	K.Lakshmi Prasad	Asst.Prof.
23.	V.Sankararao	Asst.Prof.
24.	B.Udayalakshmi	Asst.Prof.
25.	Mallikarjuna Rao Dandu	Asst.Prof.
26.	R.Praveen Kumar	Asst.Prof.
27.	B.KamalaPriya	Asst.Prof.
28.	A.Dhanunjay Kumar	Asst.Prof.
29.	G.Naresh	Asst.Prof.
30.	S.Snigdha	Asst.Prof.

52. The following is the consolidated list of FDPs/STTPs/Workshops/Webinars attended by faculty from 15.03.2020 to 30.06.2020.

S.No.	Name of the Faculty	FDPs/STTPs/Workshops/Webinars		
		1Day	2-5Days	>5Days
1	Dr.K.Appa Rao		1	
2	Dr.S.Pichi Reddy	8	7	2
3	Dr.P.V.ChandraSekhara Rao	3	2	
4	Dr.P.Vijay Kumar	7	5	1
5	Dr.P.Ravindra Kumar	7	5	1
6	Dr.Y.Appala Naidu		2	
7	Dr.K.Dilip Kumar	3	9	1
8	S.Srinivasa Reddy	16	5	
9	J.Subba Reddy	27	15	10
10	Dr.V.Dhana Raju		5	
11	Dr.K.Murahari	8	6	4
12	B.Chaitanya	4	2	
13	Dr.N.SunilNaik	2	3	
14	S.Srinivasa Reddy (Jr)	2	3	
15	B.Sudheer Kumar	4	6	2
16	Ch.SivaSankaraBabu	9	6	1
17	K.V.Viswanadh	11	4	1
18	A.Naresh Kumar	2	2	1
19	K.Narayana		2	
20	S.Rami Reddy	5	4	2
21	A.Nageswara Rao	6	6	2
22	K.Lakshmi Prasad	4	2	2
23	V.Sankararao	16	8	2
24	B.Udaya Lakshmi	3	4	1
25	B.KamalaPriya	8	10	1
26	R.Praveen Kumar	2	1	
27	D.Mallikharjuna Rao	11	5	
28	A.Dhanunjay Kumar	5	8	6
29	G.Naresh	1	1	
30	S.Snigdha	5	5	2
Total		179	144	42

FACULTY ACHIEVEMENTS

COURSERA ONLINE CERTIFICATIONS

- The following are the details of faculty completed the coursera online courses.

S.No.	Name of the Faculty	Name of the Course	Duration of course	Institute/ Organization
1.	Dr.S.Pichi Reddy	3D Printing and Applications	4 weeks	ILLINOIS
2.	Dr.P.Vijay Kumar	Writing emails in english	5 weeks	Georgia Tech University, USA
3.	Dr.P.Ravindra Kumar	Writing emails in english	5 weeks	Georgia Tech University, USA
4.	Dr.Y.Appala Naidu	Introduction to Basic Vibrations	< 8 Weeks	Korea Advanced Institute of Science and Technology (KAIST)
5.	Dr.K.Dilip Kumar	Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading	< 8 Weeks	Georgia Institute of Technology
		Statistical Molecular Thermodynamics	> 8 Weeks	University of Minnesota
		Air Pollution – a Global Threat to our Health	8 Weeks	University of Copenhagen
		Mechanics of Materials III: Beam Bending	< 8 Weeks	Georgia Institute of Technology
		Spreadsheets for Beginners using Google Sheets	< 8 Weeks	RHYME
		Create Your First Python Program	< 8 Weeks	RHYME
		Introduction to Basic Vibrations	< 8 Weeks	Korea Advanced Institute of Science and Technology(KAIST)
		Mechanics of Materials II: Thin-Walled Pressure Vessels and Torsion	< 8 Weeks	Georgia Institute of Technology
6.	J.Subba Reddy	Understanding Research Methods	< 8 Weeks	University of London
		Introduction to Engineering Mechanics	8 Weeks	Georgia Institute of Technology
		Materials Science: 10 Things Every Engineer Should Know	8 Weeks	UCDAVIS
		Qualitative Methods	8 Weeks	University of Amsterdam
7.	B.Chaitanya	Learning how to learn	5 weeks	University of California
8.	Dr.V.Dhana Raju	Machine Learning for all	< 8 Weeks	University of London
		Introduction to thermodynamics:Transferring energy from here to there	< 8 Weeks	University of michigan,USA

		Understanding Research Methods	< 8 Weeks	University of London
9.	Dr.N.SunilNaik	Solar Energy Basics	< 8 Weeks	The State University of New York
10.	S.Srinivasa Reddy (Jr)	Machine Design part-I	5 weeks	Georgia Institute of Technology
11.	SudheerKumar.B	Applications in Engineering Mechanics	< 8 Weeks	Georgia Institute of Technology
		Epidemics, Pandemics and Outbreaks	< 8 Weeks	University of Pittsburgh
		Introduction to Engineering Mechanics	< 8 Weeks	Georgia Institute of Technology
		Mastering Statics	< 8 Weeks	Hongkong University of Science And Technology
		Matrix Algebra For Engineers	< 8 Weeks	Hongkong University
		MOM-II	< 8 Weeks	Georgia Institute of Technology
		MOM-III	< 8 Weeks	Georgia Institute of Technology
		MOM-IV	< 8 Weeks	Georgia Institute of Technology
		Create Your First Python Program	< 8 Weeks	Course Project Network
		Safety in The Utility Industry	< 8 Weeks	University of Newyork (Buffalo)
		Spread Sheets For Beginners Using Google Sheets	< 8 Weeks	Coursera Project Network
		Support Vector Machines With Scikit-Learn	< 8 Weeks	Coursera Project Network
		Applications in Engineering Mechanics	< 8 Weeks	Georgia Institute of Technology
		Epidemics, Pandemics and Outbreaks	< 8 Weeks	University of Pittsburgh
12.	Siva SankaraBabuChinka	Introduction to Engineering Mechanics	< 8 Weeks	Georgia Institute of Technology
		Applications in Engineering Mechanics	< 8 Weeks	Georgia Institute of Technology
		Create your First Python Program	< 8 Weeks	RHYME
		Mechanics of Materials-I : Fundamentals of Stress & Strain and Axial Loading	< 8 Weeks	Georgia Institute of Technology
		Mechanics of Materials-II : Thin - Walled Pressure Vessels and Torsion	< 8 Weeks	Georgia Institute of Technology
		Mechanics of Materials-III: Beam Bending	< 8 Weeks	Georgia Institute of Technology

		Mechanics of Materials-IV: Deflections, Buckling, combined Loading & Failure Theories	< 8 Weeks	Georgia Institute of Technology
		Introduction to Basic Vibrations	5 Weeks	Korea Advanced Institute of Science and Technology (KAIST)
		Spreadsheets for Beginners using Google Sheets	1 Week	Coursera Project Network
		Support Vector Machines with scikit-learn	1 Week	Coursera Project Network
13.	K.V.Viswanadh	wind energy	5 weeks	
		Project Management: The Basics for Success	4 weeks	
		CAM and Design Manufacturing for Mechanical Engineers with Autodesk Fusion 360	4 weeks	
		Simulation Analysis for Mechanical Engineers with Autodesk Fusion 360	4 weeks	
		Modeling and Design for Mechanical Engineers with Autodesk Fusion 360	4 weeks	
		Introduction to Mechanical Engineering Design and Manufacturing with Fusion 360	4 weeks	
		Multi-Axis CNC Toolpaths	4 weeks	
		3-Axis Machining with Autodesk Fusion 360	4 weeks	
		Creating Toolpaths for a CNC Lathe	4 weeks	
		Introduction to CAD, CAM, and Practical CNC Machining	4 weeks	
		Machine Design Part I	5 weeks	Georgia Institute of Technology
		Introduction to Thermodynamics: Transferring Energy from Here to There	8 weeks	
		Introduction to Google Docs	1 week	
		Material Behavior	6 weeks	
		Matrix Algebra for Engineers	4 weeks	
		Introduction to Advanced Vibrations	6 weeks	
		Ferrous Technology I	6 weeks	
		Introduction to Programming with MATLAB	9 weeks	

		Introduction to Engineering Mechanics	5 weeks	Georgia Institute of Technology
		Spreadsheets for Beginners using Google Sheets	1 week	
		Applications in Engineering Mechanics	5 weeks	
		Excel Skills for Business: Essentials	6 weeks	
		Material Processing	2 weeks	
		Ferrous Technology II	7 weeks	
		Autodesk Certified Professional: AutoCAD for Design and Drafting Exam Prep	2 weeks	
		Materials Science: 10 Things Every Engineer Should Know	5 weeks	
		Create Your First Python Program	1 week	
		Mastering Statics	7 weeks	
		Programming for Everybody (Getting Started with Python)	7 weeks	
		Support Vector Machines with scikit-learn	1 week	
		Introduction to Basic Vibrations	5 weeks	Korea Advanced Institute of Science and Technology (KAIST)
		Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading	5 weeks	Georgia Institute of Technology
		Mechanics of Materials IV: Deflections, Buckling, Combined Loading & Failure Theories	2 weeks	Georgia Institute of Technology
		Mechanics of Materials III: Beam Bending	5 weeks	Georgia Institute of Technology
		Mechanics of Materials II: Thin-Walled Pressure Vessels and Torsion	3 weeks	Georgia Institute of Technology
14.	A.Naresh Kumar	Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading	5 weeks	Georgia Institute of Technology
		Mechanics of Materials II: Thin-Walled Pressure Vessels and Torsion	3 weeks	Georgia Institute of Technology
		Create Your First Python Program	1 week	Coursera Project Network
		Mechanics of Materials IV: Deflections, Buckling, Combined Loading and Failure Theories	2 weeks	Georgia Institute of Technology

		Spreadsheets for Beginners using Google sheets	1 week	Coursera Project Network
		Support Vector Machines with scikit-learn	1 week	Coursera Project Network
		Epidemics, Pandemics and Outbreaks	4 Weeks	University of Pittsburgh
15.	S.Rami Reddy	Introduction to thermodynamics:Transferring energy from here to there	< 8 weeks	University of michigan,USA
16.	A.Nageswararao	Improve statistical inference	< 8 weeks	Eindhoven University of Technology
17.	K.Lakshmi Prasad	Create your first python program	8 Weeks	
		Mechanics of Materials I	8 Weeks	Georgia Institute of Technology
		Mechanics of Materials II	8 Weeks	Georgia Institute of Technology
		Mechanics of Materials-III	2 Weeks	Georgia Institute of Technology.
		Spread Sheets Beginners using Google Sheets	1 Week	Coursera Project Network
		Support Vector Machines with Scikit-learn	1 Week	Coursera Project Network
		Mecanicas of Materials IV: Deflections, Buckling, Combined Loading and failure theories	2 Weeks	Georgia Institute of Technology
18.	Sankararao.V	Introduction to Engineering Mechanics	< 8 Weeks	Georgia Institute of Technology
		Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading	< 8 Weeks	Georgia Institute of Technology
		Wind Energy	< 8 Weeks	Technical university of Denmark
		Introduction to Mechanical Engineering Design and Manufacturing with Fusion 360	< 8 Weeks	AUTODESK
		Introduction to Basic Vibrations	< 8 Weeks	Korea Advanced Institute of Science and Technology (KAIST)
19.	B.Udaya Lakshmi	Epdemicspandamics and outbreaks	> 8 Weeks	University of pittsburg
		Introduction to basic vibrations	< 8 Weeks	KAIST
		Create your first python program	< 8 Weeks	Coursera Project Network
		Support vector machines with scikit learn	< 8 Weeks	Coursera project network
		Spreadsheets for beineers using Google sheets	< 8 Weeks	Coursera project network

		Mechanics of materials-II	< 8 Weeks	Georgia Institute of Technology
20.	Kamala PriyaBysani	Create Your First Python Program	< 8 Weeks	RHYME
		Epidemics, Pandemics and Outbreaks	< 8 Weeks	University of Pittsburgh
		Spreadsheets for Beginners using Google Sheets	< 8 Weeks	RHYME
		Support Vector Machines with scikit-learn	< 8 Weeks	RHYME
21.	A.Dhanunjay Kumar	AI For Everyone	< 8 Weeks	Stanford University
		Basic English 1:Elementary	4weeks	Kings college London
		Programming for everybody	7 Weeks	University of Michigan
22.	GantalaNaresh	Mechanics of Materials II: Thin-Walled Pressure Vessels and Torsion	< 8 Weeks	Georgia Institute of Technology
		Materials Science: 10 Things Every Engineer Should Know	< 8 Weeks	UCDAVIS
23.	S.Snigdha	Introduction to personal branding	5 weeks	Georgia Institute of technology
		Introduction to Engineering mechanics.	5 weeks	Georgia Institute of Technology
		Advanced Manufacturing Enterprise	4 Weeks	The State University of New York

NPTEL ONLINE CERTIFICATIONS

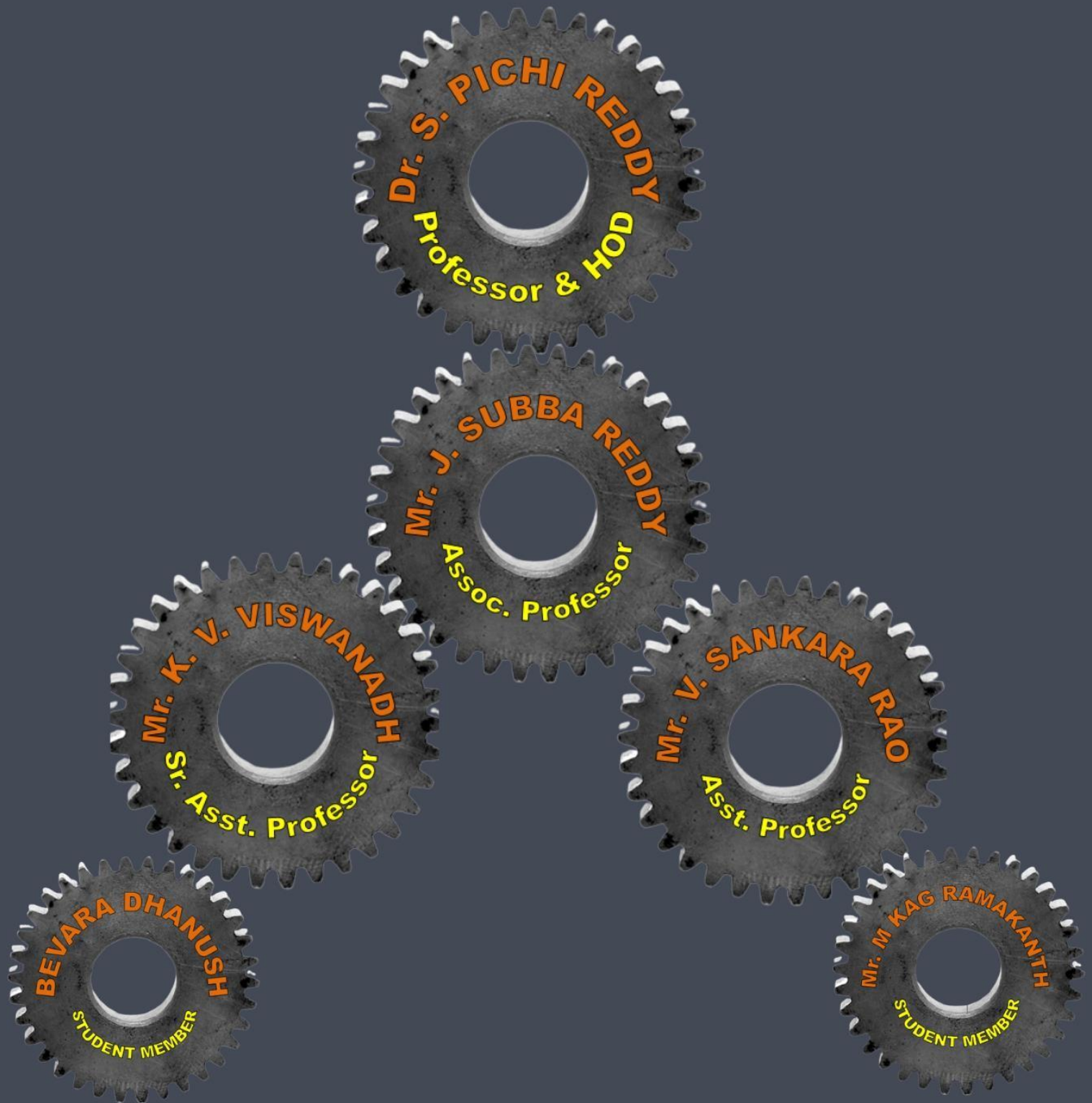
S. No.	Name of Faculty	Title of the course	Duration	Awarding Institute
1.	Dr.P.Vijay Kumar	Enhancement of Skills and personality	8 weeks	IIT Kanpur
2.	Dr.P.RavindraKumar	Power Plant Engineering	8 Weeks	IIT Roorkee
		Waste to Energy Conversion	8 Weeks	IITRoorkee
		Heat Transfer	12 Weeks	IIT Bombay
		NBA Accreditation and Teaching-Learning in Engineering (NATE)	12 Weeks	IIScBangalore
3.	J.Subba Reddy	Enhancing Soft skills and Personality	8 weeks	IIT Kanpur
4.	Dr.V.Dhana Raju	Power plant Engineering	8 weeks	IIT Roorkee
5.	S.Srinivasa Reddy (Jr)	Fundamentals of Machine Design	8 weeks	
6.	Ch.SivaSankaraBabu	Strucutral Dynamics	12 Weeks	IIT Hyderabad
7.	A.Nageswara Rao	Understanding Design Thinking and People Centred Design	4weeks	IIT Kanpur

8.	V.Sankararao	IC Engines & Gas Turbines	12 Weeks	IIT Guwahati
9.	A.DhanunjayKumar	Introduction to Mechanical Micro machining	12 weeks	IIT Kharagpur
10.	S.Snigdha	Enhancing Softskills and Personality	8 weeks	IIT Kanpur

ACKNOWLEDGEMENTS

The department expresses sincere thanks to all faculty, technical staff and students for contribution towards the technical magazine- mech pulse.

Editorial Board



DEPARTMENT OF MECHANICAL ENGINEERING
LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING
(Autonomous)

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