# MIT | Academy of Engineering

(An Autonomous Institute Affiliated to Savitribai Phule Pune University)

# THE INSIDER

31-03-2023



# INTRODUCTION

Greetings to all our valued readers, It is our pleasure to present the March 2023 edition of our newsletter, which brings you the latest updates and highlights from the Academy of Engineering.

This month, we are thrilled to share with you the exciting progress taking place at the MITAOE.

We are honored to showcase the exceptional accomplishments and achievements of our Academy's students and staff, who have been work-

ing tirelessly in various fields, including research and development, patents, and much more. This issue features some of the noteworthy achievements that they have accomplished, which we are proud to present to you. We hope that this edition of our newsletter provides you with an engaging and informative read, allowing you to glimpse the outstanding work being done by the MITAOE community. We value your input and feedback, and we look forward to hearing from you.

# SPOKE PERSON



**DR. ABHIJEET MALGE**Dean School of Mechanical Engineering,
MIT Academy of Engineering, Alandi, Pune.

The MIT Academy of Engineering has been committed to providing quality education in the world of engineering. Our faculty members are highly skilled, experienced, and dedicated to helping students to achieve their academic and career goals. The engineering landscape has become very dynamic due to the fast evolution of emerging technologies. Students must stay up-to-date to deal

with the latest technological advancements and trends. As the industry's business models are changing with the evolution of advancing technologies, our curriculum is designed to accommodate the anticipated changes in the workflows of industries. It provides the students with a solid foundation in engineering principles, skill courses to solve real-world problems, as well as incorporating courses related to emerging technologies to reduce further upskilling and reskilling of students. Along with students' academic development, Students participate in research projects, join engineering clubs and organisations, and attend guest lectures and seminars. We at the MITAOE are determined and ethical values in students to transform them into well-versed, technocrats and responsible citizens.

# **ACHIEVEMENTS**



**Dr S.V. Taralkar**, Associate Professor and Dean QA participated in a Two Day National Level Workshop on NIRF Ranking 2023.

From the School of Chemical Engineering, **Mr Ganesh Mule** (Third Year) and **Mr Muskan Bharadia** (Final Year) students qualified for the GATE examination.





From the School of Chemical Engineering, **Mr Naim Fakir** (Final Year) was selected as GET for Praj Industries, Pune.



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Ms Vaishnavi Sharma and Mr Nitin Bhale from Third Year B.Tech have won the First Prize during SciCon 2023 organized by the School of Humanities and Engineering Sciences.

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The School of Computer Engineering emerged winner in the Cultural category and was declared the runner-up in the sports category for the year 2022-23.



**Niranjan D Girhe**, a BTech Computer Engineering student received the Maestro 2023 award. He was honoured during the Annual Social Gathering Nakshatra 2023.



Aaditya Barve, a BTech Computer Engineering student won the Best All-Rounder 2023 Award.

honoured at the Nakshatra 2022 Annual Social Gathering.

Aaditya Birangle, a BTech Computer Engineerings tudent pegged the



Best Dynamic student 2023 award. He was felicitated during the Annual Social Gathering Nakshatra 2023.

# **EVENTS**



MIT AOE celebrated their Annual Event "Nakshatra" starting from 3 rd March till 6 th March 2023. It was a 3-day cultural event, which also included price distribution followed by a DJ night on the 3 rd day of the event. Students had organised food stalls, various club stalls, theme based decorations around the campus. Everyone on campus enjoyed the food and various fun activities that were arranged by student groups throughout the course of the event.



On the occasion of International Women's Day, on 8 th March 2023, the MIT Academy of Engineering, HR Department organised a Guest lecture on Stress management and a training session on Women's Fitness for female teaching and non-teaching staff of the institute.

On 10 th and 11 th March 2023, the IIChE Students Chapter, School of Chemical Engineering organized the 18th National Level Chemical Engineering Student Conference "PRAKALP". The theme for this PRAKALP was Exergy and Sustainabil Abstracts were called for Paper and Poster presenta



tions from students of chemical engineering and allied branches across from India. Around 120 abstracts were received from various domains which consisted of a total of 82 groups (Poster: 32 Groups and Paper: 50 Groups).



 Centre for Excellence in Learning-Teaching (CELT)

'CELT' and School of Mechanical Engineering (SME) has jointly organized a two days International FDP on 'Synergising Problem & Project Based Learning and Design Thinking' on 2nd and 3rd March 2023.

The Chief Resource Person: Dr. Deepak L. Waikar, Managing Partner, EduEner

gy, Singapore has 'conducted the FDP in online mode and 23 faculties from MITAOE - Engineering and Design attended physically the interactive and activity-based sessions of the program.

On 8 th March 2023, a group of Chemical Engineering students visited Air Liquide India Pvt Ltd as part of Semester industrial visit. The Visit was planned as a part of a dual purpose which was to visit the Gas separation unit along with participate in the women's day celebration at the Air Liquide plant site.





• The CRPC cell hosted the largest PLACEMENT BOOTCAMP ever Featuring 4 talented speakers from top-tier companies: Neha Gupta; SDE2 from Adobe, Rahul Garg; SDE at Amazon, Supriya Purohit; Sr. Operations Executive at Flipkart, Rahul Maheshwari; Founder of Linux Socials, previously an Ex-Engineer at Google and Adobe. The goal of placement Bootcamp was to discover exceptional talents with

• On 18 th March 2023, the students of B Tech Chemical Engineering Omkar Mahale and Shivaji Nawale participated in Affiche Azeotropy, IIT Bombay on under the guidance of Dr Sandeep Shewale, Dean SCE. Students presented a paper which was titled Treatment of Vehicular exhaust through a PFR model using Alkaline Absorption. Their work was well appreciated by the jury members of IIT Bombay and even secured a 2nd Rank with a cash prize of Rs 25000 and Internship Opportunities with Jay Chemicals.



Every year IIT Bombay conducts Asia's Largest Civil Engineering Annual Fest i.e. Aakaar. Here many competitions and workshops were conducted. The program started with the opening ceremony. Shubham Tiwari (SY B Tech) and Aditya Surve (SY B Tech) took the Fusion 360 on the first day. They also got an opportunity to attend a keynote session by Dr. Niraj Hiranandani.

This event was conducted at Indian Institute of Technology, Bombay on 18 March 2023

 On the consecutive day Shubham Tiwari (SY B Tech) attended Staad Pro workshop. The program ended with the closing Ceremony and Certificate distribution.

This event was conducted at Indian Institute of Technology, Bombay on 18 March 2023





 FORCES, Student Associated body, School of Civil Engineering organised Freshers + Farewell Party for the students of Civil Engineering Department **Ubder** the initiation of respected **Presi**dent Mr. Om Thakur and under the auidance of respected Dean of school of civil engineering Mr. Shyam Shukla and Vice chairmen of FORCES Mr. Khushal Kanade. The trip started with the Express Train journey from Pune to Karjat. Followed by Local train journey from Karjat to Neral Station. After the journey continued via cab and reached the entry point from where Trekking started and all the Students enjoyed the trekking in the groups along with their respective group guides and reached Alexander This event was conducted at Alexander Heritage, Matheran on 24 & 25 March 2023.

- Equilibrium 2023, A National Level Technical Symposium was conducted where the School of Civil Engineering organised Abhyudaya-The Revolution 2023.which included many technical and non technical events. the initiation of respected Vice President Mr. Aaditya Todkar and under the guidance of respected Dean of school of civil engineering Mr. Shyam Shukla and Vice chairmen of FORCES Mr. Khushal Kanade.
- The first program was Field Expo where under the guidance of Mr. Dhananjay Bhosle, the elevation of inaccessible objects was obtained by using survey i n s t r u m e n t s .



And 1st place secured by:

- 1. Vedant Sontakke
- 2. Shradha Gadge
- 3. Mayuri Jagdale
- 4. Amogh Bedmuth

And **2nd Position** secured by:

- 1. Madhura Shirode
- 2. Arti Dapale
- 3. Ritesh Bhatnate
- 4. Bhupendra Deshmukh

This event was conducted at Fluid Mechanics Lab HBM 05 on 31 March 2023.



event 3 was Wisdom for Environment was conducted under the enlightenment of Mr. Nikhil Bhalerao and Ms. Swapnali Mohol where poster presentation was conducted for the topic related to current environment problem scenario and solution was implemented.

This event was conducted at HBM 10. on 31 March 2023.





The next event i.e. **Concrete Blocks** was organised under the direction of Mr. Bhaskar Wabitkar where, the designing of early strength gain concrete for 3 day's strength testing

This event was conducted at Concrete Lab HBM 02. on 31 March 2023.



#### And 1st place secured by:

- 1. Rohit Adhav
- 2. Bira Narbat
- 3. Gayatri Londhekar
- 4. Abhishek Vinchu

#### And **2nd Position** secured by:

- 1. Sanskar Chavhan
- 2. Vaidehi Chaudhari
- 3. Ganesh Chaudhari
- 4. Rakhi Pandhagare



 Last technical event i.e. Crafting a bridge was organised under the Instruction Mr. Sitram Suryavanshi where by using creativity and intelligence, bridge models were made and tested for the strongest one.

This event was conducted at Drawing Hall HBM. on 31 March 2023.

And 1st place secured by:

- 1.Uday Patharkar
- 2.Uday Andhale
- 3.Prajwal Bambal
- 4.Krushna Dawale

And 2nd Position secured by:

- 1.Priti Jadhavar
- 2.Gayatri Pansare
- 3.Bira Narbat
- 4.Pooja Patil

 Under Non Technical Event, Carrom was played.

This event was conducted at Room HBM HBM. on 1 April 2023.

And 1st place secured by:

1.Pawan Sorte

And **2nd Position** secured by:

1.Rohit Wankhede



of Civil Engineering Delivered a speech on "#ImportanceOfExternal-Relations in education" at Kolhapur Institute of Technology, Kolhapur. Dr Ramjee Prasad and Dr Anil Sahastrabuddhe were the main guests at this international conference on 6G #mitaoe #mitacademyofengineering #kolhapurinstituteoftechnology #InternationalConference2023





• Mss Anushia Thamotharem,
Bachelor of Manufacturing Technology, Public University Utara Malaysia,

TESOL at the University of Nottingham. Mss Rita Vengidesan, Bachelor of Business Administration at the University of Utara Malaysia. Visited MITAOE and MITACSC campuses and addressed students on the "Benefits of an international summer internship". It was a day-long session on both campuses where Students, Professors interacted with Mss Anushia Thamotharem and Mss Rita Vengidesan where questions related to higher education in abroad Universities, Educa-

## RESEARCH AND DEVELOPMENT

- Mrs. Pranali P lokhande, Chinnaiah presented an article on "Cardiac Disease Detection Using lot-Enabled ECG sensors and Deep Learning Approach". In: Shaw, R.N., Paprzycki, M., Ghosh, A (eds) Advanced Communication and Intelligent Systems. ICACIS
- Dr Sandeep D Pande published a Q1 journal Operational Research in Engineering Science: Theory and Applications, in "Design and Analysis of Rule-Based Fuzzy Logic Controller for performance enhancement of the Sugarcane Industry."





- Mrs. Diptee S Ghusse published a SCI Paper in Traitement du Signal titled "Enhancing Marathi Handwritten Character Recognition Using Ensemble Learning"
- Mr V.D. Pakhle, Assistant Professor of the School of Chemical Engineering published a research article on the topic "Ultrasound Assisted Preparation, Characterization and Application of Biosorbent for Rhodamine 6G Removal from Waste Water". The article is published in Environmental Quality Management (Wiley Publications).

- research paper in Elsevier's Q1 journal Scientific African, with the title "A DenseNet CNN-based liver lesion prediction and classification for future medical diagnosis", Volume 2023, 01629.
- Dr. Sandeep D Pande published a Mr. Sandeep C Shiravale published a paper on "Secure cloud storage using a Digest Algorithm" at the 7th International Conference on Computing Methodologies and Communication. (IEEE Conference).

# **PATENTS**

#### Patents Are Filed In March 2023

APPLICANT	INVENTORS PATENT TITLE		PATENT NO	DATE OF FILING
MIT Academy of Engineering, Pritam S. Kalos, Pavankumar C. Sarvade, Pranit R. Magdum, Shantanu D. Patil, Sushant B. Ingawale	Pritam S. Kalos, Pavanku- mar C. Sarvade, Pranit R. Magdum, Shantanu D. Patil, Sushant B. Inga- wale	Automatic Agri- cultural Pesti- cide Sprinkling Robot	202321021494	March 25, 2023
MIT Academy of Engineer- ing, Saharsh Dalal, Manas Mane, Samyak Dethe, Nita- sha Chaudhari	Saharsh Dalal, Manas Mane, Samyak Dethe, Nitasha Chaudhari	Solar Operated Autonomous Solar Panel Cleaning Robot	202321021463	March 25, 2023

#### **Patents Are Published:**

APPLICANT	INVENTORS	PATENT TITLE	PATENT NO	DATE OF FILING	DATE OF PUBLICATION
MIT Academy of Engi- neering, S andee p Shiravale, Sanket Patil, Pavan Gayake, Tejas Mahod, Mudit Shrivastav	Sandeep Shiravale, Sanket Patil, Pavan Gayake, Tejas Mahod,Mudit Shrivas- tav	An ERP System for the Institute Library- for Smooth Func- tioningand Support The Cause of Digitization	202321016370	March 11, 2023	March 24, 2023
MIT Academy of Engineering, V.N. Deshmukh, S.C. Shiravale, Sahil Arun Musale, Shubham Argade, Shubham Bulunge, Akansha Meshram	V.N. Deshmukh, S.C. Shiravale, Sahil Arun Musal, Shubham Argade, Shubham Bulunge, Akansha Meshram	Designing the Ballistic Plate Utilized for Com- batMissions to Save Human Life	202321016369	March 11, 2023	March 24, 2023

## **OTHERS**

- Engineering conducted puter "Hands on Moodle" session for the faculty of the School of Computer Engineering to get acquainted with the use of advanced features of Moodle in preparing and managing the course content and activities on Moodle on 01 March 2023.
- Ms. Shubhangi P Kale organised a One Day FDP on "Essentials of Data Science" to enhance the knowledge for implementation of data computation, data manipulation, data visualization methods along with case studies on 2nd, March 2023 by resource person Mr. Vivek Nikam, CodeSpyder Pvt. Ltd.,Pune.
- Ms. Shubhangi P Kale organized a session on LaTeX on 1 March 2023 for the faculty of School of Computer Engineering by the resource person Mr. Chavan, Ashutosh MITAOE, SEE. Alandi (D.)
- Dr. Manish B Giri has organized a session on IEEE for SY, TY and B. Tech students on 25 Feb 2023 by Mr. Gurav Datte, Training Manager, IEEE EBSCO.
- The school of E&TC Engineering organized a Guest Lecture on "Revolutionizing Operations with Automation: Re-• al-world Applications and Best Practices" by Mrs. Nital Sarap, Sr. Automation Trainer for Final Year BTECH Students under course Process Automation on 9th March 2023.

- Mr. Pranav R Shriram, School of Com- Dr. M. P. Patil organized a guest lecture for B. Tech Chemical Students on the Topic "Effective way of financial investment in the Stock Market" by Dr. Parikshit Shahane, Senior Technologist- Research and Development Nalco - An Ecolab Company, Pune.
  - Mrs. M. D. Sardare organized a guest lecture for SY B. Tech Chemical Students on the Topic "Applied Mathematics for Chemical Engineers" by Dr. Brij Bhan Singh, Professor and Head, Department of Mathematics, BATU.
  - School of Chemical Engineering successfully organized a Two Day National Level Workshop on the "Internship Embedded Degree Program" under University QIP.
  - The school of E&TC Engineering organized a Faculty Development Programme on "Emerging Technologies -Internet of Things (IoT)" by Mr. Abhijeet Deogirikar, Founder, CEO & Director, CopperCloud IOTech Pvt. Ltd., Pune from 27th February to 1st March 2023.
  - The school of Chemical Engineering organized an Industrial Visit for all girls students at the Air Liquide India Pvt. Ltd, Pune on the occasion of Women's day.
  - Mrs. Kavitha S & Mrs. Vinodini U Gupta conducted a guest lecture on AWS Cloud Services for TY B.Tech students on 24th March 2023 by Mr. Haridas Bhoite, Data Analyst, The Math Company, Pune.

- Mrs. Prajakta V Ugale conducted a Mrs. Chetna H Nemade conducted a guest lecture on Recent Trends in Data Science for TY students on 20th March 2023 in collaboration with Analytics India Magazine. The session was conducted by Mr. Kunal Turakhia, Global Practice Head – Hyperscalers & Decision Sciences at Wipro.
  - guest lecture on the "Randomized Algorithms" session on 24th March 2023 by Dr. Amey Bhangale, Assistant Professor in Computer Engineering, University of California, Riverside.

"We Thank all the faculty members, staff, and students who have been he-Ipful and cooperative while thenewsletter was under process. It is wit a team of active members that the February edition of "The Insider" is ready to be published."

#### **EDITORIAL TEAM**

Prerna Sukhramani Bhushan Bembale Milan Sagdhara Nilesh Lokhande Sarvesh Shinde