

Swami Vivekananda University, Barrackpore

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## DEPARTMENT OF MECHANICAL ENGINEERING

### “NO TECH WITHOUT MECH”

The department of Mechanical Engineering, Swami Vivekananda University offers state of the art education, well equipped classroom, high end laboratories and cutting-edge research facilities for the students to create, enable, apply and spread knowledge in the advanced field of Mechanical Engineering. In addition to curriculum courses, the department contributes to value added courses, guest lecture by industry experts, industrial visits and various add on activities for the students to make them future ready technocrats of academia & industry. We are committed to work in emerging areas and to develop sustainable technologies & innovations pertaining to mechanical engineering and its allied sectors.

## WHAT'S NEW

- Research paper published
- Consultancy work started through Centre of advanced manufacturing.
- Active participation on Ministry of Education and AICTE sponsored national event “Innovation, Design and Entrepreneurship (IDE) Boot Camp.
- TechnoMania & Project Exhibition cum competition.
- Setup a NABL certified Lab “Centre for materials testing and Characterization.
- New faculty Associated.
- Organize a Workshop on Entrepreneurship Awareness Programme
- Summit school visit in our 3D printing lab and Advance manufacturing lab.

## EDITORIAL

In pursuit of Swami Vivekananda University's vision of excellence, innovation, and entrepreneurship, the Department of Mechanical Engineering is committed to contribute the best possible and feels immense pleasure to share this newsletter with all of you. The department has a vision to emerge as an excellent center of skill-based learning in Mechanical Engineering to develop professionals who are technically competent, ethical and capable of addressing the changing societal needs with credibility. The department has focused to continued enhancement of its facility to cater the overall anticipation of industry and academia. The recent strides made by mechanical engineering department underscore a commitment to excellence in research, innovation, and education. Notable achievements include the publication of research papers and patents, initiation of consultancy work, and active involvement in national events promoting innovation and entrepreneurship. The establishment of a NABL certified lab further enhances our capabilities, while the addition of new faculty members enriches our academic community. Workshops and school visits reflect our dedication to fostering entrepreneurship and technological advancement, solidifying our position as a hub for cutting-edge research and education. For all these achievements, I express my sincere thanks to our students and faculty members for their invaluable contributions and countless efforts. We conclude with a commitment to pursuing excellence and look forward to sharing an enhanced version in the next issue.

HOD (Mechanical Engineering)

### **Research Paper published:**

Six journals have been published in various well-known journals, such as Case studies in Thermal Engineering, Journal of Mines, Metals & Fuels and Structural health monitoring etc.

### **Consultancy work**

The Centre of Advanced Manufacturing has initiated consultancy services in partnership with the efficient CNC industry, Kolkata. Leveraging cutting-edge technology and expertise, this collaboration aims to optimize manufacturing processes, streamline operations, and enhance overall efficiency. Through tailored solutions and innovative strategies, the consultancy offers valuable insights and guidance to businesses seeking to maximize productivity and competitiveness in today's dynamic market. With a focus on advanced techniques and industry best practices, this initiative promises to drive continuous improvement and foster growth for both the CNC industry and its associated partners.



**Centre for Advanced Manufacturing**

Department of Mechanical Engineering  
Swami Vivekananda University







**Active participation on Ministry of Education and AICTE sponsored national event “Innovation, Design and Entrepreneurship (IDE) Boot Camp.**

SVU organized a Boot camp (Phase II) on Innovation, Design and Entrepreneurship (IDE) sponsored by the Ministry of Education and AICTE, Govt. of India from 29<sup>th</sup> January to 02<sup>nd</sup> February 2024. Faculties and students of the department of mechanical engineering are active participation in this programme.

The outcomes from an Innovation, Design, and Entrepreneurship program are multifaceted. Participants gain the skills to ideate, prototype, and execute innovative solutions. They develop a deep understanding of user needs through design thinking methodologies, resulting in products and services that resonate with customers. Furthermore, entrepreneurship training equips individuals with the tools to navigate business challenges, fostering job creation and economic growth. Ultimately, the program cultivates a culture of innovation, empowering individuals to drive positive change in their communities and industries.

**TechnoMania & Project Exhibition cum competition**

Swami Vivekananda University, Barrackpore, is abuzz with excitement as it gears up for its much-anticipated event, TechnoMania & Project Exhibition cum competition. This dynamic event serves as a platform for budding technocrats and innovators to showcase their ingenuity and creativity. From cutting-edge technology to innovative projects, participants from various disciplines come together to demonstrate their prowess and exchange ideas. With a spirit of healthy competition permeating the air, the event promises to be a melting pot of innovation, collaboration, and learning. Through TechnoMania, Department of Mechanical Engineering reaffirms its commitment to fostering a culture of innovation and excellence among its students, inspiring them to push the boundaries of conventional thinking and embrace the limitless possibilities of technology.



**Setup a NABL certified Lab “Centre for materials testing and Characterization.”**

The Mechanical Engineering Department, SVU proudly established the NABL certified Lab, "Centre for Materials Testing and Characterization." This state-of-the-art facility employs advanced technology and expert personnel to deliver precise analyses of diverse materials. Accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL), it ensures adherence to stringent quality standards. Through comprehensive testing services, it caters to industry needs, guaranteeing accurate results for enhanced reliability. Our commitment to excellence fosters trust and innovation in material assessment within the engineering community.

**Centre for Material Testing and  
Characterization  
Central Research Facility  
(NABL certified Instrumentation)**

Instruments Instituted by:

Instron, United Kingdom  
Fine Testing Instrument, India



Department of Mechanical Engineering  
Swami Vivekananda University

**New faculty Associated with the department:**

Two faculty members have been joined in the month of February 2024,

1. Dr. Sujit Mazumder, Assistant Professor.
2. Dr. Bikash Panja, Professor.



### **Organize a Workshop on Entrepreneurship Awareness Programme:**

Swami Vivekananda University organized a workshop on ENTREPRENEURSHIP AWARENESS PROGRAMME (EAP) FOR YOUTH MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP, GOVT. OF INDIA sponsored by Hindustan Unilever Limited (HUL) with collaboration with NATIONAL INSTITUTE FOR ENTREPRENEURSHIP AND SMALL BUSINESS DEVELOPMENT (NIESBUD) MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP, GOVT. OF INDIA. The workshop enhanced youth awareness of entrepreneurship, equipped them with essential skills for business success, facilitated networking with industry experts, showcased government support initiatives, encouraged innovation, and inspired participants to pursue entrepreneurial ventures, fostering economic growth and empowerment.



### **Summit school visit in our 3D printing lab and Advance manufacturing lab**

Recently, Summit School had the enriching opportunity to visit our Mechanical Engineering Department for cutting-edge 3D printing lab and Advanced Manufacturing facility. The visit aimed to acquaint students with state-of-the-art technology and its applications in modern manufacturing. Through hands-on demonstrations and interactive sessions, students explored the intricacies of 3D printing, learning about its potential in prototyping, customization, and innovation. Moreover, they gained insights into advanced manufacturing processes, witnessing how precision engineering contributes to industrial evolution. The visit not only broadened their understanding of technology but also inspired future engineers and innovators, fostering a spirit of curiosity and discovery.

