

Mechzine

Department of Mechanical Engineering
Meerut Institute of Engineering & Technology
Volume - 7.0

From The HOD'S Desk

The spirit of improvement is not always a spirit of liberty; for it may aim at forcing improvement on an unwilling people. Mechanical Engineering is the largest of the engineering disciplines and a large number of mechanical engineers go into manufacturing of computer and electronic products, machinery and transportation equipment's. The department cares for student support, mentoring, tutoring, study skills workshops and career development. Mechanical Engineering students culminate their studies with a year-long capstone project requiring design problem solving, creative thinking, project planning and teamwork. A broad selection of technical electives encourages students to pursue special interests in design and manufacturing, energy and environmental issues, thermal and fluid sciences materials, dynamics & controls and robotics.

Mr, Dinesh Kumar

(Head of department)

Vision of the Department

To become a nationwide recognised department for research oriented quality technical education in line with emerging trends and evolving demands of society.

Mission of the Department

The mission of mechanical engineering department includes:

1. Embracing excellent teaching learning techniques to provide practical quality education that is commensurate with the emerging trends and industry demands.
2. To promote research in interdisciplinary areas by forging collaborations with global industries and establishing state-of-the-art research facilities in order to develop among students innovative and creative capabilities.
3. To mentor & guide young technocrats & inculcate them with the spirit of entrepreneurship along with ethics, value & Eco-sensitivity.

Activities

Debate competition is organised by literary club on "Netflix vs Novel" 30 students participated in this competition out of which 3 earns the prize.

CEO of career wheel limited Shamli Mr Varun Jain interacted with the students of final year for enlightening them about industry requirement now days and what they are expecting from new employee.

Vice President, HR Tata Steel interacted by a video conferencing with the students of Mechanical final year and enlighten them about online courses training module of tata steel.

Student Achievement

Robotics and automation club organised 4 week training on automation for final year students, these module were covered during course

P111- Basic Pneumatic P122- Advanced Pneumatics EP211- Basic Electro-Pneumatic EPA311- Electro-Pneumatic Automation with PLC, M711- Mechatronics for factory Automation Introduction to Industry 4.0

41 students are trained in this automation training



Hardik Rastogi (ME 2nd year) and Nancy Rastogi registered their name in india book record by preparing bio diesel bike. This was national level event they won the first prize in that event.

Hardik Rastogi (ME 2nd year) and Nancy Rastogi participated in the event BEST OUT OF WASTE at Vidya Knowledge park, meerut and won the 2nd prize on national level



Hardik Rastogi and Nancy Rastogi participated in the frugal event organised by bijnor engineering college on the state level they won the 2nd prize in that event.

Dr. Pardeep Kumar with the help of Dr. Saumaya Shah and Mr. Sandeep Kumar has published a research paper entitled "Mixed-Mode Thermo Elastic Delamination Fracture Behavior of Composite Skin Stiffener Containing Interface Delamination" in Journal of Materials Research and Technology (Impact Factor: 3.327), Sep. 2019.

Dr. Pardeep Kumar with the help of Dr. Ansar Ali and Mr. Sandeep Kumar has published a research paper entitled "Effect of impeller diameter on Nusselt number in mechanically agitated vessel" in International Journal of Numerical Methods for Heat & Fluid Flow (Impact Factor: 1.9), July 2019.

Dr. Tushar Jain and Dr. Pardeep kumar have participated in the AICTE recognized Faculty Development Program on "Outcome Based Education for Program Accreditation" at NITTTR Chandigarh from 18 Nov., to 22 Nov., 2019.

Mr. Vipin Sharma has published a research paper entitled "Effect of RE addition on wear behavior of an Al-6061 based hybrid composite." Wear journal, 2019.

Mr. Vipin Sharma has published a research paper entitled "Investigation of rare earth particulate on tribological and mechanical properties of Al-6061 alloy composites for aerospace applications." In Journal of Materials Research and TECHNOLOGY, 2019.

Dr. Naman jain has published a research paper entitled "Mechanical characterization and machining

Performance evaluation of rice husk/epoxy an agricultural waste based composite material" in Journal of the Mechanical Behavior of Materials 2019.

Dr. Naman jain has published a research paper entitled Dynamic Mechanical Analysis and Creep-recovery behaviour of Polyvinyl Alcohol based cross-linked Biocomposite reinforced with Basalt fiber in Mater. Res. Express 2019.

Dr. Naman jain has published a research paper entitled "Creep and dynamic mechanical behavior of cross-linked polyvinyl alcohol reinforced with cotton fiber laminate composites" in J Polym Eng 2019.

Mr. Bhupendra Singh Chauhan has published a research paper entitled "Effect of varying biogas mass flow rate on performance and emission characteristics of a diesel engine fuelled with blends of n-butanol and diesel", Journal of Thermal Analysis and Calorimetry, (2019), (SCI Impact Factor 2.471).

Patents

Our innovation and research team filed patent in the title “of Invention-Influence of Biogas Mass Flow Rate and Rice Bran Based Biodiesel with Diesel on A Dual Fuel Engine” with a collaboration with industry expert as well as other country researchers.

ApplicationNumber-201911041108

Applicant Name - Sunil Kumar Mahla

Geetesh Goga

Bhupendra Singh Chauhan

Amit Dhir

Our innovation and research team filed a patent in the title “High speed cutting pressurized coolant flow internal cooling drill bit.” With the team effort of other faculty members.

Application Number-201911049523,

Applicant Name – Nomendra Tomar

Awani Bhushan

Swapan Suman

Published books

Mr. Bhupendra Singh Chauhan published book in the title “Investigation of Diesel-Eucalyptus biodiesel fuelled CI Engine”

ISBN978-613-8-91749-6,

[https://www.morebooks.de/store/qb/book/investigations-on-diesel-eucalyptus-biodiesel-fueled-ci-engine/isbn/978-613-8-91749-6,](https://www.morebooks.de/store/qb/book/investigations-on-diesel-eucalyptus-biodiesel-fueled-ci-engine/isbn/978-613-8-91749-6)

Authors-Geetesh Goga,

Sunil Kumar Mahla,

Bhupendra Singh Chauhan [SP]

Mr. Naman Jain published book in the title “Lightweight Graphene Composite Materials”

[TNF_01_K418248_C001_docbook_new_indd.indd](#)

Authors-Akarsh Verma

Naman Jain

Avinash

Parashar

Vinay K. Singh

M. R.

Sanjay

Suchart Siengchin

Funded projects

International Travel Grant to visit Salt Lake City, Utah, USA for IMECE-11122, ASME on 11-14 November 2019 from SERB (ITS/2019/005121), DST India Principle Investigator:
Dr. Bhupendra Singh Chauhan



Project grant Integrated approach towards socio-economic development of ST community in Himachal Pradesh, DST, SEED/TITE/2018/55, Rupees Sixty two lakhs seventy one thousand only, 3 years (2019-2022), (Presentation- Revision-Bank Detail, PFMS etc. Communicated), Role-PI.

Principle Investigator:
Dr. Bhupendra Singh Chauhan



Improving living condition of SC communities using paddy waste (Parali) for energy generation and organic farming, DST, Rupees Fifty Lakh, 2 years (2019-2021), Role-PI.
Principle Investigator:
Dr. Bhupendra Singh Chauhan



Project Title: "Characterization of PVA based Crosslinked Composites Reinforced with Functionalized Nanoparticles/Fiber"

Sponsor: Dr. A.P.J. Abdul Kalam Technical University Uttar Pradesh, Lucknow under Technical Education Quality Improvement Programme-III, India
Duration: 1 year (currently working)
Principle Investigator: Dr. Naman Jain
Funded amount-3 lakhs



Project Title: "AI based controlled environment tubular furnace of maximum working temperature 1200°C"

Sponsor by: Collaborative Research and Innovation Program (CRIP), funded under TEQIP-III of AKTU, Lucknow (2019-20).
Project Duration: 1 year (June 2019-Ongoing)
Amount Awarded/Sanctioned: Rs. 3.0 Lakhs

Principle Investigator: Dr. Siddhartha Jain



*Work Hard Dream Big Never
Give Up*