MECHANICAL ENGINEERING MAGAZINE 2020-21



dr ramesh jeeragal Hod

MECHANICAL ENGINEERING DEPARTMENT

THE DEPARTMENT OF MECHANICAL ENGINEERING IS A PART OF B.L.D.E.A'S V.P.DR. P.G. HALAKATTI COLLEGE OF ENGINEERING. & TECHNOLOGY. VIJAYAPUR SINCE ITS INCEPTION AND WAS ESTABLISHED IN 1980 WITH AN INTAKE STRENGTH OF 40. IN 1994, THE PROGRAM WAS FIRST APPROVED BY A.I.C.T.E. FOR AN INTAKE STRENGTH OF 60 (LETTER NO. F. 41- 43/B 111/RC-MB/93/16239) SUBSEQUENTLY, THE PROGRAM IS APPROVED EVERY YEAR. THE DEPARTMENT HAS GROWN TREMENDOUSLY OVER THE YEARS AND IS NOW RECOGNIZED AS THE MAJOR ENGINEERING DEPARTMENT OF THE INSTITUTE WITH PRESENT INTAKE STRENGTH OF 150 AND QUALITY TEACHING AND INSTRUCTION AT THE UG/PG LEVEL.

THIS PROGRAM HAS BEEN ACCREDITED BY THE NATIONAL BOARD OF ACCREDITATION(NBA) FOR ENGINEERING AND TECHNOLOGY, NEW DELHI FOR A PERIOD OF THREE YEARS FROM 31ST MARCH 2006 (LETTER NO. F. NO. NBA/ACCR-499/2004 DATED 07-04-2006). THIS PROGRAM WAS AGAIN **RE-ACCREDITED** THE NATIONAL ΒY BOARD OF ACCREDITATION (NBA) FOR ENGINEERING AND TECHNOLOGY, NEW DELHI FOR A PERIOD OF THREE YEARS FROM 30TH JUNE 2018 AND PRESENTLY IT'S ACCREDITED FOR A PERIOD OF THREE YEARS UP TO 30TH JUNE 2021(LETTER NO. F. NO. 25-29/2010-NBA DATED 08-11-2018). THE DEPARTMENT HAS THE STRENGTH OF 38 MULTIFACETED FACULTIES AND IS A HOMOGENEOUS BLEND OF EXPERIENCED AND IUNIOR FACULTY MEMBERS. THE AVERAGE EXPERIENCE OF TEACHING FACULTY IS ABOUT 13 YEARS. THE DEPARTMENT HAS ENOUGH INFRASTRUCTURE REQUIRED TO CATER FOR THE NEEDS OF MECHANICAL DEGREE ASPIRANTS.

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VISION

TO BE RECOGNIZED AS A DEPARTMENT OF EXCELLENCE BY PROVIDING HIGH QUALITY MECHANICAL ENGINEERING EDUCATION ALSO CONTRIBUTE IN RESEARCH RELEVANT TO INDUSTRIAL SOCIETY

MISSION

- IMPARTING QUALITY EDUCATION TO THE STUDENTS AND ENHANCING THEIR SKILLS TO MAKE THEM COMPETETATIVE IN INDUSTRY
- ESTABLISH CENTRES OF EXCELLENCE AND COLLABORATE WITH R&D ORGANIZATIONS TO FOSTER RESEARCH ACTIVITIES
- COLLABORATE WITH INDUSTRIES TO PROVIDE SOLUTIONS TO THE IDENTIFIED PROBLEMS
- PROMOTE ENTREPRENEURSHIP

EDITOR BOARD



Dr Ramesh Jeeragal

HOD MECH DEPT



Prof Rajendra Kattimani

ASSISTANT PROFESSOR

WORKSHOP/FDP/SHORT TERM COURSE TRAINING PROGRAMS

LIST OF STAFF WHO HAVE COMPLETED WEBINAR/WORKSHOP/FDP/SHORT COURSE TRAINING PROGRAMS

STAFF NAME: Vishwanath Hokrani

TOPIC:Refresher Course in Strength of Material PROGRAMME:STTP DATE :04/01/2021 to 08/01/2021 PLACE: Nitttr Kolkata

STAFF NAME:Praveen V Goggal

TOPIC:Applications of Artificial Intelligence and Machine Learning in Mechanical Engineering PROGRAMME:FDP DATE :2TH TO 16TH JAN PLACE: Kolhapur Institute Of Technolohy,Kolhapur

STAFF NAME: Prashant Puthani

TOPIC:Hydraulic Machines PROGRAMME:STTP DATE :18TH TO 22ND JAN Nitttr Kolkata

STAFF NAME:Prashant Puthani

TOPIC:"Hybrid Renewable Energy Systems and Waste to Energy - The Challenges and Sustainable Development PROGRAMME:STTP DATE :1ST FEB TO 6TH FEB PLACE: New Horozon College Of Engineering ,Bengaluru

STAFF NAME:Santosh Hiremath

TOPIC:3D Printing & Design" PROGRAMME:FDP DATE :8TH FEB TO 12TH FEB PLACE: All India Council For Technical Education

STAFF NAME: Vishwanath Hokrani

TOPIC:Renewable Energy Intervention In Industry, Commercial And Domestic Application PROGRAMME:FDP DATE :15TH TO 27TH FEB 2021 PLACE: Rajeev Gandhi Memorial College Of Engineering And Technology ,Nadhyal Ap

STAFF NAME: Vishwanath Hokrani

TOPIC:Automation Technologies – Phase 2 PROGRAMME:STTP DATE :APRIL 5TH – 10TH , 2021" PLACE: Ajay Kumar Garg Engineering College, Ghaziabad, Uttar Pradesh

STAFF NAME:Vishwanath Hokrani

TOPIC:Social Enterprise Management FPROGRAMME:DP DATE :6TH TO 15TH JUNE 2021 Aicte Training And Learning (Atal) Academy

STAFF NAME:Prashant Puthani

TOPIC:Alternative fuels for IC Engine FPROGRAMME:FDP DATE :02-08-2021 to 06-08-2021 PLACE:University College Of Engineering (UCET), Vinobabhave University Hazaribag.

STAFF NAME:**Sajidali Hatturkar**

TOPIC:Advances in Materials & Manufacturing FPROGRAMME:FDP DATE :12-07-2021 to16-07-2021 PLACE:Department Of Mechanical Engineering S J M Institute Of Technology Chitradurga – 577502

STAFF NAME:Rajendra Kattimani

TOPIC:Advances in Materials & Manufacturing FPROGRAMME:FDP DATE :12-07-2021 to16-07-2021 PLACE:Department Of Mechanical Engineering S J M Institute Of Technology Chitradurga – 577502

WEBINAR , CONFERENCES, PAPERS, AND GUEST SPEAKERS

WEBINAR AND WORKSHOP CONDUCTED BY FACAULTIES

Dr.I G Bhavi & Prof. V V Hokrani Conduct A One Day Workshop On Design Thinking, Criteria Thinking & Innovation Design On 11-01-2021.Event Speaker Danesh Warad, Assistant General Manager Tractor And Farm Equipment's (TAFE) ,Alvara Rajasthan

LIST OF WEBINAR CONDUCTED BY FACULTY

- Engine Combustion- Future trends(29 May 2021)
- Advanced Diesel engine Technology(12th June 2021)
- Prerequisites to be a Design Engineer (June 08/2021)
- Effective Problem Solving using 8D&SPC (5th June 2021)
- Carrer in Electric Vehical Technology for Mechanical,EC &EE Engineers(8th May 2021)
- Carrer Guidance and Scope in Mechanical Engineering(12 May 2021)
- Emerging areas of Mechanical Engineering(May 10/2021)
- Design Thinking, Critical Thinking and Innovation Design(11/01/2021)
- Webinar on Automotive R & D (Calibration Services and BS6 stage2 Emission Norms)

PARTICIPATION IN CONFERENCES, PAPERS, AND GUEST SPEAKERS BY FACULTY

Dr R N Jeeragal, speaker for the 5-Days (February 01-05, 2021) TEQIPIII Sponsored Online Course on "Advancement in the use of Alternative fuels in IC Engines organized by the Department of Mechanical Engineering University College of Engineering and Technology (UCET), Vinoba Bhave University Hazaribagh, Jharkhand.

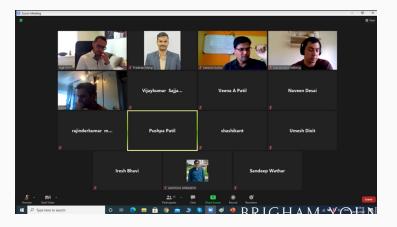
Prashant Puthani, Ramesh Jeeragal, Amaresha Patil has participated in a paper entitled"Influence of Simarouba biodiesel on engine performance and exhaust emissions of conventional compression ignition engine" At the conference on Advances in Thermal-Fluid Engineering (ATFE 2021) on 25th-26thnMarch, 2021, organized by Department of Mechanical Engineering, School of Technology, Pandit Deendayal Energy University, Gandhinagar, Gujarat, INDIA A webinar on "energy harvesting" that was held by PARUL Institute of Engineering and Technology on 11th May 2021 featured **Dr P V Malaji** as an expert speaker.

On 22nd January 2021, **Dr P V Malaji** delivered an inspirational talk "ESSENCE OF RESEARCH" organized by MBA PROGRAMME, A S PATIL, VIJAYAPUR COLLEGE OF COMMERCE.

MEMORANDUM OF UNDERSTANDING AND VGST FUND

MOU With Factory Mind AS ,Norway

The mechanical engineering department celebrates a proud moment. The CEO of the company FactoryMind AS, Norway, Santosh Kotnis, is also one of our alumni who graduated from the Mechanical Engineering Department BLDEA's. A Memorandum of Understanding was signed with FactoryMind AS, Norway. In the field of Industrial Automation (IoT, AIML), an interdisciplinary (faculty and students) team from BLDEACET will work with FactoryMind's experts in real-time projects.



VISION GROUP ON SCIENCE ANO TECHNOILOGY

Department of Electronics, Government of Karnataka List of Proposals recommended by VGST for funding during the year 2020-2021 Scheme: Centers of Excellence in Science, Engineeringa.ld Medicine (CESEM) Two of our faculties grabbed VGST fund For the project proposals

FucultyName;Dr P V Malaji Total amount; 0.25 Lakh

FucultyName:Dr.Shashikant Cholake Total amount :3 Lakh

S. No.	Details of Awardee	Subject Name	One-time grant to be released (Rs. in lakhs)	Total Amount (Rs. In lakhs) 6.25
,	Dr. Prodesp V Mulaji, Associate Professor, Department of Michaecal Engineering, BLD E A'S V.P DR P.G.Nakkets College of Engs, & Technology, Astron Raids, Vijargura - 586 203.	Mechanical Engineering	0.25	
	Dr. Viena 5. Soraganui, Professor, Department of Civil Engineering, B.V.V. Sangha's Busaveshwar Engineering College, Nijalingappa Road, Begakest - 587 302.	Cuil Engineering	0.25	0.25
,	Dr. Prasannakumara B C. Associate Professor, Department of Mathematics, Davanagere University, State Highway 76, Tholahunase, Davanagere - 577 002.	Computational and Mathematical Sciences	0.25	8.25
10	Dr. Hemawith P S, Assistant Professor, Department of Mathematics, Siddaganga institute of Technology, B.H. Road, Tumakuru - 572 103.	Computational and Mathematical Sciences	0.25	0.25
11	Dr. 8 H Shekar, Professor, Department of Computer Science, Mangalore University, Mangalogangotri , Mangalora, Dakahina Karenada - 574 299.	Computer Science/Information Science Engineering/Information Technology	0.25	0.25
12	Peol. B. Veskateka Perumal, Professor, Department of Electrical and Electronics Engineering, National Institute of Technology Kanataka, Sonivasnager PC, Southaka , Mangalura, Dakhina Kannade - 575 005.	Dectrical and Dectronics Engineering	0.25	0.25
13	Dr Shankar, G, Assistant Professor, Department of Mechanical Engineering, MrU College of Engineering, Near 1779, Channasandra, Kadugodi Post, Bengsluru - 560-567.	Mechanical Engineering	0.25	0.25
14	Dr. Amita K, Professor, Department of Pathology, Adichunchanagisi institute of Medical Sciences, B.G.Nagar, Nagamangala, Mandya - 571448.	Medical & Life Sciences	0.25	0.25
15	Dr. Pumima Madhivanan, Founder, Department of Public Health, Public Health Research Institute of India, # 85/8, Ambika, 2nd Main, 2nd Cross, Yadavagiri, Mysuru - 570 003.	Medical & Life Sciences	0.25	0.25
16	Dr. Dhanalakhmi, M, Assistant Professor, Department of Physics, Nrupathunga University, Nrupathunga Road, Sampangi Rama Nagar, Ambedkar Vieedhi , Bengaluru - 560 001.	Physics	0.25	0.25
	Prof. M.R.S. Rao Chairman VGST - Sub Committee INCASR, Jakkar Campus, Bangalore-560 064	hage 2 of 3	Yall	rof. C.N.R. Rao, r Charman Group on Science and B R, Jakkar Campus, Bangalo

9L 40.	Details of Principal Investigator	Title of the Project	Subject Name	One-time grant to be released (Rs. in lakhs)	Total Amount (Rs. in lakhs)	Cheque to be written in favour of as per proposal
12	Mr. MD Moyeed Abrar, Assistant Professor, Department of Computer Science & Engineering, Khaja Banda Nawaz College of Engineering, Kalaburagi - 585 104.	Experimental investigation of Solar Panel by using optimum thermal techniques for efficiency improvement in hot and dry regions of Karnataka	Electrical and Electronics Engineering	3.00	3.00	Principal, Khaja Banda Nawar College of Engineering
13	Dr A Karthikeyan, Assistant Professor, Department of EEE, National Institute of Technology Karnataka, Srinivasnagar PO, Surathkal, Mangaluru - STS 625.	Extraction of maximum power output from PV array using static reconfiguration scheme under non uniform irradiation conditions	Electrical and Electronics Engineering	3.00	3.00	Director, NITK
14	Dr. Prenala Bhande, Dr. Prenala Bhande, Assistant Professo, Department of CCI, Guru Nanak Dev Engineering Collega, Malloor Road, Bidar - 585 403.	Improving Network Life Time and QoS using Swarm Intelligence	Electronics and Communication Engineering / Telecommunication Engineering	3.00	3.00	Principal, GNDEC Bidar
15	Dr. B. Sriatha, Assistant Professor, Department of Electronics & Communication Engineering, Sri Saram College of Engineering, Sai Leo Nagar, Guddanahali Vilage, Samandur Post, Anekal - 562 106.	Smart Dustbin-The Future Waste Management	Electronics and Communication Engineering / Telecommunication Engineering	3.00	3.00	The Principal, Sri Sairam College, Bangalore
16	Dr. Shashikant Cholake, Assistant Pofessor, Department of Mechanical Engineering, B.L.D.E.A'S V.P.Dr.H.G. Halakatti College of Eng. & Technology, Ashram Road, Vijayapura - 586 103.	Numerical Investigation of Turbulance flow transition in presence of radiating fluids	Mechanical Engineering	3.00	3.00	Principal, BLDEA's V.P. Dr. P.G. Halakatti college of Engineering and Technology, Vijayapura
17	Dr. Syed Abbas Ali. Associate Professor, Department of Mechanical Engineering. SEOAB Instructure of Engineering & Technology, 624, Naurapur, Bagakat Road, Hudoo Cross, Vijepura - 586 221.	Study on the effects of various nanoparticles dispensed in watte cooking ol (NCCI) biodiced on Emission parameters of diesel engine	Mechanical Engineering	3.00	3.00	Principal, SECAB Institute of Engineering an Technology, Vijaypura
18	Dr. Devi Radhika, Assistant Professor, Department of Chemistry, Jain Deemed to be University, Faculty of Engineering and Technology, Jain Global Campus, Jakasandra Pott, Kanakapura Taku, Barnanagara Dutris - 550 027.	nanocomposites for enhanced photocatalytic	Nano Science & Technology	3.00	3.00	Registrar, Jain University



A Live Demonstration organized by the Department of Mechanical Engineering

A Live Demonstration was organized on 2nd and 3rd March, 2021 and the details are as under. Resource Persons: **Prof. S.V.Hiremath Prof. S.R.Doddi**

Topic: Live Demonstration on 3D Printing Technology

Resource persons Prof. S.V.Hiremath and Prof. S.R.Doddi of Mechanical Engineering Department presented seminar to the students on 3D Printing Technology by comparing traditional and modern methods and its applications in various fields. He also glanced on the basic principles used in additive manufacturing, different materials used in 3D printing, Different types of printers, Success stories. The Live session was very interesting for the students because of the real demonstration on 3D printer.

He explained Digital fabrication technology, also referred to as 3D printing or additive manufacturing, creates physical objects from a geometrical representation by successive addition of materials. Nowadays 3D printing technology is a fast-emerging technology used in the world. This technology increasingly used for the mass customization, production of any types of open source designs in the field of agriculture, in biomedical, automotive industry, locomotive industry and aviation industries. 3D printing technology can print an object layer by layer deposition of material directly from a computer aided design (CAD) model. He also explained about Training programmes and Internships conducted by Mechanical department at our institute to boost the technical skill using different methods used for 3D printer. This seminar was organized for Engineering and Diploma Students, Around 450 students have benefitted by attending the seminar.

This seminar was coordinated by

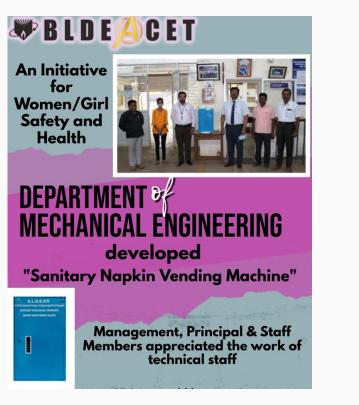
Prof.P.L.Puthani, Prof P.V.Goggal Prof.A.T.Patil.



Presentation By Prof S V Hiremath

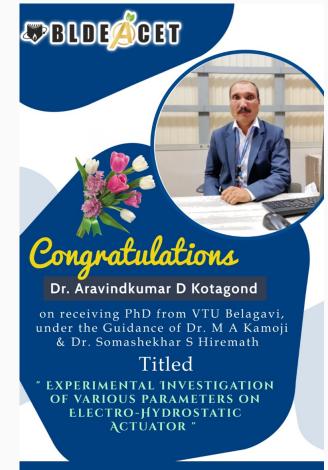


Mechanical Department instructor Mr Jagadish Marapur has Developed "Sanitory Napkin Vending Machine



CONGRATULATIONS

Proud Moment For Mechanical Engineering Department Professor Aravind Kumar Kotagond Has Successfully Completed PhD Degree Title "Experimental Investigation Of Various Parameters On Electro Hydrostatic Actuator " Under Guidance Dr M A Kamoji, KLECET Belagavi And Coguide: Dr. Somashekhar S H, IITChennai At Research Centre: Kle's Dr M S Sheshagiri College Of Engg. & Tech., Udyambag, Belagavi



DEPARTMENT OF MECHANICAL ENGINEERING



PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

- I. ESTABLISH A SUCCESSFUL CAREER IN MECHANICAL ENGINEERING OR RELATED FIELDS IN INDUSTRY AND OTHER ORGANIZATIONS WHERE AN ENGINEERING APPROACH TO PROBLEM-SOLVING IS HIGHLY VALUED.
- II. DEVELOP ABILITY AMONG STUDENTS TO SYNTHESIZE DATA AND TECHNICAL CONCEPTS FOR APPLICATION TO PRODUCT DESIGN.
- III.CONTRIBUTESIGNIFICANTLY IN MULTIDISCIPLINARY A WORK ENVIRONMENT WITH HIGH ETHICAL STANDARDS AND WITH THE UNDERSTANDING OF THE ROLE OF MECHANICAL ENGINEERING IN THE ECONOMY AND THE ENVIRONMENT.
- IV. EXCEL IN GRADUATE STUDY AND RESEARCH, REACHING ADVANCED DEGREES IN ENGINEERING AND RELATED DISCIPLINES.
- V. ACHIEVE SUCCESS IN PROFESSIONAL DEVELOPMENT THROUGH LIFE-LONG LEARNING.