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## NEWSLETTER

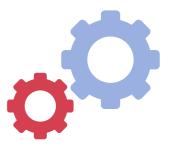
### **DON BOSCO INSTITUTE OF TECHNOLOGY**

DEPARTMENT OF MECHANICAL ENGINEERING



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### MESSAGES



DR. PRASANNA NAMBIAR, PRINCIPAL, DBIT

### PRINCIPAL'S DESK

The department of mechanical engineering at DBIT has been a very vibrant and progressive department. The faculty team along with the non-teaching staff is committed to providing the students with unique learning experiences in curricular as well as co-curricular domains. As the industry gears up for Manufacturing 4.0, the department has taken the initiative to provide valuable workplace skills through value-added courses and certification programs. The student chapters have forged a strong link with the industry with visits and expert talks. The MoUs with industry and industry associations have helped provide opportunities for faculty and students to gather valuable experience in working on real-life problems. The quality of student projects has also improved by leaps and bounds over the years. However, the department needs to drive the digital agenda in mechanical engineering. Students have to be at equal ease with programming and allied areas as with core mechanical subjects. The demand for mechanical engineering is presently on the wane but this is a purely temporary phenomenon driven by unsubstantiated speculation. The department needs to use this opportunity to reposition itself as an agile unit that willingly and enthusiastically responds to the varying demands of the workplace. I am confident that the faculty and students of the department will take this challenge and march ahead with renewed confidence and vigor. I wish the department the very best.

### HOD'S DESK

It gives me immense pleasure to present you the annual newsletter of Department of Mechanical Engineering. We are committed to impart a quality education with hands on experience to our students and ensure holistic development of students through Three-track Program viz. Academic, Aspirational & Wellness. We are making conscious efforts through student-centric & student -driven activities so that students would realize their passion over the span of four years while still they are on our campus. Our efforts are aimed at improving student's employability and transforming them into responsible citizens. We have good connect with industry, but keep on improving industry- institute relations for benefit of students and faculty. We are also successfully running an Honors Degree Course in EV and looking forward to launch similar programs in Robotics & Automation and 3D printing. At DBIT, we believe that every engineer must contribute towards deriving sustainable solutions that can solve the industrial as well as societal problems. The creative and innovative ideas are often generated at educational level by the young, enthusiastic and creative minds which may lead to start-ups. The Start-up is a buzzword in India today and we endeavor to convert research activity into entrepreneurial ventures of students and faculty as well. In order to ensure impact and substantial contribution to the department, institute and society in general; the students, staff and faculty members of the department are committed to complete the Mini & Major projects so that one of the outcomes such as a copyright, a research paper, a patent or an MVP is attained. With these goals on our minds, we expect that department will progress with leaps and bounds in near future.



DR. PRADEEPKUMAR SURYAWANSHI, PHD (MECH), IIT BOMBAY

### **STUDENTS' MESSAGES**

#### **TARUN MULANI**

DBIT has played an instrumental role in enabling me to realize my true potential. The warmth of the college campus, excellent facility and staff motivates every student to learn positive behavior and many lessons for life after joining here. There is a long list of inter-college competitions, sporting and cultural, activities, as well as technical clubs like ISHRAE, DBIT-Maths Physics Club, Xanthium racing for over all development and growth. I had immense pleasure studying here and was enchanted by the faculty's dedication, expertise and willingness to go extra mile to support students. The professors always motivate every student to excel according to their potential caliber. In spite of the pandemic there were no hurdles and hiccups in the learning process all thanks to the dedicated and friendly professors who taught us patiently with extreme ease and simplicity. It had been a wonderful experience at DBIT. Here, I have learnt that success is a journey, not the destination.





#### **SAGAR SINGH NEGI**

I am very happy that I have completed my engineering from Don Bosco Institute of technology(DBIT). I would like to thank DBIT for supporting me at every turn during those crucial years of the life. I remember being a shy introvert on the first day of my class. I had no idea that four years later, I'd be sitting here writing down my experience as I opted for my BE undergraduate course in Mechanical Engineering at DBIT. At DBIT, there is a close bond between the professors and the students. I also want to thanks my teachers very much because of them I got an opportunity to do an internship and also got to do a free course in design. I would like to express my gratitude to all the teaching and non-teaching faculties for assisting me in any manner they could. My gratitude and appreciation to DBIT's Training and Placement Department for their continuous assistance throughout this journey for determining the next step for my future & paved a clear goal. Thank you DBIT; it was a wonderful experience and a memory to last a lifetime

### **TOP ACADEMIC PERFORMER**

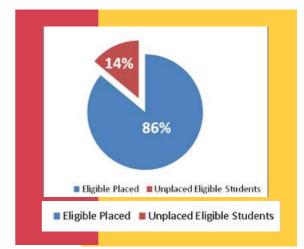
Strong academic is the backbone of the institute. Our department strives hard to maintain it. Many students of the department have achieved distinction and the top among them are listed.



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### **PLACEMENT & INTERNSHIP**

The effort of the department in Academic, Cocurricular, and extracurricular activities reflects the recruitment and overall development of students. The department continues to retain its best efforts. Almost 86% students were placed at repute industries and few have opted for higher studies.



### **INTERNSHIP**

The training and placement team takes every effort to provide internships to students in the best industries. This helps the students to upgrade their industrial knowledge and helps to understand the ongoing process and latest technologies. More than **59** students have availed themselves of internships in core mechanical-related companies.

Wellness forever Medicare Pvt Ltd	PepsiCo	Arsh Hyundai Service Center
Godrej & Boyce Mfg. Co. Ltd.	White hat Jr	Oriental Containers Ltd
Tata Motors	Reliance Retail	IOCL Gujrat Refinery
Maruti Suzuki Arena	Tata Power Thermal Power Plant	Godrej and Boyce Mfg
Royal Enfield	Central Railway Locomotive W/s	Indian Railways, Parel
Mazgaon Dock Shipbuilders Ltd.	ARCON	Hindalco
Siemens	Sharp Engineering	JSW Steel Limited
Ram Motor Cycle	N.N. Control	Exide Industries Ltd.

### **INNOVEX**

INNOVEX is a platform provided by the Institute for the final year students to showcase their year-long effort in their projects and help them in open-ended discussions and deliberations for improving the scope of the project. During 2022-23, department also allowed participation of third year mini projects Around 45 projects were exhibited.

Mr. Sarjerao Kasar (Engineering Coordinator, Pr.Engineer/Engineering Management), Mr. Nipun Mehta (Founder CEO-Sphere Engg Ltd, Hon. Secretatary, TSSIA & COSIA Thane) and Ms. Prachi Dabke (Entrepreneur, Co-founder RA Solar Karjat) were the judges for the event.

Group Members	Title	Position	Guide
Neel Ajay Ved	Leg Cast Using Photogrammetry	First	Prof. Shreeprasad Manohar
Priyank Rajesh Panchal			
Dev Janak Parmar			
Shaun Pinto			
Bhavin Rajesh Uttnoori	Generation of a 3D Model from MRI/CT Scan Data	Second	Prof. Shreeprasad Manohar
Heena Ganeshram Choudhary			
Praful Prabhakar Pawar			
Rushabh Dnyaneshwar Shelar			
Khanna Dennis Joseph	Experimental Setup on Thermal Conductivity of Composite Wall	Third	Prof. Nilesh Gaware
Joel Sibichan Mariamma			
Mishra Saurabh Manoj Kumar			
Singh Sagar Kunwar			
Bhattacharya Uditangshu Diptojyoti			













### **DEPARTMENT CLUBS**

As a part of a three-track program, apart from academic needs, wellness and aspiration attributes being identified. The department has ISHRAE, MESA, Automation & Robotics (AAR), and Energy clubs. These clubs help the students to understand various aspects of Mechanical Engineering and provides a platform to further excel in their respective domain.

### ISHRAE

- Organized ISHRAE Chapter Installation Ceremony
- Organized Technical Talk on "BMS-Building Management System" by Mr. Shakti Leekha, ISHRAE Thane Chapter on 8th Sept'22
- Arranged an Industrial Visit at M/s. Satish Ice Factory, Ulhasnagar on 14th Oct'22
- Organized Four different activities for 12th Science students on 26th Sep'22, 1st Oct'22 and between 13th to 19th December'22
- Arranged an Industrial Visit at M/s. DryAll, 07th Feb'23
- Arranged an Industrial visit to Belimo Automation India PVT. Ltd, Rabale on 9th Feb'23
- Two Students undergone internship at Kruger Ventilation Industries between 13th Dec to 13th Jan'23
- Arranged an Industrial visit at M/s Satish Ice Factory, Ambernath
- Organized Aquest Institute level competition on 24th Jan'23
- Students participate at Aquest State level competition on 27th Jan'23 bagged first runner up position.
- Participated at Aquest National level competition on 3rd Mar'23
- Organized Tree Plantation on 26th Jan'22



















### **ACHIVEMENTS OF FACULTY**

The department has a well-blended mixture of faculties. Many of them are not only highly qualified from institutes of repute but also have rich industrial exposure. Few contributions of faculty in research, consultancy, and expert lecture are



### Dr. Pradeepkumar Suryawanshi

- Published papers on "A Novel Mass Spring Model for Simulating Deformable Objects" at Journal of Mechanics of Materials and Structures, 2023
- Submitted journal papers
  - a. Suryawanshi, P., Singh, R., and Gupta, A. (2023). A mass spring model applied for characterizing mode-i fracture of orthotropic materials. Under Review at Journal of Mechanics of Materials and Structures.
  - b.Suryawanshi, P. (2023). A mass spring model applied for Simulation and Characterization of Behavior of Composite Structures. Under Review at Journal of Mechanics of Materials and Structures.
- Delivered an expert talk on "Entrepreneurship as Career Option to FE students" on 1st Dec 2022 at DBIT Mumbai
- Invited as Jury for "Maharashtra Startup Yatra-2022" organized by Maharashtra State Innovation Society (MSInS), Government of Maharashtra at MU incubation Center on 13 Oct 2023
- Participated Impact Failure Conclave 2022, "Beyond the Binary: Successes in Failure and Failures in Successes" at IIM Bengaluru from 25-26 Nov 2022
- Participated at ATAL FDP on "Institutional Building-Leadership for Academic Excellence in Higher Education" online from 5-10 Dec 2022 and offline from 12-16 Dec 2022 at SPIT Mumbai
- Participated at "DSSE Symposium on Entrepreneurship" at IITB on 31 Jan 2023





- Participated at "Innovation, Design and Entrepreneurship (IDE) Bootcamp at IIT Bhubaneswar by MOE's Innovation Cell (MIC) from 22-26 Jun 2023. Team SAI won the first place in top six teams selected out of 80 teams at the end of Bootcamp.
- Worked as coordinator for Atal Ranking of Institutions on Innovation Achievements (ARIIA) since its inception in 2018
- Delivered four expert lectures on "Introduction to Research for third year students of Mechanical Engineering at DBIT, between March to April 2023
- Constituted DBIT Institution's Innovation Council as per guidelines of MIC, MoE and President, (DBIT IIC)
- Worked as NISP Coordinator
- Act as Single-Point-of-Contact (SPOC) for Kalam Program for IP Litreacy & Awareness (KAPILA) by MoE, Govt of India.
- Electricians Kit and training for DBITI students in Jun 2023 with full sponsorship of Rupees Four Lakhs from KVIC Mumbai.
- Organized IIC Quarter I and II meeting at Boardroom DBIT on 02 Dec 2022
- Organized IIC Quarter III meeting at IQAC DBIT Mumbai on 03 march 2023
- Invited for "RIT Incubation Center" at RIT Islampur, Dist Sangli on 24 Dec 2022
- Received "MSME Today Diwali 2022 issue" from Hon Secretary TSSIA & COSIA, on 29 Nov 2022
- SP-TBI with DBIT E-Cell students at SPCE Andheri in Aug 2022



### Prof. Shreeprasad Manohar

- Published papers on "Bone Tissue Engineering Scaffolds: Materials and Methods" at 3D Printing and Additive Manufacturing journal, November 2022,
- Participated in MahaindX 2023 Industrial Expo at CIDCO Exhibition Center, Vashi from 1st June – 3rd June 2023
- Offering consultancy for "Manufacturing Mayfield clamp" for Mangeshkar Hospital Pune









#### Dr. Yogesh S Padiya

 Offered Consultancy for "Energy Audit" to "Datta Meghe College of Engineering", Navimumbai

#### Prof. Juned Ahemad

- Attended one week FDP on "Advance Maintenance Practices and Vibration Diagnostics" at Fr. C. Rodrigues Institute of Technology, Vashi between 26thJune to 1st July 23.
- Attended International Conference on "Machinery Diagnostics, Maintenance Engineering, Dynamics of Machinery at Fr. C. Rodrigues Institute of Technology, Vashi between 9th Dec to 10th Dec 22.





#### Prof. Pavan Kulkarni

• Publish Journal Paper on "Cryogenic aspects of MRI scanner" at DBIT Journal of Science and Engineering, Vol 7, 2022

### Prof.SwapnilGujrathi

Attended International Conference on "Machinery Diagnostics, Maintenance Engineering, Dynamics of Machinery at Fr. C. Rodrigues Institute of Technology, Vashi between 9th Dec to 10th Dec 22.





#### Prof. Nilesh Gaware

Attended International Conference on "Machinery Diagnostics, Maintenance Engineering, Dynamics of Machinery at Fr. C. Rodrigues Institute of Technology, Vashi between 9th Dec to 10th Dec 22.

### Prof. Madan Kulkarni

Attended 30 days faculty Induction program on "Knowing NEP:2020 and Students Holistic Development Approach" at Maharashtra State Faculty Development Academy, Pune



### COCURRICULAR, EXTRA CURRICULAR & OUTREACHED ACTIVITIES

- An Expert talk on "Energy conservation in HVAC" by Mr. Pramod Daspute in Association with PCRA on 6th Feb'23
- One day Workshop on "Threading operation with Spiral & Helix command in 3Dmodeling" on 7th Sep'22 by Prof. Chavan BS and Mr. Binoj
- One day Workshop on "Pipe joints with Fillet command in 3D modeling" on 7th Sep'22 by Prof. Chavan BS and Mr. Binoj
- Organized "Vortex22" a Department Function Day
- Arrranged Alumni Meet on 7th January 23



















### ADDITIONAL FACILITIES 3D PRINTING, INNOVATION & CNC MACHINE

Inorder to imbibe advance skills to students, department has introduced additional facilities

- Advance 3 D printing machines
- Table top CNC machine
- Digital Incubator, which helps the students to get break through Idea

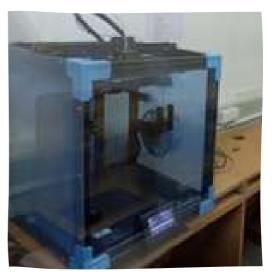














### INDUSTRY CONNECT

- **30** students were offered One month internship at Thane small scale industrial Association, TSSIA House
- 29 students were offered One month internship at other repute industries use
- Two students were offered 2 months internship at Kruger Ventilation Industries (India) Pvt Ltd,
- Organized **Six** Industrial Visit for Faculty at TISSA's Small and Medium Scale Industries at Wagle
  Estate Thane on 05 Dec 2022
- Arranged industrial visit at "Mahanand Dairy" On 23-02-2023









### **OUR FAMILY**







FR. ANTHONY PINTO, SDB DIRECTOR

FR. MARIO VAZ, SDB EXECUTIVE DIRECTOR





FR. MCENROE LOPES, SDB DR. PRASANNA NAMBIAR ADMINISTRATOR PRINCIPAL

### MEMBERS OF ACADEMIC ADVISOR COMMITTEE



Dr. S. Krishnamoorthy

Mentor (Mechanical Engineering Dept) Advisor, DBIT



Mr Prashant Chouthkanthiwar Associate Vice President at Godrej & Boyce



Prof. Bhalchandra Puranik Professor, IIT Bombay



Mr. Shreyas Bakshi Innovation Wor(k)shipper -Leader, Strategist, Coach, Advisor, Architect, Facilitator



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