

Bharatiya Vidya Bhavan's
Sardar Patel College of Engineering

DISHA'24

TechTributes:

Celebrating India's Unsung Tech Heros

43rd Edition

The Unsung Indian Heroes of Technology

In today's fast-moving world filled with technology, there are some real heroes who often go unnoticed. They're the ones working quietly behind the scenes, making big changes without seeking the spotlight. These unsung heroes aren't just creating fun gadgets; they're transforming entire industries and improving our lives in big ways.

Their stories often stay hidden, overshadowed by more famous people. That's where this magazine comes in. We want to shine a light on these amazing folks, celebrating their achievements and showing the world how important they are for our future.

Through inspiring stories and interviews, we'll take you behind the scenes to see the incredible work these unsung heroes do every day. We'll show you how they're making our world better, one brilliant idea at a time.

These unsung heroes come from all different backgrounds and have all kinds of jobs, but they're all working toward the same goal: making the world a better place using technology. They're not in it for fame or fortune. They just really believe in what they're doing.

But it's not always easy for them. They face lots of challenges along the way, like not having enough money to do their work or running into tricky technical problems. But they keep going because they know they're making a real difference in people's lives.

That's why it's so important to tell their stories. By shining a spotlight on these unsung heroes, we can inspire others to do great things too. We can show everyone how amazing they are and encourage more people to use technology for good.

So let's celebrate these unsung heroes of technology. Let's thank them for all their hard work and for making our world a better place.

This page by:-
Vidhi Ahuja &
Parth Kurkure



Bharatiya Vidya Bhavan's
Sardar Patel College Of Engineering



DISHA'24

Presents

"TechTributes"

Tech Bharat | Bharatiya Tech Veer | Unsung Heroes

Disclamer: All the views expressed in the subsequent articles and poems are individual opinions of writers and not of the institution. The institution does not hold any responsibility regarding any content given by students.

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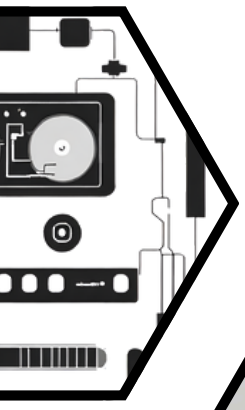
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Shri Sardar Vallabhbhai Patel



Kulpati Shri Dr. K.M.Munshi

Vision

Sardar Patel College of Engineering (SPCE) aspires to be an institution of national repute that will create professionals with competence and motivate research for the progress of the nation.

Mission

- To impart quality education through time relevant curriculum in academic programs.
- To enhance career opportunities for students through industry institute interaction and value added courses.
- To promote excellence by encouraging innovative ideas and lateral thinking.
- To inculcate sense of discipline and responsibility towards society.

Core Values

- Quality Education
- Diversity
- Integrity
- Accountability
- Responsibility
- Equity
- Excellence

FOREWORD

Presenting the latest release of the SPCE Annual College Magazine, DISHA 2024, marks a significant milestone in our journey. Through its pages, we offer a glimpse into the vibrant world of SPCE, featuring our dedicated student committees, lively festivals, and the remarkable talents of our faculty and students. DISHA aims to inspire and guide the creative endeavors of our gifted student community, thanks to the dedication and brilliance of our magazine committee, ensuring the continuation of DISHA's cherished legacy.

For over four decades, DISHA has been a cornerstone of SPCE's journey, adapting to evolving themes and witnessing shifts in generations. More than just a technical publication, DISHA serves as a creative compass, nurturing the artistic talents within the SPCE community. Through words, art, and music, we capture fleeting moments and immortalize them, striving to encapsulate the essence of our experiences for generations to come.

This edition revolves around the central theme of showcasing the unsung heroes of technology and is aptly named "Innovate." Just like resuscitating endangered species, these individuals and their innovations seek to revive or restore aspects of our technological landscape that have been overlooked or underappreciated. The main goal of highlighting these innovators is to inspire readers and shed light on their contributions, ultimately fostering a sense of unity and collaboration to address the challenges of our ever-evolving technological world. Through education and awareness, we aim to unite readers in championing these unsung heroes and their endeavors for a brighter technological future.

We extend our sincere gratitude to Dr. M. M. Murudi, our esteemed Principal, for his unwavering support. Special thanks to Dr. Shyamlee Solanki, Chairperson of the Student's Welfare Committee, and all its members for their constant encouragement. Our appreciation also goes to the students, faculty, and all those who contributed reports and photographs, as well as our fellow and former council members, friends, and family for their belief in and motivation of our endeavors. We owe a debt of gratitude to our dedicated committee, particularly Digvijay, Mishti, Divya, Dhanashree and Anshul who shared our vision and helped bring it to life on these pages. Lastly, we applaud Mr. Aryan Pawar and Ms. Nidhi Shah for his meticulous proofreading of the magazine.

The journey of crafting and appreciating art has a remarkable way of resurrecting forgotten concepts, talents, and narratives that lie dormant within us. What began as a modest dream of creating this magazine has blossomed into a tangible reality, seamlessly bringing together a mosaic of ideas and expressions. As we embark on this adventure, we invite every reader to immerse themselves in the boundless reservoir of creativity and skill that defines "DISHA".

~ Vighnesh Jondhale & Swati Pethkar
Magazine Secretaries,
Students' Council 2023-24.

“From Principal’s Desk”



Dr. M. M. Murudi

Sardar Patel College of Engineering (SPCE) was established in 1962 under the management of Bhartiya Vidya Bhavan. SPCE was granted autonomy in 2010, and the college has achieved numerous milestones since then. SPCE has always strived to meet the growing demand for engineering talent and to continue growing and improving. Post graduate programme Structural Engineering in Civil Engineering Department is Accredited for three years till 30.06.2026. Undergraduate programmes B.Tech in Civil and B.Tech in Mechanical are accredited till 2025. The institute has applied for accreditation for UG programme in Electrical Engineering. The institute has also been accredited by the NAAC with a grade of 'B' for the period of 5 years from 2021-22. The institute has applied for re-assessment of NAAC grade. The institute has been granted extension of autonomy for five more years (2022-23 to 2026-27) by UGC.

SPCE is now entering its 14th year of autonomy. The institute is following the Outcome Based Education System. Our Institute is one of very few institutes who have implemented NEP 2020 through R23.

NEP 2020 will allow students to experience holistic and multidisciplinary education in addition to a focus on chosen majors with multiple entries and multiple exit options. In regulation R23, apart from change in curriculum, the evaluation system is also modified. The equal weightage is given to Continuous Internal Evaluation and Semester End Evaluation. The faculty is using innovative methods of evaluation which help for improving the results and transition rate.

Our professors and the supporting staff of SPCE have worked hard towards implementing courses and programmes that play a major role in improving the students' technical skills and in their overall development.

Research Activities:

Approval of Research Fund: One of the pivotal achievements of the year was the approval of a substantial research fund of 2.5 Crores and total fund approved as 4.6 Crores in the last three years. This fund has been allocated to support a range of research activities aimed at enhancing the scientific and technological landscape of SPCE.

Following are the few of the segments for which Research Fund is approved:

1. FIST Project (Fund for Improvement of Science and Technology Infrastructure): A significant portion of the research fund has been approved for the FIST project. This initiative focuses on upgrading and modernising the college's infrastructure to facilitate advanced research in various fields. The funds will be utilised to procure state-of-the-art equipment, establish advanced laboratories, and enhance research facilities.

2. Technology development projects by the Department of Science and Technology (DST). These projects aim to foster innovation and address contemporary challenges through the development of cutting-edge technologies. SPCE has initiated several projects in areas such as novel manufacturing technologies, renewable energy, sustainable development in energy, and smart infrastructure.

3. Collaborative Research Projects: SPCE has fostered collaborative research partnerships with esteemed institutions including IIT Bombay and Government College of Engineering Karad, Fr. Conceicao Rodrigues Institute of Technology

Vashi, Navi Mumbai 4. Fund for Post-Doctoral Fellowship under WISE KIRAN Scheme: Institute has received approval for facilitating research of Post Doctorate fellow under scheme 'Women in Science and Engineering-KIRAN (WISE-KIRAN)' from DST to cater women of all walks of life.

Other Key Achievements:

- Increase in Research Publications: The research culture has enabled faculty and students to engage in high-quality research, resulting in a notable increase in research publications in reputed journals. SPCE researchers have made significant contributions to various fields, disseminating their findings to the academic community and beyond.
- Participation in Conferences: SPCE researchers have actively participated in national and international conferences, presenting their research findings and exchanging ideas with experts in their respective fields. The SPICON 2022 conference conducted by SPCE on the occasion of diamond jubilee year celebration has been published in IEEE explore proceedings in year 2023 and in American Institute of Physics (AIP) proceedings in 2024.
- 33 kWp Rooftop Solar PV with tracker systems and a standalone system with battery backup installation was initiated as a part of collaborative research project, for SPCE and SPIT.
- Proposal on Increase in Intake of PhD centre in Electrical Engineering: SPCE has defended the proposal on increase in intake of PhD centre in Electrical Engineering. Institute is awaiting for the notification from the University.
- 5 students successfully completed the PhD from the institute in year 2023-24.

Our professors have attended international conferences, participated in various webinars and workshops, and have also engaged in research projects to broaden the scope of their knowledge and published research papers. Our faculty members have delivered expert lectures/talks at various organisations. Our faculty members are special committee members at different Universities, institutes and organisations. Our faculty members are also reviewer of Scopus index journals. The Institute has conducted four AICTE-sponsored ATAL workshops at the national level SPCE exhibits good performance in the research publications of the calendar year 2023-24. Total 42 research papers are published in the calendar year 2023. The publication count per faculty per year rose from 054 to 0.8957 in the

The Civil Engineering Department has taken the lead in testing and consulting projects. In the year 2023-24, the department has generated revenue of Rs 1,75,85,900 INR. by means of testing and consultancy works.

The supporting staff engages in several developmental courses and strives to implement better practices amongst the students and professors alike. The students have also organised the technical and social events, like SPHINX, SPIRIT, and the annual debate competition, in the offline mode this academic year. Our students are participating in various activities/ competitions via ROBOCON, WAVE, and SPCE RACING CLUB. IEEE students chapter organised sessions on Research Ethics; GATE preparation, Placement preparation and conducted training sessions on SQL.

The SPCE alumni association is active and has several plans to contribute to the growth of the institute. Institute is proud to share few of the notable contribution of alumni Samsung Digital Board and UPS were donated by alumni of the year 2012 in the Civil and Electrical Department.

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FACULTY ADMIN



Dr. Hansa Jeswani

Head - Civil
Engineering Dept



Dr. Sangeeta Daingade

Head - Electrical
Engineering Dept



Dr. Ramsubhash Maurya

Head - Mechanical
Engineering Dept



Dr. Shyamlee Solanki

Head - First Year
Engineering Dept

FACULTY

CIVIL



Left to Right: Dr. A. R. Kambekar, Mr. Ankit M. Asher, Dr. Tanuja Bandivadekar, Ms. Akshata Despande, Dr. Hansa Jeswani, Dr. M. M. Murudi, Dr.Reshma Raskar, Prof. K. A. Nadgouda, Dr.Reshma Raskar, Prof. S. J. Kumbhar, Dr P. G. Gaikwad, Dr. A. N. Ghadge

ELECTRICAL



Left to Right: Dr. Jayram V. Gholave, Mr. N. G. Bhitre, Dr. Nandkishor W. Kinhekar, Mrs. Matilda J, Mrs. Ushma Shah, Dr. (Mrs.) Anupa Sabnis, Dr. (Mrs.) Sangeeta Daingade, Mrs. V. P. Joshi, Dr. (Mrs.) Swati A. Lavand, Mrs. Prajakta Joshi, Mr. Rahul Chavhan, Dr. B. B. Pimple.

FACULTY

MECHANICAL



Left to Right: Dr. Kiran Suresh Bhole, Mrs. Megha Janbandhu Nagrale, Mr. Kunal Bhavsar, Dr. Santosh Rane, Dr. Ramsubhash Maurya, Prof. Dattatray N. Jadhav, Dr. B. N. Bhasme, Mr. Sharad Valvi, Mr. Deepak Singh

FIRST YEAR



Left to Right: Mr. Kunal Bhavsar,Dr. Jayram V. Gholave, Mrs. Megha Janbandhu Nagrale , Dr. Shyamlee Solanki, Mrs. Divya T. A., Mr. Satishkumar G. Barot, Mr. Sharad Valvi, Mr. Vinodkumar I. Sharma.

DISHA MAGAZINE COMMITTEE 2023-24



Faculty Advisor:
Dr.Shyamlee Solanki

Magazine secretaries:

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- Swati Pethkar

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- Tamanna Samal
- Sunreet Burgul
- Vidhi Ahuja
- Neelanjana Mandal

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- Aashi Ghogare

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- Aashi Ghogare
- Atharva Kavalkar

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- Divya Dhas
- Anshul Meshram

DEPARTMENT OF CIVIL ENGINEERING

INTRODUCTION

The Civil Engineering Department has been in existence since the establishment of this institute. The department has an excellent infrastructure and is AICTE-approved. Apart from the undergraduate programme, postgraduate programmes in construction management and structural engineering are offered. The department is approved by the University of Mumbai for the Ph. D. programme, with an intake capacity of 45. In addition, the department has been selected as a QIP centre by the AICTE. AICTE provides full financial assistance for three years to the research scholars registered under QIP. Also, under this QIP, the department can conduct a number of short-term courses in the area of civil engineering, and a complete financial assistantship will be provided by AICTE

NBA ACCREDITATION

Undergraduate Civil Engineering Programme	Accredited till 30.06.2025
Post graduate Civil Engineering Programme with Structural Engineering	Accredited till 30.06.2026
Post graduate Civil Engineering Programme with Construction Management	Appealed and In Process

DEPARTMENT ACTIVITIES

Dr Hansa Jeswani took over as Head Civil Engineering Department from 1st June 2023. NEP 2020 was implemented for 1st year UG with Regulation 2023 scheme and even for first year of PG programs with regulation 2023 scheme. NBA accreditation visits for PG (CM) and PG (SE) were undertaken in October 2023. The details of other activities are mentioned as follows

- Site Visits arranged : 05 (Colaba Wastewater treatment Plant UG , Coastal road Visit UG and PG (CM and SE), Missing Link Project near Lonavla (PG SE), Ferro-cement Factory (PG CM)).
- Lectures and Workshops arranged: 8 Guest Lectures and 5 workshops (2 Primavera MSP and BIM, EPANET and Jaltantra, GIS, GPS)

SPECIAL ACHIEVEMENTS

- Dr Ajay Kambekar is mentoring Dr Suman Rawat (PDF fellowship) who jointly Recieved Grant under Research development- Department of Science and Technology (DST), Ministry of Science; Technology, Government of India for Women in Science and Engineering" WISE-PDF scheme (January 2024)
- Dr Hansa Jeswani and Dr Reshma Raskar Phule organised ATAL FDP on Urban Infrastruction, Sustainability and Climate change from 8th to 13th January 2024.
- Dr. Reshma Raskar Phule received best paper award at ISG-ISRS symposium held at Symbiosis International University, Pune from 28-30 Nov 2023.
- Dr Ajay Kambekar's co-supervised student Dr Sudipta Chakraborty was awarded PhD Degree for the Thesis titled Sea Level Rise Due to Climate Change and it's effect along the coast of Mumbai by The Assam Royal Global University

PAPERS/BOOK CHAPTERS PUBLISHED BY FACULTY MEMBERS IN SCOPUS INDEX JOURNALS/CONFERENCES OR BOOKS

The following table shows the papers published by faculty in scopus index conference/journals

S No	Name of faculty	No. of Papers and Book Chapters published
1	Dr. Mohan Murudi	2
2	Dr Abhinandan Bage	2
3	Dr. Ajay Kambekar	1
4	Dr. Pravinchandra Gaikwad	2
5	Dr. Hansa Jeswani	1
6	Dr. Reshma Raskar	2+1 Book Chapter
7	Dr. Anil Ghadge	3
7	Dr. Kshitija Nadgouda	2
9	Prof. Snehjit Kumbhar	2
10	Prof. Akshata Deshpande	1
11	Prof. Shweta Patil	1
12	Prof. Ankit Asher	3
TOTAL	=	23

INVITED LECTURES DELIVERED BY FACULTY IN OTHER CAMPUSES/COLLEGES/INDUSTRY

Dr. Ajay Kambekar

- Delivered invited lecture as a resources person on United Nations SDG: Implementation through National Education Policy (NEP) at Fr. C. Rodrigues College of Engineering Bandra, Mumbai University on 21 st November 2023
- Delivered an invited lecture on “Introduction to Climate Change” during ATAL AICTE training and Learning Academy sponsored programme on Management of natural Resources in view of Climate change on 01st January 2024 at Saraswati College of Engineering Kharghar, Navi Mumbai, Mumbai University.
- Delivered invited talk on “Artificial Intelligence for Sustainable Coastal and Ocean Developments” during workshop organized by Ocean Engineering Department of Civil Engineering, Indian Institute of Technology Bombay on 12th January 2024 at IIT Mumbai.
- Delivered an invited lecture on “Introduction to Climate Change” during short term training programme sponsored by Indian Society for Technical Education titled “Modern trends in design, construction, repairs and urban renewals” on 20 January 2024 Shri VileParle Kelwani mandals Shri Bhagubhai Mafatlal Polytechnic VileParle Mumbai.
- Delivered talk on “Applications of Remote Sensing in Development Engineering” during short term training programme titled “Applications of Latest Technologies in Engineering” sponsored by Indian Society for Technical Education at AI Kalsekar Technical Campus, Panvel Mumbai, University of Mumbai on 18 January 2024 at Mumbai.
- Delivered talk on “National Education Policy 2020” during short term training programme titled “Applications of Latest Technologies in Engineering” sponsored by Indian Society for Technical Education at AI Kalsekar Technical Campus, Panvel Mumbai, University of Mumbai on 18 January 2024 at Mumbai.

Dr. Reshma Raskar Phule

- Delivered 2 expert lectures and conducted workshop in GIS and Applications at Rizvi College of Engineering and VVP Engineering College Rajkot
- Dr Raskar Phule is invited faculty to take a course on GIS applications in Bhavan’s college for M.Sc students.

Dr. Kshitija Nadgouda

- Delivered Expert lecture at Shri Bhagubhai Mafatlal Polytechnic on basics of Geotechnical Engineering
- Delivered Expert lecture organized by ISTE student chapter of JSPM’s Rajarshi Shahu College of Engineering, Tathawade, Pune on “Lateral Earth Pressure and Soil Exploration”

Prof. Ankit Asher

- Delivered expert lecture in Kalsekar College on Practical applications of Structural Analysis

Journal Reveiwers

Dr Ajay Kambekar (21 journals), Dr Hansa Jeswani (02 journals), Dr Reshma Raskar Phule (02 journals), Dr. A. N. Ghadge(02 journals) and Dr Kshitija Nadgouda (01 journal) are reviewers of scopus indexed journals.

Special Committee Member/ Special achievement

Dr Ajay Kambekar is a BOS member of Mumbai University, SVKMs MPSTME, SBM Polytechnic, DBATU state technical University. He is also an academic Audit Committee Member and Research Committee at DBATU and Amity University (Panvel). He was PhD Thesis reviewer for 5 thesis in various University. One of his co-guided student was awarded PhD that is Dr Chakraborty Sudipta: "Sea Level Rise due to Climate Change and Its Impact along the Coast of Mumbai" at Royal School of Engineering and Technology The Assam Royal Global University, Assam.

Dr Kambekar, Dr Jeswani and Dr Raskar Phule have organised competitions in SPCE under the aegis of UMA/UBA, Green Club and Sustainability and Green Initiative respectively. Dr Kambekar coordinated elocution competition in collaboration with the Airports Authority
of India (AAI- A Central Public Sector Enterprise) and Sardar Patel College of Engineering as
a part of Vigilance Awareness Week is observed every year during the week in which the
birthday of Sardar Vallabhbhai Patel falls.

Testing and Consultancy.

Most of the teaching faculty such as Dr Murudi, Dr Nagrale, Dr Bage, Dr Kambekar, Dr Gaikwad, Dr Jeswani, Dr Raskar-Phule, Dr. Ghadge, Dr Nadgouda, Prof. Snehjit, Prof. Deshpande and Prof. Asher are involved in testing and consultancy. The special consultancy taken up last year was related to MCGM, MBMC, NABARD, PWD and total revenue generated in past year is 1,75,85,900 INR.

FDP/NPTEL courses completed

Dr Bage, Dr Gaikwad, Dr Jeswani, Dr Raskar-Phule, Dr Ghadge, Dr Nadgouda, Prof Snehjit Kumbhar, Prof Shweta Patil, Prof. Ankit Asher, Prof Kanchan Gupta completed 1 or 2 Faculty development programmes such as ATAL and NPTEL courses with total courses completed as 16 for the year.

Student/Alumni Achievements

Mr Harsh Shrivastava (TYBTech) has secured 146th rank in Geomatics in GATE. Ms Aditi Nhavkar (2017 passout) received award 'SWARAJYA ABHIYANTA HIROJI INDULKAR' PURASKAR 2024 By Urban Development Department, Ministry Govt. of Maharashtra.

Award granted by: Hon'ble Shri Eknathji Shinde, Chief Minister, Govt. of Maharashtra for excellence in engineering in government departments. Apart from it other achievements of present students are as follows

- No. of students who qualified GATE-2024: 10 (2 students (Third Year), 8 students (BTech))
- No. of students who got Campus Placement (2023-24) : 22 (BTech), 7 MTech (CM)+8 MTech (SE) (average package is 5.9 lpa)
- GRE given and waiting for admit : 02
- Workshop organised Through Civil Engg. Association : 03
- Expert Talk organised through Green Club: 02
- Site Visit organised through CEA : 03
- Quiz competition :01 (Engineers Day)

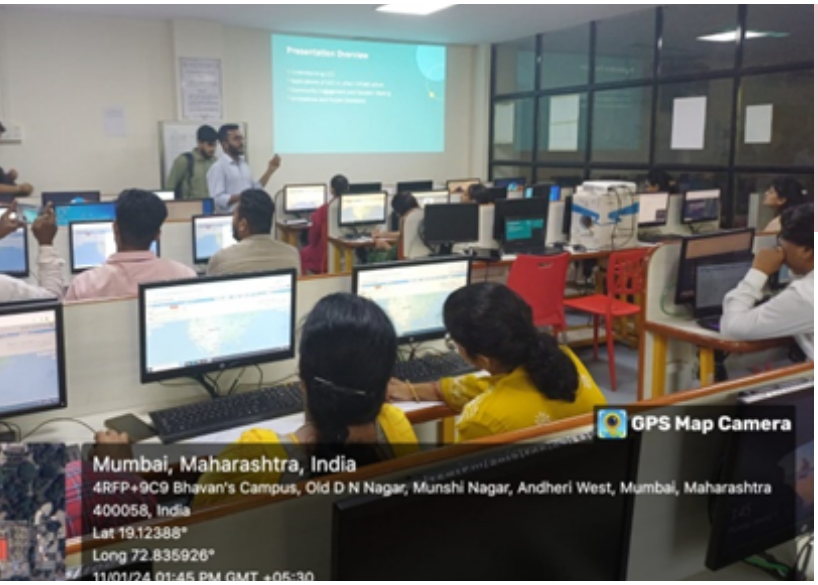
Result Analysis for 2022-23

The result analysis for BTech Civil Engineering and MTech Civil Engineering with construction Management and MTech Civil with Structural Engineering

YEAR	2022-2023
FY BTECH	65.67%
SY BTECH	71.23%
TY BTECH	77.78%
BTECH (FINAL YEAR)	100%
MTECH 1ST YEAR (SE)	84.2%
MTECH 2ND YEAR(SE)	71%
MTECH 1ST YEAR (CM)	90%
MTECH 2ND YEAR (CM)	94.5%

FACULTY DEVELOPMENT PROGRAM

URBAN INFRASTRUCTURE, SUSTAINABILITY AND CLIMATE CHANGE'



Hands on training for google earth graph

All India Council for Technical Education (AICTE) Training and Learning (ATAL) Academy
Sponsored One Week
Faculty Development Program

Organized By
Department of Civil Engineering

Program Coordinator-:
Dr Hansa Jeswani

Duration: 08th – 13th January 2024
Mode: Face to Face (Offline)

The AICTE'S TRAINING AND LEARNING ACTADEMY (ATAL) Sponsored one week FDP on Urban infrastructure, sustainability and climate change was organised by Civil Engineering Department of SPCE with Dr Hansa Jeswani and Dr Reshma Raskar Phule as the coordinator, and the co-coordinator.

It had stalwarts as distinguished as Dr Mhaiskar, Dr Deepankar Choudhury, Head, CED, IIT Bombay, Dr Prasad Modak, Director, Environment Management centre, Dr Basarkar, GM, Afcons, Dr Kalbar, Professor CUSE, IIT B, Dr Srinidhi, Prof., ESED, Dr Korde, Prof CTARA Pro VC NMIMS, Shri Bala, XR developer to Shri Alok Mishra, Head, Sustainability at Welspun as the speakers at the course.

A total of 41 participants from various colleges and industry registered with 27 participants successfully completing the course. The concepts of sustainability in urban and rural infrastructure, be it foundations, tunnels, water, food system infrastructure were touched upon. The lab sessions involved Visit to DST Nidhi Prayas Lab, DST SERB lab and understanding concepts of 3D printing, waste water to energy conversion using microbial fuel cell, whereas hands on session on Jaltantra, Google earth engine, GIS which the participants enjoyed.

A Bhavan's adventure centre visit was undertaken where participants learnt about sustainability in nature by knowing about herbs, shrubs and trees as well as floral and faunal biodiversity.

DEPARTMENT OF ELECTRICAL ENGINEERING

INTRODUCTION

Department of Electrical Engineering was established in 1962 with undergraduate programme in Electrical Engineering. In the academic year 2014-2015 department started the post graduate programme in Power Electronics and Power System. In the year 2018-2019 Department received approval of Ph. D. programme by University of Mumbai. The intake for these programmes is sixty, eighteen and ten respectively.
The department has an excellent infrastructure. The strength of Department of Electrical Engineering is its faculty, students, supporting staff and alumni. The department has expertise in the field of power system, electrical machines and drives, electronics, communication engineering and control system. Among the faculty, five faculty members have completed doctorate from reputed institutes and remaining are either pursuing or trying to get admitted for Ph. D. programme

VISION

Department of Electrical Engineering aspires to produce socially responsible and dedicated electrical engineer by providing conceptual learning that enhances research based activities

MISSION

- To educate through classroom teaching along with intensive practical activities and promote Academic excellence with the help of expertise in different fields of Electrical Engineering from industries and academic institutes.
- To promote innovative ideas through seminars and projects.
- To bring awareness of social responsibilities as an Electrical Engineer

This report presents academic activities of Electrical Engineering Department April 2023-2024. All activities are planned and executed considering overall development of students.

ACADEMIC ACTIVITIES:

Curriculum:

The department curriculum is in alignment with AICTE model curriculum and NEP. Regulation R-23 is designed as per the guidelines form the Director of Technical Education, State of Maharashtra which has features of NEP2020. As per R23 students will get minor degree in the interdisciplinary specialization and will have compulsory internship in final year. This year department designed and implemented R23 for the students admitted in AY2023-24 and implemented Regulation R22 for second year students. Department offers variety of courses under Professional and Open Electives.

The professional electives cover the advanced courses of Electrical Engineering whereas open electives cover interdisciplinary courses. Department has history of an excellent placement and this curriculum will definitely further improve graduate employability. The elective courses are useful for the students continuing higher studies. To get conceptual clarity department runs two general laboratory courses, namely, Electrical Simulation laboratory and Electronics design Laboratory. Apart from regular experiments many of our laboratory courses require implementation of mini projects for completion of courses, which gives hands on experience to students and help them to complete final year projects.

Department applied for increase in intake capacity of PhD in the department. Local enquiry committee visited the department for the same. External Academic Audit of the Department was successfully completed for the AY2022-23

ATAL sponsored FDP:

Dr. Swati Lavand and Dr. B. B. Pimple organized ATAL sponsored one week FDP on 'Green Energy: Challenges & Mitigation Strategies'. Delegated from industries, academicians and students attended this workshop. The course addressed various performance issues of the power grid in presence of high penetration of EV and RE, design of power system protection scheme in presence of renewable energy sources, need of state of art technologies and strategies to mitigate the challenges in Green Energy and model & simulate distributed generation or micro-grid.

Guest lectures:

The following guest lectures were arranged for students. These lectures were delivered by experts from industry and reputed academic institutes to update students with advances in technology:

- Design of Compensators using MATLAB
- AC – AC Converters design and simulation
- Non-Linear Control Systems
- Awareness of Cyber security
- Semiconductor Manufacturing and Design

A Guest Lecture on Semiconductor Manufacturing and Design by Dr. Prashant Kasambe from SPIT, Mumbai, was organized on occasion of Foundation Stone Laying Ceremony of three Semiconductor Facilities by Honourable Prime Minister Shri. Narendra Modi. This lecture served as a platform to highlight the importance of semiconductor manufacturing in India's technological advancement and economic growth.

Few laboratory sessions in Signals and Systems, Control System, Advanced Electrical Drives, Power System, Electric Vehicle and Design of Control Systems were conducted by research scholars pursuing Ph. D. from IIT Bombay which helped students to learn hardware experiments and new simulation techniques

Faculty Achievements:

- Dr. B. B. Pimple and Dr. Swati Lavand received grants of Rs. 250000/- for conducting ATAL workshop.
- Dr. Anupa Sabnis was State coordinator, curriculum development committee NEP 20202, State of Maharashtra.
- Dr. B. B. Pimple is member Board of Studies of Electrical, University of Mumbai.
- Prof. Vishal Dake got selected for P.hD in the department of Electrical Engineering, SPCE.

Students Achievements:

- Electrical Engineering Students Association (EESA) is active throughout the year. The students conducted and participated in many technical and extra-curricular activities under the guidance of department faculty coordinators Prof. Sumbul Abidi, Prof. Rahul Chavan and Prof. Vishal Dake.

The following activities are conducted by EESA-

- Breadboard Workshop
- Autocad Workshop
- Calculator Workshop
- Proteus Workshop
- Circuit Hunt
- Women's day celebration
- Blood donation camp
- Sports events
- Treck to Kille Vasota

- Rikson Irudayakani Arasan from final year B. Tech. Electrical recived "Bank of Baroda Achievers' Awards" for AY 2023-24.
- Mr. Tanishq Kale received Second prize in technical paper competition "Prakalpa 23" at K. J. Somaiya College of Engineering, Vidyavihar.
- Mr. Tanishq Kale secured second place in "IDEATHON 2K24" held in march 2024 at FCRIT, Vashi, Navi Mambai.
- Mr. Tanishq Kale won district level Best Innovation Award at Maharashtra Student Innovation Challenge organized by Maharashtra State Innovation Society and was invited for Startup-Mahakumbh organized byASSOCHAM India, Nasscom Startups, Bootstarp Incubation and Advisory Foundation, TiE, and IVCA at New Dehli. His start-up got recognized and incubated at K. J. Somaiya College of Engineering, Vidyavihar.
- Mr. Ankur Tambe was selected for the Indian Academy of Sciences Summer Research Fellowship Program 2023 and Utkarsh program 2023 by TVS Motors.
- Mr. Ankur Tambe secured 3rd place with cash prize at Aakash symposium 2024, IIT Bombay.
- PhD students have published papers in various international conferences.
- ELITE Coder's Club arranged workshops to inculcate coding culture among students. Prof. Ushma Shah is the faculty coordinator for the same.
- Department students are participating in various activities/ competitions via ROBOCON, WAVE, Car Racing teams, Rotract Club, SPSGI.
- IEEE students chapter organized sessions on Research Ethics, GATE preparation, Placement preparation and conducted training session on SQL

Publications:

- Department faculty and students have published research article in international conferences/ Journal. Following is a list of publications-
- A. A. Sonkamble, R. D. Chavhan, B. S. Jadhao and S. M. Rathod, "Real-Time Indian Sign Language Detection using SSD-Mobilenet," IEEE , doi: 10.1109/SPICON56577.2022.10180839.
- S. Hasan, H. J. Bahirat and P. V. Navalkar, "A Statistical Method for Sizing Storage for Large Wind Farms," IEEE, doi: 10.1109/SPICON56577.2022.10180531.
- P. N. Gokhale, B. R. Patil, S Joshi, "Image Extraction Approaches for Density Count Measurement in Obstruction Renography Using Radiotracer 99mTc-DTPA", Springer Book chapter on Image Processing and Capsule Networks, pp. 57-71.August 2023.
- Pradnya Gokhale, Sameer Joshi Babasaheb Rajaram Patil, "Quantitative Measurement and Analysis of Renal Obstruction Using ROI Detection Techniques", UGC Care I:Biological Forum – An International Journal, Volume-15, Issue-6, Pages- 761-767 June 2023
- Sushama D. Wankhade, B.R. Patil, "Lithium-ion battery: Battery sizing with charge scheduling for load levelling, ramp rate control and peak shaving using metaheuristic algorithms", Journal of Energy Storage, Volume 86, Part B, 2024, ISSN 2352-152X, Dr. B. B. Pimple and Dr. Swati Lavand received grants of Rs. 250000/- for conducting ATAL workshop.

- S. D. . Wankhade and B. R. . Patil, "Leveraging Storage Batteries for Sustainable Green Energy Harvesting: From Li-Ion Perspective", ijmst, vol. 10, no. 5, pp. 257-277, Oct. 2023.

Department faculty has worked as reviewer in reputed conferences and transactions such as, Automatica.

Alumni Activity:

Samsung Digital Board and UPS were donated by alumni of the year 2012. Special Thanks to Prof. V. P. Joshi for coordinating this activity.

Laboratory Development:

Control System lab received major equipment for performing various experiments like time response of a system, PID controller, Lag-lead controller, frequency response of a system, Non-linear system simulator.

33 kWp Rooftop Solar PV with tracker systems and a standalone system with battery backup installation was initiated as a part of collaborative research project, for SPCE and SPIT

Placements:

Total of 63 students from Electrical department were placed in AY2022-23 in reputed companies like TATA Power, TATA Motors, Schneider Electrical, TCS, Mahindra& Mahindra, TVS motors, Reliance, Megger. Four of the students joined for higher education in reputed institutes like Texas A&M University, Rutgers University, IIT, NIT.

FACULTY DEVELOPMENT PROGRAM

"GREEN ENERGY: CHALLENGES & MITIGATION STRATEGIES"



ATAL FDP on Green Energy: Challenges & Mitigation Strategies

All India Council for Technical Education (AICTE) Training and Learning (ATAL) Academy
Sponsored One Week
Faculty Development Program

Organized By
Department of Electrical Engineering

Program Coordinator-:
Dr. Swati Lavand

Duration: 18th – 28th December 2023
Mode: Face to Face (Offline)

Speaker profiles

Mr. Ashok Pendse Independent consultant & Energy coordinator, Mumbai
Dr. R. R. Sawant Professor, EXTC, SPIT
Dr. Sandip Anand Professor, EED, IIT Bombay
Dr. Gopal Gajjar, Research Scientist, IIT Bombay
Dr. S. A. Soman Professor, EED, IIT Bombay

Dr. Anju Meghwani Power Electronics Consultant, Mumbai
Dr. A. M. Kulkarni Professor, EED, IIT Bombay
Dr. Yogesh Bichpuriya, Senior Scientist with TCS Research
Mr. P.Sanodiya Chief Manager, System Operation, WRLDC, Mumbai
Dr. Sushma Wagh, Professor, Electrical Dept, VJTI, Mumbai.

It was a great Initiative by ATAL Academy. I am thankful to AICTE for giving me this opportunity to conduct the FDP for faculty members of technical institute of India free of cost. I got huge response for registration as well as lots of compliments on course design and quality of sessions.
Participants also appreciated the Industrial visit to Grid – India at WRLDC, Mumbai

DEPARTMENT OF MECHANICAL ENGINEERING

STATISTICS OF THE DEPARTMENT ACTIVITIES

1	Number of research publications	Faculties - Student's -	27 02
2	Faculty Development Program	Conducted - Attended -	05 15
3	Research Fund		
4	Consultancy work		
5	Social Outreach Activities		

MOUs signed:

- A MOU is signed between Godrej and Boyce Manufacturing and SPCE on 8/8/2023. This MOU was intended for SPCE Racing team to get partial manufacturing assistance/expertise from Godrej manufacturing facilities located at Vikroli, Mumbai.
- To start a center of excellence at SPCE in domain of HVAC, A MOU is signed between blue Star and SPCE on 8/12/2023. This MOU was intended to train students and others for available HVAC systems and to support the refrigeration and air conditioning laboratory.

FACULTY ACTIVITY AND ACHIEVEMENTS:

Prof.R S Maurya

- Prof. R S Maurya attended a National-level workshop on 'MATLAB- Data Analysis and
- Visualization' from 5th to 7th January 2024.
- He also participated in the ASME Conference on 'Artificial Intelligence in Mechanical Engineering' held at IIT Mumbai on 26th August 2023.
- Furthermore, he attended a 1-week Faculty Development Program (FDP) on 'OBE and Application of Generative AI in Teaching and Research' from 6th-13th March 2024 at GC Kottayam.
- Prof. Maurya successfully published a paper titled "Thermal Characterization of a Phase Change Interface under Directional Exponential Heating" at the 27th national and 5th international ISHMT-ASTFE (IHMTC 2023) held at IIT Patna.
- Additionally, he provided guidance and supervision to the SPCE WAVE Team 'Wave
- Aeromastros,' enabling them to participate and secure the 2nd rank in the Best Technical Presentation at the 'SAEISS Drone Development Challenge 2023' held from 21st to 23rd July 2023.

Prof.R S Maurya

- Prof. Rajesh Buktar attended the AICTE ATAL FDP on Generative AI: Concerns and Solutions at Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology from 01/01/2024 to 06/01/2024.
- He also participated in “Simulation and Digital Twin for Manufacturing and Service Industries”held from 15th to 20th November 2023.
- Prof. Buktar attended an industry-oriented faculty development program on Machine Learning, Deep Learning & Raspberry PI integration for real-world solutions from 31st July to 5th August
- He attended a one-day workshop on Research Symposium on 14/01/2023.Prof. Buktar delivered guest lectures on Augmented Reality, Digital Twin in Smart Manufacturing, Innovative Teaching Learning Methods using AR, and the role of IoT, AR, and VR in digital marketing.
- He spoke on the topics of driving digital transformations with augmented reality and using augmented reality in education.
- Prof. Buktar has been granted a patent for “A Conceptual Framework of End-to-End IoT Implementation in Auto Component Manufacturing Enterprises” (Patent No - 202321059197).

He has published the following papers.

- Merging Legacy Equipment with Industrial Internet of Things to Improve Productivity of Auto Component Manufacturing Enterprises – An Industry 4.0 Initiative” presented at the Third International Conference on Intelligent Robotics, Mechatronics, and Automation Systems (IRMAS 2023).
- “Recent Trends of IoT Integration in Indian Auto Component Manufacturing Enterprises” published in the Proceedings of the International Conference on Advanced Materials and Technologies for Industry 4.0 (ICAMT 4.0).
- “Implementation of Industry 4.0 and Smart Manufacturing in Indian Manufacturing Industries Using Simulation Approach” presented at Intelligent Robotics, Mechatronics, and Automation Systems (IRMAS 2023).
- “Implementation of Digital Manufacturing Practices in Manufacturing Industry Using Simulation Approach in Alliance with Industry 4.0” presented at the 2nd International Conference on Innovations in Mechanical and Civil Engineering, International Medical Aesthetic Conference and Exhibition 2023

Prof.D N Jadhav

- Prof. D N Jadhav participated in a workshop on ATAL FDP on 'Semiconductors in Design and Development of Micro-Electromechanical Systems' from 8th to 13th January 2024.
- He successfully published a paper titled "Design and Analysis of Hydrogen Storage Pressure Vessel Using Composite Material" authored by Bhooshan V. Kamble, Nilesh R. Raykar, and Dattatray N. Jadhav in AIP Conf. Proc. on 21st March 2024; Volume 2985 (1), Page 020002.

Prof.Kiran S Bhole

- .He served as the coordinator of the ATAL FDP on 'Semiconductors in Design and Development of Micro-Electromechanical Systems' held from 8th to 13th January 2024.
- He organised a SERB-sponsored 2-day workshop on the 'Investigation of Fractal Growth on Curved Surfaces in Hele Shaw Flow' on 2nd and 3rd March 2024.
- Additionally, he attended the ASME Conference on 'Artificial Intelligence in Mechanical Engineering' at IIT Mumbai on 26th August 2023.
- He was a guest speaker in a one-week FDP on 'Recent Advances in Mechanical Engineering' at DY Patil Institute of Technology, Pune.

He authored and published several articles, including:

1. A Generic Digital Twin Application Framework for Emerging Trends in Industrial Proces Heaters
2. Design Methodology for Development of Experimental Setup for Fabrication of Controlled Micro and Meso Fractals.
3. Computational Analysis of a New Airfoil for Micro-capacity Wind Turbine.
4. Computer-aided Approach for Case-specific Design of Fixture for Slot Milling Process.
5. Efficacious Elimination of Salts from a Convoluted Ethylene Glycol-Water Solution Employing Nanofiltration Membranes.
6. Machine Learning Approach to Predict Viscous Fingering in Hele-Shaw Cells.
7. Synthesis of Sodium Chloro Fluoride System for Generating Micro Fractal Type Structures for Microfluidic Applications

Prof. Kiran S Bhole received research funding as follows:

- ₹112L from DST under FIST to improve S&T Infrastructure in the college on 30th October
- 2023.
- ₹250,000, a second grant from SERB project approved for 'Investigation of Fractal Growth
- on Curved Surfaces in Hele-Shaw Flow'.
- A collaborative research grant of ₹43.4 lakhs with GEC Karad, was received from DST.
- A collaborative research grant of ₹45.3 lakhs with Fr. Agnel COE, Vashi, received from DST.
- A DST research fund of Rs.7.50lakh for work on 'Programme on Innovation, Design, and
- Entrepreneurship (IDE) to Foster Make-in-India Initiative, received.

- He successfully guided PhD scholar Ms. Chetna Sharma, who was awarded a PhD degree from Mumbai University on 25th September 2023.
- He submitted 2 patent applications.

Prof.S B Rane.

- Prof. S B Rane attended a national-level webinar on 'Lean Six Sigma Overview' organized by the IIIE Student Chapter, MED on 30th October 2023.
- he organized the Cornell Maha-60 program (orientation program) under the guidance of the Government of Maharashtra with the assistance of Cornell University, New York, USA, at Sardar Patel College of Engineering, Mumbai on 5th December 2023
- Prof. Rane conducted the Alumni Speak Program under the theme 'My Success Story of Vedang Patel' and the Handover-Takeover Ceremony on 17th October 2023 at the SPJIMR Auditorium. Additionally, he organized an event titled "Business Skills Needed to Thrive in the 21st Century: How to Become an Opportunity Magnet?" by Shekhar Srinivasan on 28th August 2023.
- Prof. S B Rane conducted sessions on Problem Solving Skills in the Orientation Program from 7th August to 18th August 2023 at D Y Patil University.

Prof. Rane has co-authored following research articles

- A Generic Digital Twin Application Framework for Emerging Trends in Industrial Process Heaters published in Procedia CIRP, Volume 119, 2023, Pages 1128-1133.

- Comparison on conventional and digital technology assisted design methodologies of process heater radiant section published in the International Journal on Interactive Design and Manufacturing (IJIDeM).
- An application of IIoT framework in system design, performance monitoring and control for industrial process heater published in the International Journal on Interactive Design and Manufacturing (IJIDeM).
- Optimization of a shift in the natural frequency of a nitinol-reinforced composite beam published in the International Journal of Interactive Design and Manufacturing.
- Modeling barriers to adoption of digitization in supply chains using FTOPSIS and its impact on sustainability TBL published in Benchmarking: An International Journal.
- A machine learning approach for investigation of the natural frequency of a nitinol- reinforced composite beam published in Engineering Research Express.
- Strategies for development of smart and green products using Blockchain-IoT integrated architecture published in Operations Management Research.
- Integration of Lean Six Sigma with Internet of Things (IoT) for productivity improvement: a case study of contactor manufacturing industry published in the International Journal of System Assurance Engineering and Management.
- He was awarded a patent on 3rd November 2023 for an invention titled 'A System and a Method for Performing Forging Operations.'
- Prof. S B Rane won the Platinum award for SPCE in the National Six Sigma Competition 2023 for the work presented by him and his team.
- He reviewed a paper in the International Journal of Technology Analysis & Strategic Management in 2024.
- Additionally, Prof. Rane reviewed two papers in International Journals published by Emerald publications between 2023-2024.
- He participated in the PJMT Distinguished Lecture held on 28th December 2023 at ViMEET.
- Prof. S B Rane was nominated as a Governing Council Member for SSGBCET, Bhusawal for the year 2023-2024.
- He attended the PBOS meeting at SBM Polytechnic on 29th August 2023.
- Prof. Rane has been serving as the Chairman of the Indian Institution of Industrial Engineering Mumbai Chapter since 2022.
- He acted as a Subject Expert at MHS Sabusiddik COE on 5th July 2023.
- Furthermore, Prof. Rane was an Eminent Resource Person in an IEEE Bombay Section Sponsored One-Week Faculty Development Program (Capacity Building Workshop) titled "Blockchain: Future of Cyber Security" conducted from 3rd July 2023 to 8th July 2023 in offline mode at SPIT Mumbai

Prof.Megha S Nagrale

- Prof. Megha S Nagrale attended the AICTE ATAL FDP on Generative AI: Concerns and Solutions at Bharatiya Vidya Bhavan's Sardar Patel Institute of Technology from 01/01/2024 to 06/01/2024.
- She also attended the AICTE ATAL FDP on Semiconductors in Design and Development of Micro-Electromechanical Systems at Sardar Patel College of Engineering from 08/01/2024 to 13/01/2024
- Additionally, Prof. Nagrale participated in the "Advances in Industrial and Manufacturing Operations: Applications and Practices (AIMOAP-23)" organized by the Department of Mechanical Engineering, National Institute of Technology Kurukshetra during December 15- 19, 2023.

Her research publications include:

- "Solar Float Design and Simulation Using LDPE Material" published in Eur. Chem. Bull. 2023,12(issue 7),3934-3942.
- "Design and Development of Automated Solar PV Module Cleaning Robot" published in Eur. Chem. Bull. 2023,12(issue 6),2965-2983.
- "Design of Solar Mount using High Density Polyethylene" published in Eur. Chem. Bull. 2023,12(issue 7),3943-3954.
- "Numerical Analysis of Solar Floats Made of LDPE for Upwind Condition" published in Eur. Chem. Bull. 2023,12(issue 6),2984-2988.
- "Effect of cutting parameters on various output responses for cryo-treated INCONEL X750 alloy" published in Int J Interact Des Manuf (2023)."Comparison of time required for solar PV plant cleaning with robotic and manual technique" published in AIP Conference Proceedings (Vol. 2985, No. 1) in March 2024.
- She was granted a patent on "IOT BASED SMART PILL DISPENSING DEVICE" with Design No. 389399-001.

She received research funds including:

- DST's grant of 43.4 Lakhs on AMT Proposal Technology Development for Controlled Fabrication of 2D and 3D Net-Shaped Microstructures using Lifting Plate Hele Shaw Cell in December 2023.
- DST-Training Programme on Innovation & Entrepreneurship scheme of the Department of
- Science and Technology, Rs 7.5 Lakhs in January 2024.

She coordinated various MESA activities:

- Blood donation camp under MESA on 10/10/2023.
- Student study tour to Chandigarh-Kullu-Manali-Amritsar from 29/1/2024 to 06/2/2024.
- IV of TYBTech students to TIFR, Mumbai on 28/2/2024.
- Industrial Visit to PARLE Factory at Khopoli on 02.12.2023 for 45 students. Mindfulness Awareness Session conducted on 14.10.2023 in association with Vipassana Research Institute Borivali.
- Expert talk on "How to achieve your career goals" by Dr. Ganesh Soni, a Quality Control Manager at Hexagon Group on 24 April 2023.

Prof.Sachin Vankar

- Prof. Prof. Sachin Vankar Attended AICTE ATAL FDP on 'Generative AI:Concerns and Solutions'at SARDARPATEL INSTITUTE OF TECHNOLOGY from 01/01/2024 to 06/01/2024.
- Published a journal paper on' Automated Coffee Making and Bottle Filling System using S7-1200 PLC and Ladder Logic Programing' published at Int. Journal of Materials, Mechanics and Manufacturing (2023).
- He organized an industry visit for B.Tech. (Mechanical Engineering) Semester VIII students to MAHAGENCO, Gas Turbine Power Station (GTPS), Uran on 02/05/2023.

Prof.B.N.Bhasme

- In the capacity of co-convener, Prof. B.N. Bhasme oversaw the "Semiconductors in Design and Development of Micro-Electromechanical Systems" ATAL Faculty Development Programme (FDP). The dates of the event were January 8–13, 2024.
- On August 26, 2023, he attended the ASME Conference on "Artificial Intelligence in Mechanical Engineering" at IIT Mumbai.
- Prof. Bhasme's project, "Laboratory Refrigeration Unit with Transparent Evaporator, Real-Time Data Monitoring,

and IoT Integration," was awarded an ASHRAE equipment grant of Rs. 2,47,034 (about $2,980).

- On May 27, 2023, he planned a visit to Belimo Automation India Pvt. Ltd. by the ASHRAE Student Chapter. Students saw an entire air conditioning plant equipped with an energy monitoring system during their visit.

Prof.Kunal Y. Bhavsar

- Prof. Kunal Y. Bhavsar attended ASHRAE's Chapter Regional Conference in Colombo, Sri Lanka, from October 5th to 8th, 2023
- He attended the full-day 'YouthCon' event at Novotel Hotel, Mumbai, organized by ASHRAE Mumbai Chapter on December 16th, 2023.
- Prof. Bhavsar attended a Distinguished Lecture session on "ASHRAE Standard 90" by Mr. Chandrasekar from Singapore at Belimo Training Centre, Rabale, on January 5th, 2024.He attended the Pune Air Conditioning and Refrigeration Conference in Pune, organized by ASHRAE Pune Chapter, on February 10th, 2024.
- He hosted ASHRAE Mumbai Chapter's Distinguished Lecture on 'Terminal Units' by Mr. V. Krishnan in SPCE 114 on December 2nd, 2023, with more than 20 SPCE ASHRAE student members attending the session. It was also attended by ASHRAE Mumbai President Mr. Sanjay Verma, Secretary Mr. Goutham Pitchikala, Immediate Past President Ms. Nivedita Jadhav, Vice President Mr. Parth Thakkar, and CTTC Chair Mr. Kartik K.
- Prof. Bhavsar also hosted ASHRAE Mumbai Chapter's Expert Lecture on 'Cold Chain Refrigeration' by Mr. Anand N. in SPCE 114 on March 9th, 2024, where more than 15 SPCE ASHRAE student members attended the session. It was also attended by ASHRAE Mumbai President Mr. Sanjay Verma and Secretary Mr. Goutham Pitchikala.
- He is a Board of Governors (BOG) Member and Student Activities Chair at ASHRAE Mumbai Chapter for Society Year 2023-24.

Prof.Haseen M. Shaikh

- Haseen M. Shaikh attended ATAL FDP on 'Semiconductors in Design and Development of Micro-Electromechanical Systems' from January 8th to 13th, 2024.
- Prof. Shaikh performed state-level administrative work for CET CELL, Maharashtra, for postgraduate admissions for the academic year 2023-24
- Prof. Shaikh also performed duties for the NEET examination for the academic year 2023-24.
- Prof. Shaikh acted as an observer in the NVS Recruitment Exam 2023.

Prof.Sharad R Valvi

- He participated in the ATAL FDP on 'Semiconductors in Design and Development of Micro- Electromechanical Systems' from January 8th to 13th, 2024.
- He completed a certification course on "Python for Mechanical Engineers" organised by Fr. C. Rodrigues Institute of Technology, Vashi.
- He published a paper titled "Comprehensive Analysis of a High-Temperature Solar-Powered Trigeneration System: An Energy, Exergy, and Exergo-Environmental (3E) Assessment" in the Proceedings of the IMechE Part C: Journal of Mechanical Engineering Science. The paper's DOI is 10.1177/09544062241237417.

FACULTY DEVELOPMENT PROGRAM

"SEMICONDUCTORS IN DESIGN AND DEVELOPMENT OF MICRO-ELECTROMECHANICAL SYSTEMS"



group photo of Dr. N. C. Shivprakash and the participants at the end of session.

All India Council for Technical Education (AICTE) Training and Learning (ATAL) Academy
Sponsored One Week
Faculty Development Program

Organized By
Department of Mechanical Engineering

Program Coordinator-:
Dr. Kiran Suresh Bhole

Duration: 08th – 13th January 2024
Timing: 09:00 am to 5:30 pm
Mode: Face to Face (Offline)

Embarking on a transformative journey, Bhartiya Vidya Bhavan's Sardar Patel College of Engineering hosted a cutting-edge One Week offline Faculty Development Program from January 8th to 13th, 2024. Sponsored by AICTE's Training and Learning Academy (ATAL), the program delved into the intricacies of "Semiconductors in Design and Development of Micro-Electro Mechanical Systems."

Drawing 42 participants nationwide, this dynamic initiative brought together experts from prestigious educational institutions and industries, creating a vibrant platform for the exchange of knowledge and ideas. This FDP unfold the insights shared by eminent speakers in this intensive 6-day workshop, propelling innovation in the realm of semiconductors and micro-electro mechanical systems.

Dr. Sharad Mhaiskar, Pro-Vice Chancellor of NMIMS and Dr. Nitin Kale, CTO Nanosniff Technology graced the occasion as the Guest of Honor and Chief Guest respectively. Dr. Kiran Bhole, the program coordinator, provided insights into the offline FDP and highlighted various initiatives by the ATAL Academy.

He eloquently presented the program's outline, shedding light on the crucial role of semiconductors in the design and development of Micro-Electro Mechanical Systems.
Following are the few of the photographs of the events.

FIRST YEAR ENGINEERING DEPARTMENT

INTRODUCTION

The first-year department helps the students learn basic science courses, which lays the foundation for them to study the professional courses in their engineering program. The department also helps the students learn and enhance their communication and interpersonal skills and develop a fine overall personality. As a result, the students are better prepared to face the interviews for on- campus as well as off-campus placements and also perform well in their professional lives. Thus, the department creates a bridge between the basic sciences, humanities, and engineering, a prerequisite for a good engineering programme.

The department has well-qualified and experienced faculty and also well-equipped, state-of-the art laboratories. The laboratories are upgraded as per the needs and curriculum. The department conducts an orientation programme and an induction programme of 21 days for the newly admitted F.Y.B.Tech. students, where the students are exposed to various courses and also introduced to soft skills and the art of living. They are introduced to yoga and different outdoor and indoor sports for their overall physical and mental growth. The department (through the institute TPO) also conducts diagnostic tests for F.Y.B.Tech. students, which helps the students know their strengths and weaknesses so that they can work to overcome those weaknesses. Mentor faculty and in-house counsellors are available to help the students if they are facing any problems.

Dr. Shyamlee Solanki has been in charge as the Head of the Department of First-Year Engineering since 2nd May 2022.

DEPARTMENT ACTIVITIES

Dr. Shyamlee D. Solanki, (coordinator) and Dr. Kiran Bhole (Co-coordinator) Organized ATAL AICTE Sponsored two-week faculty development program on "Stress management, Art of Living and Effective Communication" from November 14, 2022 to November 25, 2022. The Institute received a grant of Rs. 3,00,000 for conducting the FDP. Eminent Professors form IIT's and Management institutes and IAS were invited as resource persons.

FACULTY ACHIEVEMENTS

1. **Dr. Shyamlee Solanki** got selected as a member of the Board of Studies at the NMIMS Mukesh Patel College of Engineering. She is also a visiting faculty member for their MBA and Tech courses in semesters VIII and IX.
2. **Prof. Satishkumar Barot** received a letter of appreciation from AICTE for contributing as a translator of the book "Mathematics-I for Non-CSE of the 1st year undergraduate programme in marathi under the AICTE Technical Book Writing Scheme as per the requirement of National Education Policy 2020.

SERB SPONSORED RESEARCH PROJECT

Project Title: Investigation of Fractal Growth on the Curved Surfaces in Hele Shaw Flow

DST No: CRG/2021/000747

Principal Investigator (Name and Address): Dr. Kiran Suresh Bhole, Associate Professor, Department of Mechanical Engg., Sardar Patel College of Engineering, Andheri (West), Mumbai 400058

Objectives of the Project:

1. Design and development of experimental setup for formation of control micro fractals for curved surfaces.
2. To study the control of fractals on conical and spherical Hele-Shaw flow using pits and multiport.
3. To develop the process plan for 3D scalable fractal structures.
4. To control the development of microfractals on conical and spherical surfaces.
5. Effect of rheology of nano particle filled non-Newtonian resin in fractal formation.

Experimental Setups:

Figure 1 below shows experimental setup developed for primary experimentations. It is used to experimentally investigate viscous fractal growth on curved surfaces (conical and hemi-spherical). Fractal formation on flat surfaces is also studied. Conical and Hemi-spherical surface plates (of maximum 70 mm diameter), designed in CAD software and manufactured from polymethyl methacrylate (PMMA) (also known as acrylic glass) are used in this experimentation process. Process parameters, gap between the surface plates and velocity of separation of surface plates, in this experimentation are varied in specific ranges and fractals formed on these surfaces are analyzed. Image processing software is used for this purpose. Fluid used for fractal formation is non-Newtonian fluid, Sodium; 5-chloro-2-(2,4-dichlorophenoxy) phenol;fluoride (also known as toothpaste). Due to inherent limitations in the design of setup, there are constraints on the selection of process parameters. Hence, versatile experimental setup shown in Figure 2 is designed and developed. This newly developed setup is able to fabricated fractal patterns on surface plates of 100 mm diameter with wide range of process parameters and with precision.

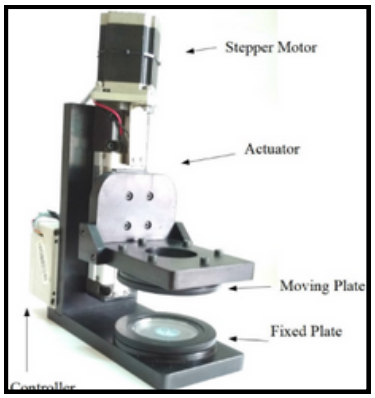


Fig. 1 Primary Experimental Setup

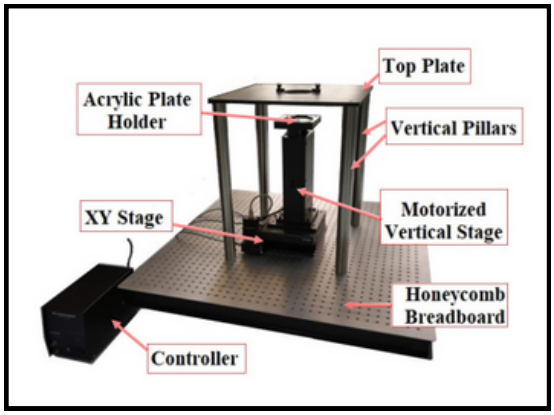
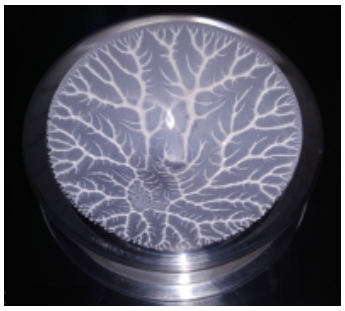


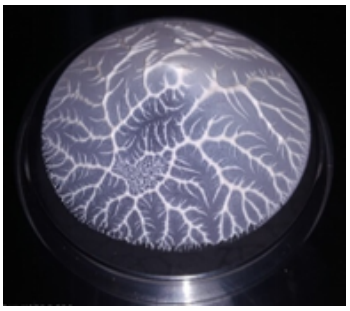
Figure 2 Versatile Experimental Setup

Outcomes:

High viscosity fluid is squeezed to specific gap between two parallel surface plates and upper plate is lifted with controlled velocity. Consequently, fractal patterns are formed on both the plates as replica of each other. Patterns are formed for the specific range of process parameters. Gap between the surface plates (b) is selected as 0.1, 0.2, 0.3 and 0.4 mm whereas velocities of separation of surface plates are selected as 1, 2, 3 and 4 mm per minute. Patterns formed on conical surface plates for 0.1 mm gap between plates and 3 mm per minute plate separation velocity are shown in Figure 3 below.



(a) Pattern on base plate



(b) Pattern on upper plate

Figure 3 Fractal Patterns obtained on conical surface plates for 0.1 mm gap between plates and 3 mm per minute plate separation velocity

Fractals formed on the plates are analyzed for its dimensional features by varying process parameters in specified range. Hemi-spherical surface plates are also used and fractal growth on it is also investigated for the same specified range of process parameters. Fractals formed on hemi-spherical plates for 0.3 mm gap and 1 mm per minute velocity are shown in Figure 4.

Figure 4 Fractal Patterns obtained on hemispherical surface plates for 0.1 mm gap between plates and 3 mm per minute plate separation velocity

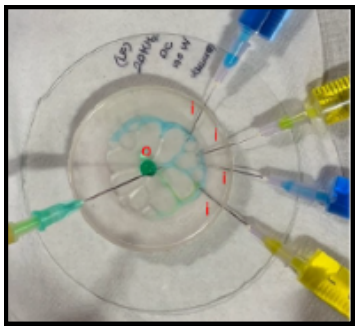
These fractals formed are also analyzed for dimensional features and compared with those on conical plates for study of 3D surface on fractal formation. Observations of analysis are based by the governing physics behind it. Investigated experimental procedure is successfully converted to the innovative micro-mixing application.

Application:

Fractal patterns obtained on flat plates are casted to moulds and deployed into micro-mixing application. Figure 5 shows mould casted from patterns on flat plate and working model of micro-mixer. Blue and yellow coloured liquids are used for determining the efficacy of micro-mixer model. Similar methodology can be realized with moulds casted from patterns on curved surfaces.



(a) Casted mold



(b) Micro-mixer working model

Figure 5 Micro-mixer application

STUDENT WELFARE COMMITTEE



- Dr. Shyamlee D. Solanki - Chairperson
- Dr. Jayram Gholave
- Dr. Anil N. Ghadge
- Dr. NandaKishor Kinhekar
- Prof. Megha Janbandhu
- Mr. Kishor Joshi
- Mr.Darshan C. Nawale

STUDENTS' COUNCIL



GENERAL SECRETARY:
- Mr. Digvijay Shekhar

Dep. GENERAL SECRETARY:
- Mr. Harsh Kabra

SPORTS SECRETARY:
- Mr. Aarya Nimbalkar
- Mr. Chaitanya Jagtap
- Ms. Vaishali Lagad

SOCIAL WORK SECRETARY:
- Mr. Rishi Agrawal

TECHNICAL SECRETARY:
- Mr. Prasad Naik
- Ms. Sharvi Dhariya
- Mr. Nachiket Narlawar

MAGAZINE SECRETARY:
- Ms. Swati Pethkar
- Mr. Vighnesh Jondhale

CREATIVE HEAD:
- Ms. Urvashi Seth
- Mr. Rajdeep Banerjee

CULTURAL SECRETARY:
- Mr. Sanskar Dholay
- Mr. Anurag Pandey

FINANCE SECRETARY:
- Ms. Asmita Bharitkar
- Mr. Gagan Tapadia

LITERARY SECRETARY:
- Ms. Riya Gharat

LADIES REPRESENTATIVE:
- Ms. Apurva Garad
- Ms. Minham Kant

GENERAL SECRETARY ADDRESS

It is with great pleasure and pride that I stand before you today to reflect on the remarkable journey we've embarked on together over the past year. As we gather here, let us take a moment to celebrate the achievements and the spirit of excellence that have defined our community. I'm super proud and thankful for all the things we've done together.

Our journey together began on August 1st, laying the groundwork for a promising year ahead. This marked the foundation of a year filled with opportunities for growth, collaboration, and collective success.One of the earliest highlights of our year was the celebration of Independence Day on the 15th of August. With spirited group dances, music performances, and moving poetry readings, we came together to honor the values of freedom, unity, and patriotism that bind us as a nation.

Following this, we warmly welcomed the new batch of students during the induction ceremony. It was a moment of excitement and anticipation as we embraced the newest members of our community, eager to support and guide them on their journey ahead.Recognizing the importance of holistic well-being, we organized yoga classes aimed at nurturing the physical and mental health of our members. These sessions provided a space for relaxation, self-reflection, and connection within our busy academic lives.In our commitment to environmental stewardship, we joined hands with the Rotaract Club for a beach cleaning initiative at Versova. It was a tangible demonstration of our dedication to preserving and protecting our natural surroundings for future generations.

On the 16th of October, we hosted a stem cell donor registration drive in partnership with MDRI. The overwhelming response, with 370 new registrations, underscored our collective commitment to making a difference in the lives of others.The festivities continued with 'Prarambh,' our official freshers' party, where the talent and enthusiasm of our first-year students were on full display. This was followed by a vibrant Garba night, where traditional attire and joyful dance brought our community closer together.In October, we also organized a Model United Nations event, fostering diplomatic dialogue and global awareness among participants. This was followed by the SPCE Annual Debate in December, conducted in the esteemed Oxford style format, which stimulated intellectual discourse and critical thinking among our members.Republic Day on the 26th of January was celebrated with great fervor, with musical and dance performances capturing the essence of our cultural heritage and national pride.

The commencement of the new semester heralded the success of SPIRIT, our sports event, which saw active participation from colleges across Mumbai. The dedication and hard work of our sports secretaries played a pivotal role in elevating SPIRIT to new heights.Social Week, held from the 4th to the 7th of March, brought moments of joy , culminating in the exciting PRE Sphinx event. This set the stage for our much-anticipated annual techno-cultural fest, SPHINX, which showcased the creativity and innovation of our community.Alongside, the SPCE Cup, organized in association with CEA MESA and ESSA, fostered a sense of unity and friendly competition among our branches.SPHINX 2024 stood as the pinnacle of our collective creativity and innovation, featuring a diverse array of technical events and captivating cultural performances. The grand finale, a concert night on the Bhavan's ground, marked a historic moment with renowned celebrities Kushal Mangal and Shreya Jain gracing the stage.

I extend my heartfelt gratitude to the entire team of the Student Council, whose unwavering dedication and hard work made these events possible. Special acknowledgments to Dr. Shyamlee Solanki ma'am, Chairperson of the Student Welfare Committee, for her steadfast support and guidance.As we look ahead to the future, let us carry forward the spirit of unity, excellence, and service that defines us as a community. Here's to more success, more growth, and more memories to cherish in the years to come.

~ Digvijay Shekhar

DEPUTY GENERAL SECRETARY ADDRESS

Reflecting on my tenure as deputy secretary, I am overwhelmed with gratitude for the journey it has been. Each moment, whether challenging or rewarding, has been instrumental in my personal growth and development. The myriad experiences and lessons learned have sculpted me into the individual I am today, and I would eagerly embrace the opportunity to relive them all over again.

I owe a profound debt of gratitude to the tireless dedication and support of the Student Council. Their unwavering commitment has been the bedrock of our collective success, infusing every endeavor with purpose and fulfillment. To the incoming council members, I extend my sincerest best wishes and encouragement.

Looking forward, I am brimming with optimism for the continued prosperity of SPCE. May our shared vision and unwavering dedication to excellence propel us toward making a lasting, positive impact within our community and beyond.

In conclusion, I wish to express my heartfelt appreciation to all council members for their invaluable contributions, and to Dr. Shyamlee Solanki for her indispensable support and guidance. Let us carry forward the wisdom gleaned and the memories cherished as we embark on this journey of growth and evolution together.

Thank you.

~ Harsh Kabra

TECHNICAL SECRETARIES ADDRESS

TEAMWORK IS THE SECRET THAT MAKES COMMON PEOPLE ACHIEVE UNCOMMON RESULTS.

As we continue to harness the power of collaboration within our college, we, the Technical Secretaries, are delighted to share the strides we've made in nurturing the technical landscape at our esteemed institution. With the active collaboration of various departmental committees including CEA, EESA, and MESA, we have engaged students through an array of workshops, seminars, and interactive sessions. Our technical clubs—SPCE Racing, S.P.A.R.K., and W.A.V.E.—have exerted continuous efforts and hard work, achieving remarkable nationwide success. Their dedication exemplifies the spirit of teamwork we so deeply cherish and promote. SPHINX, our grand techno-cultural fest, has provided an enriching platform for budding engineers through diverse technical competitions and showcases. This year, we introduced new events like RoboSumo and electrical circuit design, alongside established contests such as robo soccer, CAD modeling, concrete design, and quiz competitions. These competitions tested and enhanced participants' skills in robotics, coding, concrete technology, and electrical engineering, reflecting the challenges encountered in the real world of engineering. Additionally, the technical paper presentations and mock interviews proved to be particularly impactful, equipping students with the essential tools to excel in both academic and professional arenas. These events not only stimulated intellectual growth but also prepared participants for future career opportunities, reinforcing the practical applications of their academic studies. To conclude this address, we extend our deepest gratitude to everyone who played a pivotal role in making this year a resounding success. Special thanks to the core committee team and the organizers, whose dedication and hard work made the fest both possible and memorable. We also appreciate the continuous guidance and support from Dr. Shyamlee Solanki, Chairperson of the Student Welfare Committee, our faculty, supporting staff, and our Principal. As we pass the baton to the next Student Council, we are confident that they will continue to build on our achievements and elevate our college to new heights. Thank you all for your unwavering commitment and spirit.

~ Prasad Naik **~Sharvi Dhariya** **~ Nachiket Narlawar**

CULTURAL SECRETARIES ADDRESS

As Cultural Secretaries for the academic year 2023-24 at SPCE, it has been an exhilarating journey cultivating a vibrant cultural landscape within our esteemed institution. We commenced our tenure with the grand induction of the first-year students, introducing them to the kaleidoscope of cultural clubs that enrich our campus life. The electrifying jamming session by Spandan Club set the stage for an unforgettable year ahead, infusing rhythm and camaraderie into our campus atmosphere.

Our official freshers' event, Prarambh, started with the dynamic War of Branches, fostering bonds and igniting the competitive spirit among students. Garba Raas brought the essence of tradition and celebration, uniting our diverse community in joyous revelry.

The eagerly anticipated Social Week followed, offering unforgettable experiences like the adventurous Treasure Hunt and the glamour of Ramp Walk, culminating in an electrifying DJ night resonating with laughter and friendship

Pre-Sphinx festivities showcased incredible student talents, and our promotion at Marine Drive for SPHINX 2K24 with Spandan Band's melodious tunes left an indelible mark on the city. SPHINX itself was the pinnacle of our cultural calendar, starting with a captivating Dhol Tasha inauguration and an uproarious stand-up comedy session featuring talented comedians Anish Goregaonkar, Sagar Punjabi, and Rahul Chauhan.

Our tenure as Cultural Secretaries has been a testament to the transformative power of culture to inspire, unite, and elevate. We extend heartfelt gratitude to the entire SPCE community for their unwavering support and participation. Let us continue to embrace diversity, foster creativity, and uphold the rich tapestry of culture that defines our institution.

Warm regards,

~Anurag Pandey **~Sanskar Dholay**

SPORTS SECRETARIES ADDRESS

As the custodian of the Sports Secretary role, we are humbled by the opportunity to serve our college community. As we look back on the past year, we take immense pride in the remarkable strides we've made in the realm of sports. This year, in particular, has been a testament to our unwavering dedication and commitment to sportsmanship.

It brings us great joy and immense pride to highlight the exceptional achievements of our college teams. For the first time in our college's history, we proudly secured four podium finishes in the Mumbai University Championship, including Bronze in Malkhamb (girls), Silver in Archery(girls),Bronze in Archery (boys) and Bronze in wrestling (boys category). Additionally, our teams excelled in intercollegiate tournaments across various disciplines, with notable victories in table tennis, athletics, basketball, football, cricket, and badminton.

One of the highlights of our tenure was the successful organization of SPIRIT 2024, our flagship sports event, which witnessed unprecedented participation and enthusiasm from both participants and spectators. We extend our heartfelt gratitude to our dedicated Sports heads and the entire SPIRIT team for their tireless efforts in making this event a resounding success.

Throughout our tenure, we have endeavored to uphold the rich tradition of sportsmanship and foster a culture of inclusivity and excellence within our college. The overwhelming response from our fellow students has been a testament to the enduring significance of sports in shaping our college experience.

~ Aarya Nimbalkar **~Vaishali Lagad** **~Chaitanya Jagtap**

Merit Students

Sr. no.	Name of the Award	Prize Awarded
1	KULPATI'S GOLD MEDAL	For securing First Rank in First Attempt amongst students of this college in following Programs
		B. TECH. (CIVIL) **PRASHANT SUYASH LIMAYE (9.85)**
		B. TECH. (MECHANICAL) **DHATRAK PIYUSH SHASHIKANT (9.58)**
		B. TECH. (ELECTRICAL) **VARDAM VANDAR RAJAN (9.80)**
2	KULAPATI'S SILVER MEDAL	For securing Second Rank in First Attempt amongst students of this college in following Programs
		B. TECH. (CIVIL) **SAIFEE BURHANUDDIN KHUZEMA (9.60)**
		B. TECH. (MECHANICAL) **MOHD IRFAN ISMAIL (9.54)**
		B. TECH. (ELECTRICAL) **SHETE JAYANT DEELIP (9.37)**
3	SHRI PRUTUVISH NARAYANDAS KILLAWALLA PRIZE	For securing highest scores in First Attempt amongst students of this college at **F.Y B.TECH. (ELECTRICAL)** Examination held in previous academic year and joined in **S.Y B.TECH (ELECTRICAL)** **VISHWAKARMA DITI DIWAKAR (9.91)**
		For securing highest scores in First Attempt amongst students of this college at **S.Y B.TECH. (ELECTRICAL)** Examination held in previous academic year and joined in **T.Y B.TECH (ELECTRICAL)** **ATHARVA SUNIL FUNDE (9.88)**
		For securing highest scores in First Attempt amongst students of this college at **T.Y B.TECH. (ELECTRICAL)** Examination held in previous academic year and joined in **B.TECH (ELECTRICAL)** **CHAVAN NEHA SATISH (9.47)**

Sr. no.	Name of the Award	Prize Awarded
		For securing highest scores in First Attempt amongst students of this college at **B.TECH. (ELECTRICAL)** Examination held in previous academic year **VARDAM MANDAR RAJAN (9.80)**
4	SHRIPAD RAO DUBHASHI PRIZE	For securing highest scores amongst our successful college students in the subject of "Building Drawing with CAD" in **S.Y B.TECH. (CIVIL) Sem. III** examination held in previous academic year **DHOTRE SAISHWARI RAMCHANDRA 86/100**
5	SMT. AHILYABHAI TEMBE PRIZE	For standing first in the subject of "Design of RCC Elements" in **T.Y B.TECH. (CIVIL) Sem. VI** examination held in previous academic year **ESHA JAGDISH BARAPATRE (9.84)**
6	SHRI R. M. JOSHI PRIZE	Has been awarded R. M. Joshi prize for securing highest scores in **Sem. VII and Sem. VIII (CIVIL)** taken together and passing separately during previous academic year **PRASHANT SUYASH LIMAYE (9.89)**
7	Dr. PRANLALA PATEL FOUNDATION PRIZE	Has been awarded Dr. PRANLALA PATEL prize for securing highest CPI in **F.Y.B.TECH. (MECHANICAL)** examination at the first attempt during the previous academic year **VISHWAKARMA NIKHIL PRABHAKAR (9.91)**
		Has been awarded Dr. PRANLALA PATEL prize for securing highest CPI in **S.Y.B.TECH. (MECHANICAL)** examination at the first attempt during the previous academic year **BHUSARI SANKET LAHANU (9.47)**
		Has been awarded Dr. PRANLALA PATEL prize for securing highest CPI in **T.Y.B.TECH. (MECHANICAL)** examination at the first attempt during the previous academic year **KHASBAGE ANSHUMAN ANIL (9.71)**
8	SHRI JAYANTI SATYANARAYANA MEMORIAL PRIZE	For securing highest CPI in the subject of "Structural Engineering" Sem. V at the **T.Y.B.TECH. (CIVIL)** examination held in previous academic year **ASHISH AJIT PATIL 117/125**

Sr. no.	Name of the Award	Prize Awarded
9	SHRI MARATHE MEMORIAL PRIZE	For securing highest CPI in the subject of "Engineering Mechanics" Sem I at the **F.Y.BTECH.(ELECTRICAL)** examination held in previous academic year **VISHWAKARMA DITI DIWAKAR 99/100**
10	SHRI MARATHE MEMORIAL PRIZE	For securing highest CPI in the subject of "Mechanics of Materials" Sem III at the **S.Y.BTECH.(CIVIL)** examination held in previous academic year **SHEKHAR DIGVIJAY DILIPKUMAR 87/100**
11	SHRI MARATHE MEMORIAL PRIZE	For securing highest CPI in the subject of "STRENGTH OF MATERIAL" Sem III at the **S.Y.BTECH.(MECHANICAL)** examination held in previous academic year **BHUSARI SANKET LAHANU 84/100**
12	COMMUNICATION SKILL PRIZE AWARDED BY STRUCTURAL DEPARTMENT OF F.Y. BTECH	For getting max. scores in C.S subject **CIVIL ENGG.** **ALSHI NOOPUR VIJAY (109)**
13	INDIAN WATER WORK ASSOCIATION (BOMBAY CENTRE) CASH PRIZE	For securing highest scores in "Environmental Engineering-II" **T.Y.BTECH (CIVIL)** sem. VI examination held in previous academic year **KADAM HARSH SANJAY 99/100**.
14	DR. G.A.MHASKAR & DR. B.M JOSHI PRIZE	For securing highest scores in "Environmental Engineering-II" **T.Y.BTECH (CIVIL)** sem. VI examination held in previous academic year **KADAM HARSH SANJAY 99/100**.
15	DR. G.A.MHASKAR & DR. B.M JOSHI PRIZE	For securing 1st rank in **B.TECH (ELECTRICAL)** class. **VARDAM MANDAR RAJAN (9.80)**
16	MRS. VIJAYA SURESH BHOLE AWARD OF MERIT	Mrs. Vijaya Suresh Bhole award of merit to first rank holder of **B.TECH (MECHANICAL ENGINEERING)** program to **DHATRAK PIYUSH SHASHIKANT (9.58)**.

Sr. no.	Name of the Award	Prize Awarded
17	SHRI SHANKAR BHANDARKAR	For securing highest scores amongst our successful college student in the subject of "Control System Design" in **T.Y.B.TECH Sem. VI** examination held in previous academic year **TEJENDRA GIRISH PATIL (119)**
18	SMT PRAMODINI BHANDARKAR	For securing highest scores amongst our successful college student in the subject of "Digital Control Design" in **T.Y.B.TECH semester VII** examination held in previous academic year **VARDAM MANDAR RAJAN (118)**
19	LATE SHRI NAMDEO B. DAHATONDE MEMORIAL AWARD	For securing highest scores in the subject of “Digital signal processing” at **T.Y.B.TECH. Sem. V** examination **RACHI SHAJI DIVAKARAN (107)**
20	MERIT PRIZE (OR BOOKS) AWARDED BY STRUCTURAL ENGINEERING DEPARTMENT TO THE STUDENTS OBTAINING THE FIRST CLASS AND GETTING HIGHEST NUMBERS OF MARKS IN ALL STRUCTURAL ENGINEERING SUBJECTS	Mechanics of Materials **SHEKHAR DIGVIJAY DILIPKUMAR 87/100**
21	MERIT PRIZE ON THE BASIS OF MERIT IN THE PRECEDING EXAMINATION	F.Y.B.TECH. Electrical **VISHWAKARMA DITI DIWAKAR (9.91)**
		F.Y.B.TECH. Civil **ALSHI NOOPUR VIJAY (9.38)**
		F.Y.B.TECH. Mechanical **VISHWAKARMA NIKHIL PRABHAKAR (9.91)**
		S.Y.B.TECH. Electrical **ATHARVA SUNIL FUNDE (9.88)**
		S.Y.B.TECH. Civil **SHEKHAR DIGVIJAY DILIPKUMAR (9.71)**

Sr. no.	Name of the Award	Prize Awarded
		S.Y.B.TECH. Mechanical **BHUSARI SANKET LAHANU (9.47)**
22	MERIT PRIZE ON THE BASIS OF MERIT IN THE PRECEDING EXAMINATION	T.Y.B.TECH. Electrical **CHAVAN NEHA SATISH (9.47)**
		T.Y.B.TECH. Civil **ESHA JAGDISH BARAPATRE (9.84)**
		T.Y.B.TECH. Mechanical **KHASBAGE ANSHUMAN ANIL (9.71)**
		B.TECH. Electrical **VARDAM MANDAR RAJAN (9.80)**
		B.TECH. Civil **PRASHANT SUYASH LIMAYE (9.85)**
		B.TECH. Mechanical **DHATRAK PIYUSH SHASHIKANT (9.58)**
23	GOLD MEDAL FOR HIGHEST CPI	M.TECH. (CIVIL) - CONSTRUCTION MANAGEMENT **PATIL OMKAR APPASAHEB (9.57)**
		M.TECH. (CIVIL) - STRUCTURAL ENGINEERING **ZORE VITTHAL DNYANESHWAR (9.14)**
		M.TECH. (ELECTRICAL) - POWER ELECTRONICS & POWER SYSTEM **ROY TRIPARNA (9.14)**
24	SILVER MEDAL FOR HIGHEST CPI	M.TECH. (CIVIL) - CONSTRUCTION MANAGEMENT **YADAV KHUSHRAM BUDHRAM (9.44)**
		M.TECH. (CIVIL) - STRUCTURAL ENGINEERING **DAREKAR SIDDHIKA SHARAD (9.36)**

Placement Report (Batch of 2024)

Company Name	Mechanical	Electrical	Civil
GEP Worldwide	2	0	0
Worley	2	0	0
SPECTRUM Techo Consultants	0	0	1
Selec Controls	0	1	0
Thornton and Tomasetti	0	0	1
Reliance Retail	3	1	0
OMP	1	0	1
Burns and McDonell	0	0	2
TCS	2	1	0
Tata Motors	5	6	0
Technip Energies	2	2	3
L&T Phase 1	4	6	3
Godrej Properties	0	0	1
Techint India Pvt. Ltd	0	0	1
Aker Solutions	1	0	1
Schneider Electric Phase 1	1	2	0
Axis Bank Internship	0	1	0
Axis Bank	0	1	0
TVS	0	1	0
Lodha	5	3	8
SBI General Insurance	2	3	0
Technimont	0	0	1
TATA Power	1	9	0
CBRE	2	1	0
Reliance Jio	1	0	0
Dar Al Handasah	3	5	1
Blue Star	2	0	0
ICICI Bank	1	4	0
PRAAN	1	0	0
Shapoorji Pallonji and company	0	0	2
ICICI securities	0	1	0
Schneider Electric Phase 2	0	2	0
OIA	0	1	0
Kalpataru Power	0	1	0
Mahindra & Mahindra	4	4	1
John Cockerill India Limited	1	0	0
New Horizons Consulting Engineers LLP	2	0	0
HUL	1	0	0
Jotun India Pvt ltd	1	0	2
Megger	0	2	0
ANJ Group	1	1	1
Telamon Technologies	0	0	1
Total	51	59	31
Higher Education Aspirants	16	16	28

Placement Report (Batch of 2024)

TRAINING & PLACEMENT OFFICE TEAM



Training & Placement Officer: Dr. Rahul T. Dahatonde

Civil Engineering Department

- Ms. Mitali Toke
- Mr. Sahil Wadhwani
- Ms. Anushka Patil

Electrical Engineering Department

- Mr. Aryan Pawar
- Ms. Pranjal Parmane
- Mr. Jash Parmar

Mechanical Engineering Department

- Ms. Manasi Sawant
- Mr. Hrishikesh Padaval
- Ms. Sakshi Thakur

Students' Achievements

TECHNICAL ACHIEVEMENTS		
Piyush Dhatrak & Saad Khan	B.Tech. Mechanical	Winner at ASHRAE Mumbai Paper Presentation Competition (Chapter Level) Bronze Award at ASHRAE RAL Paper Presentation (Chapter Level)
Ishani Prabhudesal, Isha Likhite & Kripa Sethi	B.Tech. Mechanical	Best Paper Presentation Award in an International Conference titled "Environmental Sustainability (ICES-2023)" organized by VJTI, Mumbai.
Ishwar Nimbhore	T.Y. Civil	Won the silver award of INR 2,50,000 with his Team Waste2Wealth for developing W2W Energy, Fuel, and Mobility Generation from Innovative Blogas Plant at "KPIT Sparkle 2023"First Prize at "National Level Web Application User Interface Design Competition" titled "LOREM IPSUM'' organized under CEPHEUS 22 (Annual Technical Fest) of IIT Goa
Divya Vijay Dhas	S.Y. Electrical	Awarded by a Scholarship Program by Technip Energies, which is given to only 100 girls all over India
Jash Parmar	B.Tech. Electrical	SPCE Robocon:1) Best Technical Report Award at DD Robocon 2023; 2) 100/100 in stage 1 and 99/100 in stage 2 of DD Robocon; 3) Winner in SPRC (Sardar Patel Robotics Challenge) in Spectra 20224) First and Second runner-up in VRC (VJTI Robotics Challenge) 2023
Ankur Tambe	B.Tech. Electrical	1) Selected (all over India) for the highly prestigious Indian Academy of Sciences Summer Research Fellowship Program 2023; 2) Selected for Utkarsh program 2023 by TVS Motors; 3) 3rd place with a cash prize at Aakash symposium 2024, IIT Bombay; 4) Projects: A) Polymer Electrolyte Membrane Fuel Cells technology, B) Reduction of End of Line Rejection of battery packs, C) IoT based Water management system

NON TECHNICAL ACHIEVEMENTS (SPORTS)

Vedant Khandekar & Pranav More	B.Tech. Civil & B.Tech. Electrical	Winner in the Instrumental Duet Competition, Sargam the musical event at the Annual Techno-Cultural Fest of SPIT, "OCULUS"
Meghna Nilange	T.Y. Civil	Silver Medal in Mumbai University Zone-II Inter-Collegiate Boxing Tournament (W) Qualified for All india level University Boxing Tournament
Tejendra Patil	T.Y. Electrical	Runner-Up in Table Tennis Singles Competition at the Annual Sports Fest of Vidyavardhini College of Engineering and Technology, "AVAHAN"Second Place in Table Tennis Singles at the Annual Intercollege Sports Fest of Sardar Patel Institute of Technology, "SPOORTHI"
Tejas Vaishnav	T.Y. Mechanical	Invited as 'Chairperson' of United Nations Human Right Council Committee at "Diplomat Model United Nations"
Pratik Bhosale	T.Y. Mechanical	Winner in Table Tennis Singles at the Annual Intercollege Sports Fest of Sardar Patel Institute of Technolo
Devhuti Matte	F.Y. Civil	Gold Medal in Table Tennis Women's Singles at the Annual Intercollege Sports Fest of Sardar Patel Institute of Technology, "SPOORTHI"
Riva Mayekar & Aarya Kulkarni	F.Y. Mechanical	Runner-Ups in English Debate Competition, Voice it Out at the Annual Techno-Cultural Fest of SPCE, "SPHINX"
Riva Mayekar	F.Y. Mechanical	Runner-Up in Mock Interview Competition at the Annual Techno-Cultural Fest of SPCE, "SPHINX"
SPCE Rugby Boys Team	-	Third Prize in Mumbal University Zone-II Inter-Collegiate Rugby Competition
SPCE Rugby Girls Team	-	Third Prize in Mumbai University Zone-II Inter-Collegiate Rugby Competition
Aashish Lalitkumar Pate	F.Y. Civil	Referee at1) Mixed-Netball National Championship 20232) 24th RSFI National Rope Skipping Championship 20233)6th State Level Rope Skipping Championship 20234) Mixed- Netball Namo Chashak 2024Bagged 2 Gold medals in State Level Rope Skipping Championship 2023 Bagged Silver medal in Namo Chashak 2024
Kevin Pooniwala	F.Y. Mechanical	Spirit 2024 Athletics 400m - 2nd place Relay - 3rd place
Jatin Pandita	B.Tech. Mechanical	1st prize in SARGAM
Shweta Godbole	B.Tech. Civil	Won ₹8000 for securing First position in the Scene-cere event of JAZBAAorganized by the Performing Arts Club of the Institute of Chemical Technology, Mumbai, in 2021.
	TY Civil	Archery 3rd place Mumbai University

THE UNSUNG IN
TECHN

In 1920, when he was around 26, he formulated what is today famous as 'Saha ionization equation'.

• When a neutral atom has an electron removed from it then it becomes an ion. This happens because of energy transfer.



Meghnad Saha

Considered the 'Father of Fibre Optics', this Punjab-born scientist's glorifying discovery of communication through optical fibres paved the way for the 'internet' as well as medical marvels like laser surgeries or endoscopic imaging.



Narinder Singh Kapany

Made the Bhisotype-a type-casting machine that revolutionised the printing industry. In one minute, the machine could cast and assemble 1200 different types automatically.



Shankar Abaji Bhisey

DIAN HEROES OF OLOGY

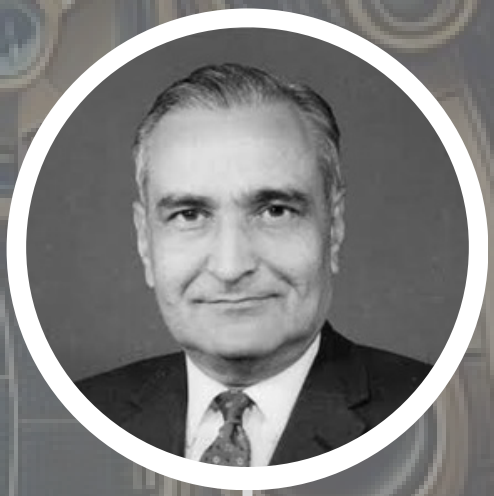
Anna Mani



Indian physicist and meteorologist. She retired as the Deputy Director General of the Indian Meteorological Department and also served as a visiting professor at the Raman Research Institute.

• Anna Mani's work and research made it possible for India to make accurate weather forecasts, and laid the groundwork for the nation to harness renewable energy.

Dr Nautam Bhatt



Development and deployment of the VT Fuse for the Department of Defense in the mid-1960s.

• He designed the acoustics of several moderate sized concert halls specifically for Indian Classical Music for a more natural sound.

• He established the Solid State Physics Laboratory in Delhi and was its founding Director.

Gopalaswamy Doraiswamy Naidu



- He is credited with the manufacture of the first electric motor in India.
- His contributions were primarily industrial but also spanned the fields of electrical, mechanical, agricultural (hybrid cultivation) and automobile engineering.
- Naidu developed an independently internal combustion four stroke engine.

RESEARCH ACTIVITY OF SARDAR PATEL COLLEGE OF ENGINEERING, MUMBAI

APPROVAL OF RESEARCH FUND

Followings are the list of ongoing and approved externally sponsored projects

Sr. No	Project Title	Faculty involved	Amount (Lakhs)	Year
1	Voice Coil Actuated Compliant Large Range Nanopositioning and Force Magnification Stages	Dr. Suhas Deshmukh (GCE Karad) and Dr. Kiran Suresh Bhole (SPCE)	45.28*	2024
2	Laboratory Refrigeration Unit with Transparent Evaporator, real-time data monitoring and IOT integration	Dr. B. N. Bhasme	2.5*	2024
3	Building Research Infrastructure in Mechanical, Civil and Electrical Engineering under FIST Scheme.	Dr. Kiran Suresh Bhole, Dr. Mohan Murudi, Dr. Anil Ghadge, Dr. Pravinchandra Gaikwad, Dr. B. N. Bhasme, Dr. Anupa Sabnis and Dr. Jayram Gholave	112*	2023
4	Structural control of landslides between Lonavala and Pune along Mumbai Pune expressway Implication to Neotectonic Deformation.	Dr. Suman Rawat, Dr. Ajaykumar Kambekar	40*	2023
5	Technology Development for Controlled Fabrication of 2D and 3D Net-shaped Microstructures using Lifting Plate Hele Shaw Cell	Dr. Kiran Suresh Bhole, Dr. Bhartbhushan Kale, Dr. Megha Nagrale	43.56*	2023
6	Programme on Innovation, Design, and Entrepreneurship (IDE) to Foster Make-in-India Initiative	Dr. Kiran Suresh Bhole and Dr. Megha Nagrale	7.5*	2024
7	Experimental and Numerical Investigation of Alumina Micromachining Process by Electrochemical Discharge Machining (ECDM).	Dr. Pradeep Dixit (IIT B) and Prof. Sharad Valvi (SPCE)	18.3$	2021
8	Application of Bio-electrochemical System for Electrocoagulation and Development of Anion Exchange Membrane using Clay Minerals	Dr. Anil Ghadge	45.89$	2021
9	Development of machine for rapid fabrication of the biocompatible microneedles, followed by clinical testing.	Dr. Kiran S. Bhole, Dr. P. Gandhi (IIT Bombay) and Dr. P. Vemula (InStem Bangalore)	118$	2021
10	Investigation of Fractal Growth on the Curved Surfaces in Hele Shaw Flow	Dr. Kiran Bhole Dr. Kedarnath Rane (NMIS, Scotland)	31.81$	2021
Total (Rs Four Crores Sixty Four Lakhs Eighty Four Thousands)			**464.84**	

INTERVIEW with Ms. Madhura Surve



Project Controls Engineer | PMO | APM Terminals-Maersk | MSc CME | TU Delft

1. Where are you currently located and what is your line of work?

I am currently located in Delft, The Netherlands. Currently I am working as a Project Management Officer (PMO) in APM Terminals-Maersk. APM terminals is a port operating company and we own the ports worldwide It is an independent subsidiary of Maersk group which is one of the world's largest shipping and logistics companies. In my role as a PMO, I am responsible for portfolio management for capital intensive projects providing required PMO guidance and resources throughout the project lifecycle. I am involved in the early stages of investment opportunities as well as in project execution to deliver the projects on agreed scope, time and budget. Prior to working in this role, I worked in a Dredging and Offshore company named Van Oord, where I had multiple roles ranging from Project Controls Engineer, Planning and Risk Engineer to Systems Engineer.

2. You were a part of several cultural events while in SPCE- can you tell us how they helped to shape your personal growth?

Yes, I was always involved in all the cultural as well as technical events in SPCE and I enjoyed it a lot. I was always enthusiastic about organizing events and managing them. Looking back to those years, participating in such events developed me immensely. It surely boosted my teamwork and leadership skills. Experiences and exposure in those events helped me learn the skills of persuasiveness and influencing as well as managing events and people and networking (although on a college level). Having learnt these, gives me confidence in my corporate world where I am now able to take several leadership roles already early in my career and where I am not afraid to step-up and take more responsibilities and initiatives.

3. Can you tell us about your experience of doing your masters in another country and the difference between work culture in India and Netherlands?

I can say I am very happy and proud that I chose to do my masters in The Netherlands. It is a great country to study, work and live in. Not boasting but the Masters program in The Netherlands is much more difficult than that compared to US or UK – when I compare same courses apples to apples. Reason being The Netherlands has a quarter system unlike semester system (with almost 4-5 courses per quarter making it 16-20 courses in one year) and doing a thesis here is compulsory. The culture here is very open, practical and people are very straightforward, which also resembles the work-culture. They have a very strict 40 hours working policy which is a huge difference as compared to my one year experience in India. There is no hierarchy and you are always appreciated for having your own opinions and comments on each and every subject possible. To put it simply, an answer to a question here is either "Yes" or "No", there is no culture of "Maybe". In India I worked for one year, although I liked it but it had hierarchy and my opinions were little considered. However, here in The Netherlands it's completely opposite and people respect your work-life balance. It is considered rude to disturb a person post 5pm or 6pm. Appreciate and Love the work-culture here!

4. Being a civil engineer, what piece of advice would you like to give to budding civil engineers from SPCE?

From my experience, civil engineering offers a wide range of specializations both in India and abroad. Don't limit yourself to just one area.

Try to explore different fields within civil engineering through internships or some (free) courses to discover what truly ignites your passion and where you'd like to work. After coming to the Netherlands, a whole new opportunity opened to me wherein I understood that the field of civil engineering is constantly evolving with lots of advancements in technology. I suggest to stay abreast of the latest techniques used in industry, industry trends and familiarize yourself with the same. Being a promoter of sustainability and something I learnt from my previous organization, I promote the same in my field of work and would advise all the "to be" civil engineers to incorporate principles of sustainability into designs and solutions, considering the growing environmental concerns.

5. Did you take part in various technical and non-technical activities that used to happen in SPCE and DUT? How did these activities benefit you in your personal and professional life?

Similar to answer to question 2. Only studying will not help you in your personal and professional life. Having some fun while taking certain responsibilities by participating either as a team member or as an organizer would help develop your personality and make you ready for the next steps in your career.

6. What inspired you to pursue your higher studies in the Netherlands and not any other country?

While applying to the universities I was very specific and only wanted to do masters in top 10 universities in the world for Civil Engineering. I applied to only three universities- Stanford University in the US, TU Delft in the Netherlands and UNSW in Australia. I really liked the course of Construction Management & Engineering at these three universities. Fortunately I got admission from all three universities and had to make a choice. Going specifically by rankings and fees, I chose TU Delft which ranked 4th in the world for Civil Engineering, above Stanford and UNSW. Hence, I chose TU Delft.

7. Are there any cultural lessons you have learnt in the Netherlands that have positively impacted your personal growth? If given the opportunity, would you recommend someone to studying or working abroad?

As mentioned above, the culture of the Netherlands is very practical and straightforward and I have adopted that. I feel it's always better to be straightforward in any matters which helps in transparent communication and not giving false hopes to someone and sticking to what you meant and what you want/wish. Another positive lesson learnt here is it is not alone the studies and academics that shape you but the different activities be it sports or some hobby that contributes towards shaping you. Indulging yourself in several different activities and not alone studies helps you develop and grow personally on various factors and is very much appreciated here. Given the opportunity I would recommend everyone both studying and working abroad, if it is possible. Studying/working abroad is a whole new experience which helps you become more independent and self-reliant and prepares you for situations outside your comfort zone. In addition to this, you understand and experience different cultures and perspectives by just being in an international environment. Life is worth exploring!

8. What are your hobbies that you used to engage in while being a student, and now as an employee?

Talking on a daily basis, as a student here in the Netherlands, I used to play tennis often in the university. It was a good way to escape the study-stress and have some time for myself. Now as an employee, I try to play tennis but it has drastically reduced as I tend to go for zumba or do some random sports, not restricting myself to tennis. If you ask my favorite hobby throughout my time in the Netherlands, it is indeed traveling. I love to travel and plan itineraries for different trips which I have somehow become best at and share it with a lot of other friends here. Europe is easily accessible and even on budget and hence I make sure to explore different places across Europe every 2-3 months.

INTERVIEW with Mr. Akshay Mhatre



Founder & Director at Gusto Controls

1. How did you feel about moving from being just a student to being a corporate worker and finally being a founder of a prestigious company?

As a student, like everyone else, I was full of aspiration. I'd look at seniors and elders and try to analyse their career and life decisions. Majorly, this helped me in eliminating options that did not suit my life goals. That thought process continued even as a Corporate Worker. Corporate life helped me in learning essential professional etiquitte concerning conduct, communication, professional Relationships, ownership of decisions and so on.

It was an important part of shaping my personality. Starting a company was the most humbling / grounding experience. Being a nobody after being somebody was a new feeling. It was, however, an opportunity to reset and reshape and I used it likewise. Being a Founder is more like being the Person Responsible 24/7/365 than being your own Boss.

2. Given the grim outlook of current trends, what suggestions would you give aspiring engineers?

We need to look at Trends as Trends. Meaning whether the outlook is grim or rosy, the thing that remains constant is, it is going to change. So prepare for that change. That said, aspiring engineers should always focus on the fundamentals because they never change. Irrespective of which stream you are from or what Technology you are working on, the corresponding underlying Basic Principles / Concepts remain constant. So master them.

3. How do you feel about the significance of certificates obtained from events and online courses in enhancing your profile?

Certificates are Endorsement documentation. Meaning they only support your claim of having knowledge of some subject. So if you have certificates, make sure you do have a deep understanding of the subjects that they talk about. Otherwise, there is negative marking.

4. Would you recommend that students utilize their semester breaks to enhance their skills or complete internships?

In my opinion, project-based engagements or internships hold greater value than certificate-based ones. Engaging in projects allows individuals to actively participate in the entire process—from self-identification and research to sourcing, building, testing, and improvising. This hands-on approach fosters a diverse skillset development that structured programs often lack. Watching a project come to life through your efforts provides invaluable real-world experience, equipping individuals with practical skills and problem-solving abilities that are highly sought after in today's dynamic job market.

5. After dedicating two years to the IT industry, how did you come across your expertise in embedded systems? Furthermore, what advice would you offer to help others uncover their unique niches?

Honestly I lasted only 7 months in the IT Industry. From there, I moved to a Marketing role which helped me to spot an opportunity to solve a problem. It is really about prespective. Marketing gave me a Business Perspective. Then, it is about willingness to take risks. Earlier the better. I stopped working for

2 years after my Marketing stint and I used that time for researching Embedded Systems and their applications in Machine Control.
Niches are developed and honed based on market demand. You need to be always on the lookout for gaps in demand and supply. Once you spot a gap, go to any extent to find / build a solution. In the process, you will find your niche.

6. After establishing your presence in India, what guidance would you offer students aspiring to explore foreign countries?

Many students aspire to immigrate to foreign countries primarily to earn more, but I advocate for a shift in perspective. Instead of focusing solely on financial gains, I believe students should view traveling to foreign countries as an opportunity to learn and grow. Developed economies offer abundant learning opportunities in terms of technologies, processes, work-life balance, and more. By immersing oneself in a different culture and environment, one can gain invaluable insights and experiences that can shape their future endeavors. It's through this journey of exploration that one may discover their true calling. Once identified, individuals can then decide whether to pursue their career in their home country or abroad, choosing the option that aligns best with their aspirations and goals. Ultimately, it's about embracing the journey of learning and discovery, which can lead to personal and professional fulfillment.

7. Could you tell us what you currently do and more about your modus operandi ?

Our core focus lies in designing and producing tailored Embedded Control Systems catering to diverse Industrial and Laboratory machines. Our objective is to furnish Original Equipment Manufacturers (OEMs) with robust technological support in electronic control, enabling them to effectively compete with global counterparts both domestically and internationally. This approach facilitates OEMs in augmenting and safeguarding their Intellectual Property rights while benefiting from cost-efficient sourcing within India. Simultaneously, our strategy affords us opportunities to penetrate new supply chains with each successful turnkey project we undertake. By providing OEMs with state-of-the-art technology solutions at competitive prices, we foster mutually beneficial partnerships that drive innovation, efficiency, and competitiveness in the industrial sector. Through our collaborative efforts, we aim to continuously elevate industry standards while solidifying our position as a trusted and indispensable partner in the realm of embedded control systems.

INTERVIEW with Mr. Prince Jain



SPJIMR Co '23 | Industry Integration Committee | L&T Energy Hydrocarbon

1. Being a mechanical engineer, what piece of advice would you like to give to budding mechanical engineers from SPCE?

As a mechanical engineer, here is my advice for students of SPCE:

• Communication: Being a graduate of SPCE, I know you will excel as engineers in your field. However, it's essential to be effective communicators to ensure your ideas are heard and understood. Prioritize subjects related to communication just as much as your core engineering subjects.

• Technology: In today's world, technology plays a significant role in everything we do. Beyond your engineering skills, it's important to be proficient in integrating new technologies to enhance efficiency and agility in your work. Aim to have a basic understanding of emerging technologies.

• Networking: Cultivating relationships with peers, professors, and industry professionals can lead to mentorship, collaborations, and career opportunities. Networking is a key aspect of professional growth.

• Flexibility: Be adaptable when it comes to your work location, receiving feedback, and handling uncertainty. In your early career, avoid letting location constraints hinder your career progress.

In addition to these points, always maintain high ethical standards and take full responsibility for your work.

2. Please share some fond memories from your student life in SPCE?

My fondest memory from my time at SPCE is serving as part of the Student Council during my third year. I had the privilege of leading a team of 13 dedicated students throughout the year. Additionally, I was lucky enough to meet my better half at SPCE, which I will always cherish.

Our batch also initiated the SPCE Sports Cup, which brought us great enjoyment. Besides these personal highlights, I also miss the Club Sandwich and Chinese Bhel from the SPCE canteen.

3. You were General Secretary of the Student Council and a part of several cultural events while in SPCE - can you tell us how they helped to shape your personal growth?

Being the General Secretary of the Student Council at SPCE was one of the best experiences I had. It pushed me beyond academics and helped me cultivate essential life skills such as effective time management, responsibility, accountability for my own actions and my team's, decision-making, and strategic planning. It also allowed me to expand my network both within and outside the college.

4. What are your hobbies that you used to engage in while being a student?

I have always had a passion for cooking. Although I was quite studious and spent most of my time on assignments and journals, cooking was an activity I enjoyed in my free time. I also practiced meditation regularly, which helped me relax and sharpen my focus

5. How was your job experience in L&T and what motivated you to pursue MBA, that too from SPJIMR?

Working as a Proposal and Cost Estimation professional at L&T was a challenging experience that provided valuable insight into the corporate world, which I found necessary before pursuing an MBA. I worked on numerous tenders for international

6. What are your future plans after completing your MBA?

After completing my MBA, I will be entering the consulting industry, focusing on the supply chain domain. My goal is to excel in my professional career's second phase.

In the short term, I aim to upskill myself by learning new technologies and possibly lead a mid-sized team. In the long term, I envision myself leading a business vertical, making strategic decisions, and playing a key role in decision-making processes.

7. You have been both an engineering student and a business student. How and what kind of difference in these 2 parts of your life do you feel?

In short, life becomes both challenging and exciting simultaneously. Moving from high school or a diploma to engineering introduces us to the demanding lifestyle of college life. Juggling morning classes with late evenings spent on assignments and extracurriculars, we may think it can't get more rigorous than this.

However, the intensity of an MBA program is much greater than that of engineering college. In an MBA, you are expected to be a more mature individual who has command over your own life. You should have a clearer vision of your goals compared to during your engineering studies. The challenges you face are not just intellectual but also physical, shaping you into a responsible business management professional.

While engineering prepares you for the corporate world, an MBA prepares you to navigate the broader world.

8. How did your involvement in the training and placement process help you and what insights did you gain?

The Training and Placement Office (TPO) ensured that students were well-prepared in advance for upcoming campus placements. Initiatives like SPLICE were introduced to prepare students for everything from aptitude tests to interviews, allowing me to identify and work on my weaknesses. As a member of the Training and Placement team at SPCE, I can confidently say that the TPO and the entire team worked hard to keep the placement processes running smoothly throughout the year.

9. How does it feel to be back on campus and to have an opportunity to be close to the college again?

Having the chance to stay on campus for a year felt incredible. The campus had been renovated since 2017, and walking along the track around our beloved Bhavans lake felt almost surreal. We celebrated festivals like Holi and Ganesh Chaturthi on campus, creating a unique and vibrant atmosphere.

During my morning walks, I often encountered professors from SPCE, and seeing them in that relaxed setting was refreshing and enjoyable.

The campus will always hold a special place in my heart.

C
E
A

Civil Engineering
Student's Association

The Civil Engineering Association (CEA) at SPCE College is a committee primarily consisting of third-year students and coordinated by second-year students. This unique structure ensures a blend of experience and fresh perspectives in organizing and executing various activities. The core objectives of the CEA revolve around Enhancing Educational Growth, Promoting Professional Networking, and Encouraging Social and Recreational Engagement. The CEA operates with the help of the CEA committee advisor, Prof. Snehjit Kumbhar, and Dr. Hansa Jeswani, the Head of the Civil Engineering Department, providing essential guidance.



Events Completed in 2023-24:

1. 'AAGAZ'-An annual inauguration event
1. Calculator Workshop
2. Trek to Harishchandragad
3. CEA Cup
4. Photography Competition
5. Quiz competition
6. Winter Trip to Manali
7. Guest Lectures
8. Site Visits
9. AutoCad Workshop

CEA COMMITTEE 2023-24:

- **General Secretary:** Shubham Thakare
- **Social Event Heads:** Piyush Kamat, Yutika Kadoo
- **Site visit and Creative Heads:** Vikas Kadam, Saishwari Dhotre
- **Sports Secretaries:** Varad Patil, Tushar Sonar
- **S.Y. Co-ordinators:** Shivraj Gade, Sidhatej Desai, Gargi Bhosale, Noopur Alshi



Electrical Engineering Student's Association

E E S A

EESA Committee 2023-24:

- **General Secretary:** Atharva Funde
- **Finance Secretaries:** Rugved Nargund (Reporting Authority), Nikhil Karad, Apurwa Hatte
- **Technical Secretaries:** Khadija Pathan (Reporting Authority), Gajanan Chavan, Ajit Kashyap, Saurabh Dahibhate
- **Non-Technical Secretaries:** Kaustubh Patil (Reporting Authority), Vaibhav Marathe, Gauri Atre
- **Sports Secretaries:** Sanket Patil (Reporting Authority), Pratikesh Potdar, Ashwini Fulpagare
- **Magazine Secretaries:** Datta Nangnure (Reporting Authority), Bhagyashree Zope
- **Department Library Heads:** Jayraj Surve (Reporting Authority), Prajwal Virkar





Events Completed in 2023-24:

1. Calculator Workshop
2. Breadboard Workshop
3. AutoCAD Workshop
4. Proteus Workshop
5. Guest Lecture on Cybersecurity
6. Vihang: The Jungle Trek to Kille Vasota
7. Photography Competition
8. Winter Trip: Manali, Kasol, Amritsar, Dalhousie & Chandigarh
9. Circuit Hunt
10. EESA Cup
11. Blood Donation Drive

Throughout the academic year, the EESA Committee has demonstrated unwavering dedication to equipping students with the skills and knowledge necessary to tackle the challenges of tomorrow. Their commitment to excellence in both technical proficiency and holistic development is evident in every aspect of their work. By integrating industry relevance into their initiatives, they have effectively bridged the gap between academia and real-world applications, empowering students to thrive in the dynamic field of electrical engineering. Through a diverse range of events, workshops, and educational programs, the committee has enriched the academic journey of its members, fostering a culture of innovation, collaboration, and leadership. With their motto of "Electrifying the Future" as their guiding principle, the EESA Committee has undoubtedly left a lasting impact, preparing students to become the future leaders and innovators in the ever-evolving field of electrical engineering.

Mechanical Engineering Student's Association

M E S A

Mechanical Engineering Student's Association (MESA) is an indispensable organ of the student body of Sardar Patel College of Engineering.
Consistently active during the college term – arranging workshops, activities and seminars for the students of Mechanical Engineering Department for their physical, academical and mental well-being, MESA committee along with the Mechanical Engineering faculty and students have had an eventful year so far with events and activities to look forward to at every turn. . Persistently working hard for the students to have a comfortable and beneficial path leading towards a bright future has always been the aim of MESA. The association has been thriving under the guidance of faculty incharges- Dr Megha Janbandhu, Prof. Sachin Vankar and Dr Ramsubhash Maurya.



The objectives of MESA (Mechanical Engineering Students' Association) are multifaceted, aiming to prepare students for their future careers while fostering a strong sense of community within the mechanical engineering department. MESA seeks to enhance students' readiness for the industry by promoting technical interest, encouraging idea generation, and facilitating interaction with real-life industrial applications. Additionally, it aims to create a supportive network among mechanical engineering students both within and outside of the college, offering guidance and exposure to industrial practices.

MESA Committee 2023-24:

- **General Secretary:** Aryan Shah
- **Cultural Secretary:** Jash Saraiya
- **Industrial Interaction Secretary:** Varadraj Singh Parmar
- **Social Secretaries:** Sanket Bhusari, Vinaya Shinde
- **Magazine Secretaries:** Nishita Nagwekar, Usha Nikitha
- **Financial Secretary:** Jai Nigudkar
- **Ladies Representative:** Shreya Bhatt
- **Committee Advisor:** Madan Narayan
- **S.Y. Co-ordinators:** Nachiket Mulay, Ayush Rathod, Kruti Jharbade

Events Completed in 2023-24:

1. Blood Donation Drive by Bombay Hospital and Medical Research Center
2. AutoCad sessions for First Year Students certified by college faculty
3. Creativity Clash – Drawing Competition during Diwali 2023
4. 10-day winter trip to Chandigarh, Manali and Amritsar
5. Industrial Visit to Bhabha Atomic Research Center (BARC), Anushakti Nagar, Mumbai
6. Industrial Visit to Parle-G factory, Khopoli
7. MESA Cup – Sports events for Mechanical Engineering students
8. Trek to Sandhan Valley and Harishchandragad
9. Seminars and events for Women's day

Thermal Engineering
Student's Association

TESA



Events Completed in 2023-24:

1. **RESEARCH PAPER PRESENTATION by TESA-SPCE Students at NCRAC-2024, IIT MADRAS:** Madan Narayanan and Shashank Phulmali, TESA-SPCE student members of B.Tech. (Mech.), Semester-VIII presented a research paper titled 'Design, Manufacturing and Testing of a Portable Cooling Jacket (Paper ID: 701)' at the 8th National and 2nd International Conference on Refrigeration and Air Conditioning (NCRAC-2024), IIT Madras. The conference organized by IIT Madras from 13-15 March 2024 was supported by IIT Bombay, IIT Tirupati, IIT Jammu, NIT Rourkela, Anna University and ASHRAE Chennai Chapter. The research paper is based on B.Tech. (Mech.) project work by co-authors Hatim Lakdawala and Suparno Ghosh, A.Y. 2019-20 under the guidance of co-author Prof. Parag K. Muley, Faculty Advisor, TESA-SPCE.
2. **Industry Visit to MAHAGENCO – GTPS Power Plant:** An industry visit was conducted to Maharashtra State Power Generation Company (MAHAGENCO), Gas Turbine Power Station (GTPS), Uran on 02 May 2023. The visit organized by Prof. Parag K. Muley, Faculty Advisor, TESA-SPCE was attended by 32 students of B.Tech. (Mech.), Sem-VIII for their academic benefit. This visit provided a comprehensive knowledge to the students with practical exposure of the latest technology, operating systems and control systems etc. in modern power plants.

SPCE RACING

SPCE Racing Electric is the Formula Student Team of Sardar Patel College of Engineering dedicated to design, manufacture and test life size formula cars. Initiated in 2010 by a group of passionate motorsports enthusiasts, the team steered out with the singular objective of making a mark in the field and establishing a lasting legacy, a goal we continue to pursue with reverence. The team has been going from strength to strength since then by winning laurels in BAJA, SUPRA, SAE and the most recent being Formula Bharat.

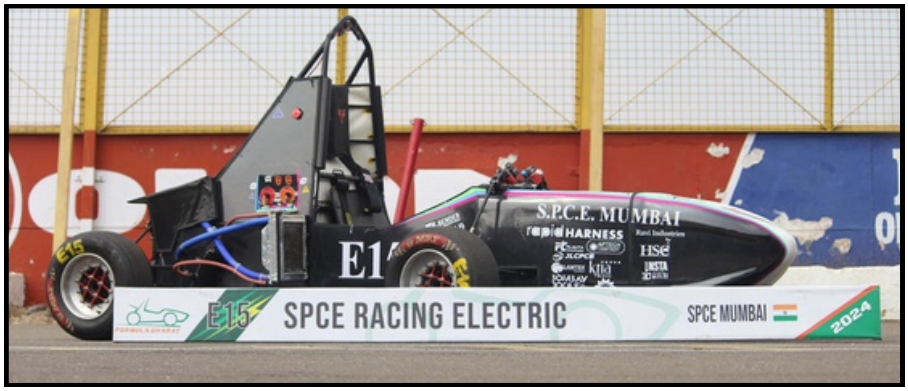
Formula Bharat (FB) replicates Formula Student competitions held globally in 11 countries such as the UK, Austria, Germany, and more. The event witnessed over 80 student-run teams competing with a formula-style vehicle in areas of engineering design, overall cost, marketability and dynamic performance over 5 days. The SPCE Racing Team comprises a total of 40 students enrolled in the second, third, and final years of their Mechanical, Civil, and Electrical Engineering BTech programs



This season's vehicle 'Voltron 2.0', was an optimised version of previous year's 'Voltron'- the first electrical prototype vehicle of the team. Ease in assembly, superior manufacturing methods, betterment in performance based off the extracted testing data were the targeted goals this season. Tireless efforts of team members and unconditional support from the college, the Racing faculty advisor- Dr. Santosh Rane and sponsors helped in achieving the same. Our Title sponsor Godrej assisted in manufacturing and procuring several parts embedded in the car such as carbon fibre, XPS foam for nose mould, knuckle/uprights etc. Numerous additional sponsors contributed to facilitating the car's manufacturing process by offering both technical expertise and manufacturing assistance for various components.

This tournament conducted at the resplendent tracks Coimbatore, Tamil Nadu is not only a racing event but is panned out to test the car in reality as well as on paper. The challenge to the student team is to design and fabricate a product that best meets the goals and intents as stated by the Rules Book for a jury of experts from the motorsport, automotive and supplier industries to judge. Students gain hands-on practical experience, while applying engineering theories studied in the classroom. In addition, students learn the art of management and teamwork, which are essential skills required in the 'real-world'.

Our Achievements this season:
Business Planning AIR - 1
Cost Presentation AIR - 4
Design 110/150 points
Overall AIR - 09



SPCE WAVE

As the academic year of 2022-23 began, SPCE W.A.V.E. (Wing of Aerial Vehicle Engineers) were preparing for their SAEISS' Drone Development Challenge 2023, a prestigious national-level Aero-Modelling Event which was set to unfold from 21st July 2023 to 23rd July 2023 at Rajalakshmi College of Engineering in Chennai and the club participated with two teams: Aero Maestros and Spartans. These two teams comprised of 2nd and 3rd year students.

The competition consists of various stages like submission of a detailed Design Report, a Technical Inspection to verify compliance with dimensional requirements, delivering a polished Technical Presentation, and ultimately a flight round to test which plane can carry the maximum payload. All the above stages in the competition constitute primary mission goals for achieving success.

After months of dedicated hard work and innovation, our designs and endeavors have proven their resilience and effectiveness as we are thrilled to announce that one of our teams Aero Maestros has bagged AIR 2 in the Technical Presentation out of a total of 82 teams competing from all over the country.

The club takes great pride in standing out among the top-tier teams nationwide and in bringing honor to our esteemed college.



Shortly after, we started the preparation for the next installment of the competition. This year, we are participating as a single team, namely WAVE Shourya, consisting of the 2nd and 3rd year students, who will represent the club in the Regular Class Category of the competition scheduled in April 2024.

The team took their first step by attending the SAE DDC Workshop which took place on the 9th and 10th of November 2023 at the SRM College in Chennai. Engaging with industry experts and phenomenal minds made this workshop an incredible learning experience. There we made a miniature model that flew successfully giving us positive energy and confidence to build regular class models.



During the manufacturing process of the prototype, we took a major step by doing the Laser-cutting of parts of our model in the newly opened NIDHI-PRAYAS (NIDHI-Promotion and Acceleration of Young and Aspiring Technology Entrepreneur) which comes under SP-TBI (Sardar Patel Technology Business Incubator). We learned a new and innovative way which helped us throughout.

The club extends its gratitude to Dr. R.S. Maurya, our esteemed faculty advisor whose unwavering support and encouragement have played a pivotal role in our achievements. Sir has been a cornerstone of our success, offering invaluable assistance and motivation during challenging moments along our journey.

S.P.A.R.K.

SARDAR PATEL AUTOMATION AND ROBOTICS K'LUB

S.P.A.R.K, which stands for Sardar Patel Automation and Robotics K'lub, comprises a dedicated assembly of undergraduate scholars hailing from the esteemed Sardar Patel College of Engineering, located in Mumbai. Commencing its journey in 2011, this collective of industrious minds is steadfastly engaged in the conception, design, and construction of advanced robotic systems. Through persistent efforts, the team continually pushes the frontiers of technological ingenuity within the realm of robotics, epitomizing a profound commitment to innovation and excellence.



Our Vision-

Organize workshops, seminars, and presentations to educate club members and the broader community about robotics concepts, technologies, and trends. Provide opportunities for members to develop technical skills, programming languages (such as Python, C++, or ROS), and familiarity with hardware components (sensors, actuators, microcontrollers). Facilitate connections with professionals, researchers, and industry experts in the field of robotics to offer insights, advice, and potential collaboration opportunities.



Competitions-

1. VRC Position 1 (2014 - 2021)
2. SPRC Position 1 (2015 - 2020)
3. Meshmerize Rank 1 (Mumbai Zonal 2022)
4. Robocon India 2019 AIR 9 Best Technical Report Award
5. Robocon India 2020 AIR 9
6. Robocon India 2021 AIR 19

Our History-

Throughout our history, we have actively engaged in a diverse array of prestigious events and competitions, underscoring our commitment to excellence and innovation. Noteworthy among these are our participation in esteemed platforms such as ABU Robocon, where we have consistently showcased our technical prowess. Our involvement extends to celebrated events like Meshmerize Techfest, Techfest at IIT Bombay, VJTI Robotics Challenge (VRC), and Technovanza organized by VJTI, Mumbai, where we have demonstrated our dedication to cutting-edge advancements.

Furthermore, our active participation in SPECTRA, the esteemed technical festival of SPCE, and our engagement in Cozmo Clench Techfest at IIT Bombay highlight our ongoing pursuit of knowledge and technical finesse. A significant international dimension is evident through our participation in the Asian Pacific Robotics Competition (ABU Robocon), which serves as a testament to our global outreach and competitiveness on an international stage.

IIIE SPCE STUDENT CHAPTER





Participants from Across the country



Grand Events Organized

Estd. on 13th January, 2020 the Indian Institution of Industrial Engineering (IIIE) SPCE student chapter was set up promote understanding of the Industrial Engineering profession in the fields of business, industry and public administration

This academic year 2023-24, under the guidance of our faculty advisor Dr. Santosh Rane and the leadership of the current Chairperson Mr. Kaif Badshah we've grown from a mere 15 members to 70+ student members making us one of the largest & most active student chapter of SPCE. Besides, we're proud to announce that we have implemented SOP (standard operating procedure) at the same time ensuring creative growth. Further more IIIE SPCE student chapter with a mission to promote the journey of excellence and create awareness about industrial engineering, have organized a variety of activities aimed at fostering technical proficiency and societal development working towards the 17 Sustainable development Goals laid by the united Nations (UN).

Guided by our core values of excellence, equity, diversity, inclusion, and sustainability, we have embarked on initiatives that aim to enhance productivity, quality, reliability, and delivery performance while promoting a culture of equal opportunity and respect for all.

Date Of Event	No. Of Participants	Title Of Event
4th June 2023	12	Orphanage Visit - Salam Balak Thrust
22nd September 2023	163	Technical paper presentation workshop: SAE student convection
28th August 2023	744	National Level Webinar On "Business Skills needed to thrive in the 21st century"
30 October 2023	200+	National Level Webinar On "Lean Six Sigma Overview"
3rd November 2023	60	Visit to SP-TBI (Sardar Patel - Technology Business Incubator)
17th October 2023	280+	Alumni speaks program: feat. Co-founder of The souled store Mr. Vedang Patel & Handover Takeover ceremony of IIIE SPCE Student Chapter
5th December 2023	60+	MAHA 60: CORNELL ACCELERATION PROGRAM
11th March 2024	120	Empowering Women: A Journey Towards Confidence (Women's day program)
18th April 2024	70+	Awareness session on E-waste management
5th May 2024	130	Seminar on Generative AI and Microsoft Co-pilot
6th May 2024	53	Industrial Visit to Siemens



SPCE ASHRAE student branch comes under ASHRAE Mumbai Chapter of Region at Large (RAL), the biggest Region in ASHRAE history. This branch disseminates knowledge through Industry Visits, Site Visits, Expert Lectures, Workshops etc. The faculty advisor, Prof. Kunal Bhavsar and Co-advisor Dr. B. N. Bhasme, are the point of contact between students and Mumbai Chapter. Mr. Kaif Badshah is the elected President of the ASHRAE SPCE Student Branch for the academic year 2023-24. SPCE ASHRAE hosted a BOG meeting of ASHRAE Mumbai Chapter in the college, on 02nd December 2023, where the student members of SPCE were invited to attend. Students learned about how the BOG meeting proceedings are done at Chapter level.



SPCE ASHRAE hosted a Distinguished Lecture on Terminal Units by Mr. V. Krishnan, on 02nd December 2023, where more than 25 students, 6 industry persons and 1 professor participated. A total of 11 SPCE ASHRAE student members attended the YOUTHCON on 16th December 2023, an ASHRAE Mumbai Chapter program specially designed for young engineers with a complete site visit of HVAC technologies at Novotel Mumbai International Airport Hotel. SPCE ASHRAE students participated in SUSTAIN 4.0 organised by Team Shunya of IIT Bombay on 11th February 2024. They attended the workshop on Rhinoceros 3d software, panel discussion on sustainability. They also visited the Team Shunya Net Zero Building which was built by the IITB team and won First Runner Up prize in World Solar Decathlon in US.

Dr. B. N. Bhasme has received Prestigious International ASHRAE Program Equipment Grant Titled 'Laboratory Refrigeration Unit with Transparent Evaporator, real time data monitoring and IOT integration' of US $ 2980 (Rs. 2,49,000). This is the First Grant SPCE has received from ASHRAE. ASHRAE SPCE student branch students visited the PlumbeX 2024, India's largest exhibition for water, sanitation and plumbing products on 26th April, 2024 SPCE ASHRAE hosted an Expert Session on Cold Chain Refrigeration by Mr. Anand K. SPCE HVAC Quiz competition was organized and top 3 winners namely, Mr. Shreyas Waindeshkar, Mr. Trisharan Ingle and Mr. Rushit Khorana from SPCE will be representing Mumbai Chapter at Regional Level (International Level).

SPSGIC

“Sustainability, ensuring the future of life on Earth, is an infinite game, the endless expression of generosity on behalf of all.”.
- Paul Hawken

The Sardar Patel Sustainability and Green Initiative Chapter (SPSGIC) continued to Promote sustainability and green initiatives Throughout the year 2023-24 under the Guidance of Chief Coordinator of the chapter, Dr. Hansa Jeswani and faculty coordinators Dr.Swati Lavand, Dr. Reshma Raskar-Phule . We think it’s everyone’s job to make the planet better, and our club is determined to help our local community in any way we can .

In collaboration with green club we have arranged the event on the date of November 1,2023 , was the expert talk on “The Sustainable Way Ahead” by Dr. Sanjay Mangala Gopal. In his emphasized the need for adopting sustainable practices to address the environmental challenges facing the world today. He highlighted the role of sustainability and green initiative chapter (SPSGIC) and green clubs in promoting sustainable practices and raising awareness about environmental issues among students. SPSGIC at SPCE collaborated with various committees, notably organizing the Green Insta Quiz and the Photography Competition, both centered on sustainability.



The quiz, held on January 26, 2024, coinciding with Harit Bharat Mahotsav, facilitated discussions on eco-friendly practices. Similarly, the Photography Competition, themed "All About Waste – Beauty and Beast," encouraged critical thinking on waste management. SPSGIC also maintained active engagement on social media, educating students on sustainable lifestyles.

PRAKRITI

Prakriti, the Green Club of Sardar Patel College of Engineering (SPCE), is a student-run organization dedicated to environmental sustainability. It is an initiative by Maharashtra Government in association with UNICEF. Established in August 2023, the club works towards creating an eco-friendly college environment and fostering youth engagement in environmental issues. Prakriti has organized various competitions to raise awareness and encourage action. These include:

• Photography contests to capture the beauty of nature and environmental concerns.

• Tree plantation drives to increase green cover and combat climate change.



• Nirmalya collection initiatives, focusing on the responsible disposal of waste generated during festivals.

The club conducts workshops on composting, recycling, and upcycling, empowering students with practical skills for sustainable living. The club partners with other organizations like RCSPCE, SPSGIC for impactful environmental initiatives (e.g. E-waste Drive). . In short, Prakriti -The Green Club of SPCE multifaceted approach addresses various environmental concerns. By combining awareness campaigns with practical activities and collaborations, the club empowers students to become responsible environmental stewards

ALUMNI COMMITTEE



The 'Alumni Tech Talk' event was organized on 23rd October 2023 in our college to facilitate interaction between the alumni and current students. The event aimed to provide an opportunity for students to gain insights from successful alumni and to explore emerging tech trends. The esteemed guest Alumni, Mr. Akshay Mhatre (Batch of 201, Electrical Engineering) who is Founder and Director of Gusto Controls, was invited for this event. The event was held in the presence of all faculty members of Electrical Department.

After the inauguration, Mr. Akshay held a highly interactive session with students from our college. He shared insightful ideas regarding emerging tech trends and their potential impact on various industries. Furthermore, he elaborated on the concept of real-time control in embedded systems, shedding light on its applications and possibilities.

The 'Alumni Tech Talk' event commenced with the inauguration ceremony of the smart board, gifted by the batch of 2012, by Mr. Akshay Mhatre and Dr. M.M. Murudi (Principal, SPCE). Additionally, Mr. Akshay personally gifted the UPS Protection box, whose inauguration was done by Mrs. V. P. Joshi and DR.(Mrs.) Sangeeta Daingade. Following the inauguration, Dr. M.M. Murudi expressed gratitude towards the batch of 2012 for their thoughtful gift. He emphasized the importance of such advancements in educational institutions, as they facilitate interactive learning and create an environment conducive to innovation. DR.(Mrs.) Sangeeta Daingade (HOD of Electrical Department) thanked the batch of 2012 for their generous gift, emphasizing the significance it holds in promoting a collaborative learning environment. Later on, Mr. Akshay gratefully extended his heartfelt appreciation to the college administration for extending him an invitation to attend and partake in the inauguration ceremony of the Smart board.

IGBC

The relaunch of the IGBC Student Chapter at Sardar Patel College of Engineering (SPCE) was a significant event, uniting students, faculty, and guests to champion sustainability in the built environment. Held at SPCE's Seminar Hall, the ceremony featured esteemed guests including Mrs. Mala Singh (Co-Chair, IGBC Mumbai Chapter), Ms. Manisha Shetty (Associate Counsellor), and faculty members Dr. Reshma Raskar and Dr. Kshitija Nadgouda, alongside the IGBC Student Chapter Committee of SPCE. The event concluded with the official relaunch of the IGBC Student Chapter at SPCE, emphasizing its commitment to promoting sustainable practices among students.The relaunch event successfully raised awareness and enthusiasm for sustainable practices in the construction industry, providing valuable insights and knowledge to students, paving the way for a more sustainable future.



Highlights:

Guest Lecture on Carbon Neutrality and Net Zero Mission : Mrs. Mala Singh delivered an engaging lecture on the imperative of carbon neutrality and achieving a net-zero carbon footprint. Real-world examples and strategies were discussed, emphasizing the urgency for sustainable practices in construction.

Key takeaways

- Transitioning to renewable energy sources.
- Strategies for carbon emission reduction in construction and design.
- Utilization of innovative technologies for carbon neutrality.
- Global initiatives toward a net-zero future.

MODEL UNITED NATIONS



The Model United Nations event hosted by the student council of Sardar Patel College of Engineering on October 28th and 29th served as a dynamic platform for students to immerse themselves in the realm of international diplomacy. With the participation of over 120 delegates from various regions across the state, the event witnessed vibrant discussions and collaborative efforts aimed at addressing pressing global issues. Divided into two prominent committees, namely the United Nations Security Council (UNSC) and the United Nations High Commissioner for Refugees (UNHCR), delegates delved into multifaceted topics ranging from international security to humanitarian crises. The collaboration with Diplomat MUN, Pune, lent an added layer of authenticity and expertise to the event. As an organization recognized by the United Nations for its dedication to promoting diplomacy, Diplomat MUN brought invaluable insights and resources to the table, enriching the overall experience for participants. The event's inaugural ceremony, held at the prestigious SPJIMR Auditorium, set a dignified tone, highlighting the significance of diplomatic engagement in addressing global challenges.

Throughout the event, students assumed the roles of diplomats, representing diverse countries and navigating complex diplomatic negotiations. Beyond honing their public speaking and negotiation skills, participants were encouraged to adopt a holistic approach to problem-solving, considering the diverse perspectives and interests at play. The Model United Nations experience not only fostered intellectual growth but also instilled in students a sense of global citizenship and responsibility.

By engaging in lively debates, drafting resolutions, and forging alliances, participants gained firsthand insights into the complexities of international relations. Moreover, the event served as a catalyst for personal growth, empowering students to step out of their comfort zones and embrace new challenges. Through collaboration and dialogue, students not only expanded their knowledge but also cultivated essential skills such as critical thinking, empathy, and intercultural communication.

In conclusion, the Model United Nations event at Sardar Patel College of Engineering was a resounding success, serving as a testament to the institution's commitment to holistic education and global engagement. By providing students with a platform to engage with real-world issues in a simulated diplomatic setting, the event empowered future leaders to navigate the complexities of our interconnected world with confidence and compassion.

ROTARACT

Theme of the year - Colors of Compassion
Club Motto - Fellowship through Service - Spreading love and serving the community
Club shout - "RCSPCE with a Vision, One Team , One Mission!"

Rotaract Club of SPCE Regency is a group of young philanthropists who work together for the upliftment of society. The Rotaract Club of SPCE was chartered on 17th August, 2019. It is Sponsored by the Rotary Club of Bombay Mahakali Heights. Rotaract Club of SPCE comes under the Rotary International District 3141.

We, at the Rotaract Club of Sardar Patel College of Engineering (RCSPCE), focus on how to organize and take part in various projects and activities throughout the year. We aim for service to nature and work to serve the society and make it a better place to live. We believe in making a positive impact on society and the environment. Our club engages in hands-on service projects, social activities and professional development.

RCSPCE has organized various competitions, events and activities in collaboration and individually to create positive change and showcase and explore the inner potential of our fellow youth.
These include:

1. Ganesh Festival Orphanage Visit
2. International Coastal Cleanup Day (Aksa beach cleanup)
3. Rotary Youth Leadership Awards
4. Halloween Movie Screening
5. Diwali Cloth Donation Drive
6. Versova Beach Cleanup Drive
7. Storytelling at Desire Foundation
8. Valentine's Day Confession Competition
9. Digital Poster Making Competition
10. Free Health Checkup Camp and Cancer Awareness Talk



The Rotaract Club of SPCE has had a remarkable year, with a total of 86 students joining and becoming members of our esteemed club. This enthusiastic participation reflects the growing interest and commitment of our college community towards serving society and making a positive impact.

Core Committee:

- President - Nachiket Narlawar
- Secretary - Prasad Naik
- Vice President - Asmita Bharitkar
- Joint Secretary - Shivam Bhangale
- Sergeant At arms - Aryan Shah
- Treasurer - Vikas Kadam
- IPP - Umesh Lahoti

Board of Directors:

- Director of Environment - Ayushya Maurya
- Director of Community Service - Mishti Singam
- Director of Fellowship - Kartik Kuralkar
- Director of Club Administration -Minal Dandekar
- Director of Youth Service - Bhakti Ghongate
- Director of Literacy - Divya Dhas
- Director of Pollution - Datta Nangnur

Under the leadership of our core committee and the guidance of our board of directors, RCSPCE has organized numerous impactful events and initiatives aimed at creating a better society and nurturing future leaders. We look forward to another successful year ahead, filled with more opportunities to serve, learn, and grow together as a club.

PIXEL VISION

Pixel vision is the official photography club of Sardar Patel College of Engineering. It was founded by a group of artistic engineers.

The club was founded by Adesh Koli and Akash Bangar in the year 2019. Since then it has focused on developing interest about photography and videography among the students of the institute. The club has had strong support from our mentor, Prof. Pritesh Rao and our faculty advisor, Dr. Santosh B. Rane.

We work hand in hand with the student council throughout the year covering all the cultural and annual events. This also includes the biggest event of our institute, Sphinx. It is a three day event that tests our talents and provides us with a great opportunity to experience the thrill of being on the field and putting our thoughts and lessons into action. These events give our members much experience and a good understanding of photography. The experience that we earn from there is reflected in our magazine the Spectacle.

The club is also active in correspondance for editing and rectification. It also conducts photography workshops regularly to take our capabilities on to a next level. Accompanied by plan for further workshops on photography and videography the club aims to develop a complete ecosystem for the nuturing of amateur photographers and future enthusiasts.

SPARSH

The SPARSH drama club of Sardar Patel College Of Engineering was earlier known as “SPCE Drama Club” which was founded by Rameshwar Garkal in 2018 and revived again in 2023 and has since actively created and filmed on multiple topics. The club is a platform for students to display their creativity through a different medium. It is said that copying is bad as it limits one’s own creativity and potential but copying intelligently is an essence of acting.
Drama club not only gives exposure to actors but each and every aspect of filmmaking/drama is covered which not only enables students to bond but also thrive to make the projectan astounding success.



चिट्ठी Team Performance at SPHINX Fest

SPARSH Drama club has successfully created a short film which holds mysterious happenings to a college going student, the story revolving around the student’s day to day life with crisp comedy scenes. The short movie is titled “REPLAY: Lost in time” which was released on 1st March 2024. The SPARSH Drama Club made a debut at the renowned SPHINX Techno-Cultural College Fest with their stage play "चिट्ठी," marking a milestone in their journey of artistic expression. The performance was not only a first for the club but also a first for the festival, introducing a new dimension of storytelling and theatrical excellence. The success of "चिट्ठी" can be attributed to the unwavering dedication and hard work of theclub members, who poured their hearts and souls into bringing the story to life.

SPARKLE

Sparkle, the official fashion club of Sardar Patel College of Engineering, is dedicated to fostering creativity and fashion knowledge among students while promoting the promising career prospects within the field. It serves as a platform for individuals to express their creative flair and fashion expertise, breaking gender norms and stereotypes along the way.

Through themed events like 'Stereotypes' and 'Greek deities,' Sparkle challenges conventional notions and showcases creativity in unique ways. The 'Stereotypes' theme shed light on biased gender norms and unfair stereotypes in a creatively compelling manner.

Similarly, 'Greek deities' highlighted the creative talents of members through handmade props, stylish outfits, dramatic makeup, and confident walks, transforming the stage into a scene from Mount Olympus.



The primary objective of Sparkle is to boost the confidence of performers and help them overcome stage fear while allowing them to express their creativity freely. Prospective members can join by filling out a registration form available on the official Instagram page. Auditions are conducted, and new student members are selected by existing senior members.

SPLASH



SPLASH – The Dance Club of SPCE, stands as a vibrant community fueled by a shared passion for dance and creative expression. Embracing diversity and skill enhancement, we provide an inclusive platform for dancers of all backgrounds and levels. Through dynamic performances, enriching workshops, and engaging social events, our mission is to empower, inspire, and unite our members in the joy of movement.

Throughout the year, SPLASH has upheld its role as a thriving hub for dance enthusiasts at Sardar Patel College of Engineering. Our dedication to fostering creativity, skill development, and community engagement shines through various dance forms and activities.

A pinnacle moment for SPLASH was our Annual Showcase, a mesmerizing event that highlighted the talent and versatility of our dancers. The performance captivated audiences, drawing admiration from both students and faculty alike. This showcase reaffirmed SPLASH's standing as a cultural cornerstone on campus, showcasing the club's influence and significance within the college community.

SPANDAN



In Mumbai's vibrant landscape, a remarkable collective of talented individuals has enchanted audiences with their melodious tunes and harmonious melodies. SPANDAN, the Music Club of Sardar Patel College of Engineering (SPCE), has emerged as a prominent force in the music scene, guided by the leadership of Mr. Suhaib Naikawadi as President and Mr. Bhavesh Jadhav as Melody Head. Their dedication and talent have propelled SPANDAN to new heights, captivating listeners and leaving an indelible mark on the city's musical landscape.

Most recently, SPANDAN took to the streets for a live jamming session on Marine Lines to promote SPHINX 2024, a Techno-cultural Fest of SPCE, before wowing the crowd with another stellar performance at SPHINX 2024 itself. As SPANDAN continues to enchant and inspire listeners with their music, it is clear that this talented group of musicians is on a trajectory towards greatness. With their passion, dedication, and undeniable talent, SPANDAN is sure to leave an indelible mark on the music scene for years to come.

SPEAKERS CLUB



The Speakers Club at Sardar Patel College of Engineering isn't just a typical extracurricular; it's a transformative hub where students hone their oratory skills and gain confidence. Every week, the club room buzzes with energy as students eagerly tackle their fear of public speaking and delve into the art of persuasive communication.

Led by the club coordinator, sessions commence with lively warm-up exercises. From tongue twisters to impromptu torytelling, these activities serve as more than just icebreakers; they ignite creativity and prepare members for the main event: speaking on diverse topics, ranging from technology to philosophy.

The pinnacle of excitement arrives with the Annual Extempore Competition, a thrilling test of students' ability to think and speak on their feet. Participants draw random topics and have a brief window to organize their thoughts before presenting to both audience and judges. It's a spirited contest that combines improvisation with poise, a challenge eagerly anticipated each year.

Beyond the thrill of competition, these sessions foster personal growth. Members not only develop skills but also character and confidence.

In the words of George Bernard Shaw, "The single biggest problem in communication is the illusion that it has taken place." At the Speakers Club, communication isn't just happening; it's resonating, impacting, and inspiring. Whether whispering anecdotes or fiercely debating on stage, every word strengthens one's voice. By the end of the year, members aren't just prepared to speak; they're ready to roar blic speaking and delve into the art of persuasive communication.

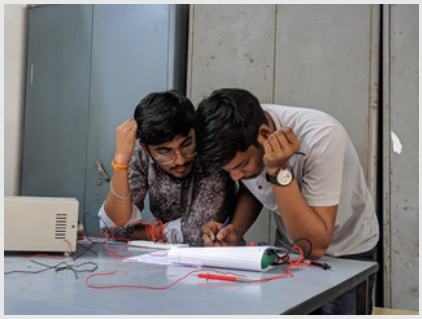
SPHINX

Sphinx 2024, the eagerly awaited annual techno-cultural fest of Sardar Patel College of Engineering, unfolded with an air of anticipation and excitement, meticulously organized by the diligent members of the student council for the academic year 2023-24. Spanning three exhilarating days from March 28th to March 30th, Sphinx offered a dynamic fusion of technical ingenuity and cultural vibrancy, attracting participants and spectators alike from far and wide. The fest served as a vibrant showcase of the college community's diverse talents, passions, and collaborative spirit, exemplifying the essence of creativity and innovation that defines SPCE.

The festivities commenced with grandeur and pomp at the inauguration ceremony held at 10 am on March 28th, heralding the dawn of an action-packed weekend. Day one unfolded with an exciting array of events, setting the stage for a thrilling journey of exploration and engagement. From the adrenaline-fueled Clash of Concrete and the robotic showdowns of Robo Sumo and Robo Soccer to the glitz and glamour of the Mr. and Ms. Sphinx beauty pageant, participants showcased their skills and charisma with fervor and flair. The highlight of the day was a spellbinding stand-up comedy extravaganza by acclaimed comedians Anish Goregaonkar, Sagar Punjabi, and Rahul Chauhan, leaving the audience in stitches of laughter and applause.

Day two dawned with renewed anticipation and enthusiasm, as participants and spectators alike immersed themselves in a whirlwind of cultural and technical competitions. The soulful melodies of Swaranjali echoed through the air, captivating audiences with their emotive resonance, while the electrifying performances of competing bands in the War of Bands infused the atmosphere with an infectious energy. Spandan, the music club of SPCE, enthralled the audience with their enchanting renditions, while Step Up, the fiercely contested dance competition, showcased the grace and dynamism of talented performers. Concurrently, the intellectual prowess of participants was put to the test in a series of technical challenges including, Constructo, Mech Quiz, and Magic by Logic, pushing the boundaries of innovation and intellect to new heights.The Mr. and Ms. Sphinx competition showcased the charisma and confidence of participants, as they dazzled the audience with their charm and poise. Contestants exuded elegance and personality, adding a touch of glamour to the festivities.

As the final day of Sphinx dawned, the campus buzzed with excitement and anticipation, brimming with the promise of unforgettable experiences and cherished memories. From the adrenaline-charged Clash of Concrete and the exhilarating Cadventure to the creative showcase of Plan It and the intellectual stimulation of Rhyme and Reason, participants embraced the diverse array of events with gusto and determination. The day culminated in a thrilling IPL Auction and an Auto Expo, offering attendees a glimpse into the future of innovation and technology. As dusk descended, the festivities reached a crescendo with an unforgettable concert and DJ night, where music, laughter, and camaraderie filled the air, bringing Sphinx 2024 to a spectacular close and leaving indelible impressions on all who were fortunate enough to partake in its magic.




BHAVAN'S CULTURAL CENTRE, ANDHERI












SPHINX

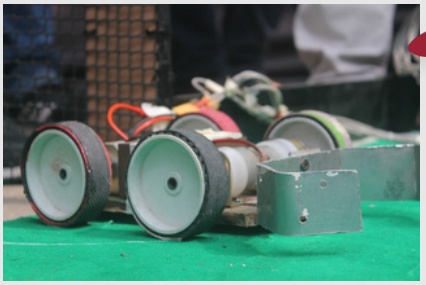

WESTEX DANCE CREW



Sphinx

2024


SPHINX






Shal Mangal





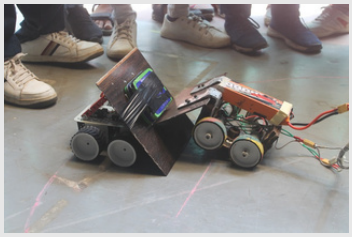




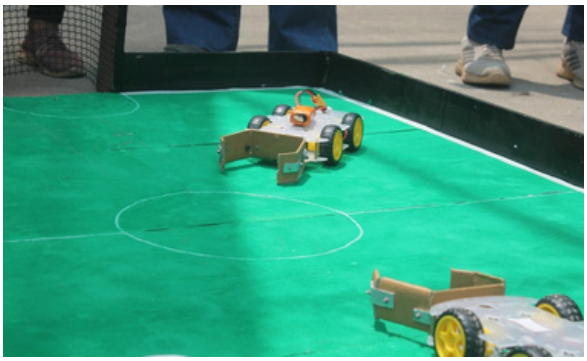



BHAVAN'S CULTURAL CENTRE,









Technical Events







Sphinx 2024, once again set the stage for a confluence of engineering brilliance and innovation under the theme "Leonine Spirit and Human Intellect." This year's edition featured an array of technical events that provided a platform for students from various disciplines to demonstrate their technical prowess, creativity, and problem-solving skills. With events ranging from intense coding challenges to dynamic robotics competitions, Sphinx 2024 celebrated the spirit of engineering through practical application and theoretical exploration.

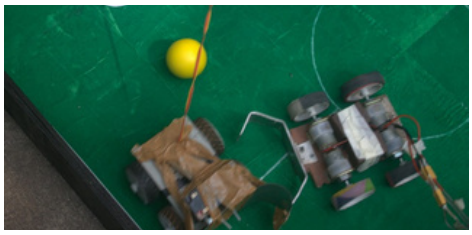
This year's **Mock Interview** event was a compelling exercise in the career preparation of more than 40 students. Participants underwent a challenging sequence starting with an aptitude test, followed by a group discussion, and culminating in a personal interview. Designed to simulate a real-world interview environment, this event provided invaluable feedback and insights, preparing students for their future career endeavors by testing their readiness under pressure.

The **Technical Paper Presentation** was conducted online, providing a platform for students to present their research in a competitive environment. Ten teams took this opportunity to delve into specialized topics, delivering presentations that were assessed on the depth of research and the clarity of delivery. The event not only fostered a scholarly atmosphere but also encouraged a spirit of learning and innovation among participants.

The most popular civil engineering event, **Clash of Concrete**, saw participation from 20 teams. Each team was tasked with creating the most efficient and sustainable concrete mix proportion. This event was a practical demonstration of sustainable engineering practices and encouraged innovative thinking in material science.









> **Innovation distinguishes between a leader and a follower**
>
> **- Steve Jobs**

Seventeen teams participated in **Constructo**, where participants used ice cream sticks to build model bridges based on principles of structural engineering. This event tested the students' understanding of load distribution and structural integrity in a fun and competitive setting.

Plan it attracted more than 50 participants who demonstrated their creativity and understanding of architectural planning. This event emphasized the importance of imaginative and practical approaches to building design, reflecting real-world issues and scenarios.

Cadventure captivated 25 participants with a challenge in mechanical design across two rounds: the first testing basic engineering graphics and the second requiring detailed isometric and orthographic views. Utilizing various 3D modeling software, competitors demonstrated their precision and innovation in crafting technical CAD models, showcasing the practical applications and critical importance of 3D modeling in modern engineering.



Mech Quiz was enhanced this year with three rounds: an online Q&A, a cheat round, and a buzzer round, focusing on core mechanical engineering concepts. This event, participated by teams of two, provided a platform for students to showcase their knowledge in a competitive format, preparing them for future exams like GATE and ESE.

Robo Soccer at Sphinx 2024 turned an engineering challenge into an exciting game where 10 teams used remote-controlled bots to play soccer. This event was a blend of technology and sport, engaging students in applying their robotic skills in a competitive and dynamic environment, testing both their technical abilities and strategic thinking.

Robo Sumo was a highlight at Sphinx 2024, featuring intense robot battles across five rounds. Each three-minute round tested the robots' design and strategic prowess, with victories going to those winning three or more rounds. This event showcased the participants' engineering and programming skills in a dynamic, competitive environment.

Magic by Logic challenged participants with a two-round competition focusing on electrical engineering. The initial round tested knowledge on logic gates and circuit designs, followed by a practical round of building circuits. This event highlighted the application of theoretical knowledge in practical scenarios, emphasizing the intricate nature of electrical engineering.

Sphinx 2024's technical events were a testament to the enduring spirit of inquiry and ingenuity among the students. Each event was not only a competition but also a learning platform that encouraged students to push the boundaries

SPIRIT

SPIRIT 2024 at Sardar Patel College of Engineering, Mumbai

SPIRIT 2024 organised by the student council of Sardar Patel College of Engineering, Mumbai, was held from February 23rd to 26th. The event attracted approximately 1200 participants and featured a wide range of sports, including athletics, cricket, football, volleyball, basketball, throwball, badminton, tug of war, chess, carrom, and table tennis. The first ever grand inauguration marked the beginning of the event, featuring a spectacular performance of BMX stunts, a vibrant splash dance, and the traditional marshal march led by the sports secretaries, culminating in the release of colorful banners, setting the tone for the success that followed.

A heartfelt vote of thanks goes out to Team Spirit, the student council, faculty members, and all those who contributed to the success of SPIRIT 2024. Their unwavering support and dedication ensured the smooth execution of the event. Special appreciation goes to the sports secretaries for their exemplary leadership and collaborative efforts with Team Spirit, which played a significant role in the event's success.

This year's SPIRIT 2024 was not just an ordinary sports fest; it was a manifestation of the collective dreams and aspirations of the entire college community. With the introduction of numerous new events, including athletics, tug of war, badminton and basketball for women, this year's event set a benchmark for excellence and innovation, showcasing the college's commitment to pushing the boundaries of sports festivals.

The Sports Fest featured a grand lineup of activities spread across four days, beginning with athletics and indoor games, followed by football and tug of war, and culminating with badminton and basketball competitions. The inclusion of new events such as athletics relays, tug of war, and badminton added a fresh and exciting dimension to the festivities, garnering widespread participation and enthusiasm from attendees.

Successful outdoor competitions included a spectacular football , basketball and cricket tournament, while indoor games such as carrom, table tennis, and chess saw enthusiastic participation and competitive spirit among participants. Notably, the introduction of badminton at the Andheri Sports Complex received an overwhelming response, further enriching the overall sporting experience for all involved.

In conclusion, SPIRIT 2024 at Sardar Patel College of Engineering was a resounding success, celebrating the spirit of sportsmanship, teamwork, and community engagement. As participants departed with cherished memories and newfound friendships, the event left an indelible mark, inspiring upcoming batches to embrace the joys of physical activity and collaboration.







SPORTS AT SPCE

2024









Archery Team
(Silver Medal)



Wrestling
(Bronze Medal)



Mallakhamb Team
(Bronze Medal)

STEM CELL DONOR REGISTRATION DRIVE

"The act of giving is an act of faith. It is a belief that our small acts can make a big difference."

Striving to make a big difference, A Stem Cell Donor Registration Drive was Conducted on 16th September 2023 in Sardar Patel College of Engineering (SPCE) by Marrow Donor Registry India (MRDI) in association with Tata Memorial hospital for the many cancer patients around the world, funded by Tata trusts.



The MDRI carries out these drives to search for potential blood donors, whose stem cells can be used to fight rare blood diseases like blood cancer, thalassemia, etc. Each donor who volunteered had a sample of saliva collected by the team of doctors. These samples will be stored in their registry, and if a donor matches with a patient with a rare blood disease, they will receive a call to make a Lifesaving blood donation of 200ml only. This way, they can save the life of a patient by helping them regenerate their stem cells.



This event was smoothly coordinated with the sincere efforts of the SPCE Student Council 2023-24 and the student volunteers from SPCE, who ensured timely assistance to the MDRI doctors. This event was organized in memory of our beloved student Kushal Kapoor who was suffering from leukemia.
The event began at 9 am in the seminar hall with Brief introduction about the Stem Cell Donation and to create awareness about the importance of stem cell donation in the students, teaching and non-teaching faculty motivating them to become potential stem cell donors.



Dr. Praveen celement and his team with SPCE Student Council started with the Registration process. Several registration stations were established where students could sign up as potential stem cell donors. The Process began with filling of registration form which were provided at the registration station. This registration form was then verified at the verification desk. At the verification desk potential donors were provided with sample kits. Donors were then sent to the sampling desk where doctors collected the saliva samples. Each Sample was labelled with a unique serial number for identification purpose.

The Stem Cell Donation Drive at SPCE was a significant success in terms of raising awareness and inspiring students to become potential stem cell donors. The event showcased the impact of collective efforts in promoting a noble cause. The event ended at 5:30 pm with total of 370 Donors registered as potential stem cell donors during the event, effectively increasing the size of the national registry.

ANNUAL DEBATE



The annual Oxford Style Debate, organized by the student council 2023-24, took place at Sardar Patel College of Engineering on December 9th and 10th, 2023. It was a big event that lots of people were excited about. Students from 16 colleges in Mumbai and Pune came together to debate important topics

Before the event, organizers spent a long time planning everything to make sure it went well. The opening ceremony on December 9th was in room no 119 and marked the start of the debates. Each college picked their best students to form teams and compete in the debates. The debates followed a special format called the Oxford Style, which is known for being very organized and focusing on good arguments

The adjudicators for the event, who played a crucial role in evaluating the debates and determining the winners, were Prerna Sukhija, a respected educator known for her insightful critiques and fair judgment, Professor Kaisar Katchi, whose expertise and knowledge added depth to the evaluation process, and Avinash Tripathy, a seasoned debater and mentor whose keen eye for detail and constructive feedback enriched the deliberations.

During the debates, students talked about different topics like technology in education and social media rules. They spoke passionately and tried to convince everyone with their ideas. It was exciting to watch and listen to them share their thoughts. The atmosphere was friendly, and everyone cheered for each other, showing good sportsmanship.

On the final day, the tension was high as the top teams faced off. In the end, the team from Vivekananda College, Chembur, won first place, and the team from VIT College, Mumbai, came in second. Utkarsh Karmungikar from VIT College was named the Best Speaker for his great communication skills.

Overall, the Oxford Style Debate was a success, bringing together students from different colleges to discuss important issues in a fun and respectful way. It showed how talking and listening to each other can help us understand different perspectives and grow as individuals.



VERSOVA BEACH CLEANUP 2023

On September 23, 2023, Versova Beach saw a remarkable gathering of individuals committed to environmental conservation. Over 30 participants, including local residents and enthusiastic volunteers, gathered at Versova Beach to participate in this citizen-led initiative. The focus was on creating a cleaner and greener paradise for everyone, significantly contributing to environmental conservation. It served as a reminder of the positive change that can be achieved when communities unite for a common cause.



The event provided participants with gloves, bags, and cleaning supplies, enabling them to actively contribute to the cleanup effort. Waves of enthusiasm and dedication swept through the participants as they set out to clean the beach, reinforcing the idea that everyone has a role to play in preserving the environment.

In the span of just one hour, the efforts of the participants resulted in a visibly cleaner and more pristine Versova Beach. It wasn't just about cleaning; it was a demonstration that collective action can bring about significant change in environmental preservation.



The Versova Beach Cleanup 2023 was a testament to the power of community engagement in preserving our natural surroundings. The event showcased the unity and commitment of over 30 individuals who collectively contributed to the cleanliness and beauty of Versova Beach. It reinforced the message that swachhata is not solely a government initiative but a shared responsibility of every individual.

The event, organized by the Student Council 2023-24 SPCE, the Rotaract Club of SPCE (RCSPCE), with support and guidance of respective college authorities, Dr. M. M. Murudi, Principal and Dr. Shyamlee Solanki, Chairperson, Student Welfare Committee and in association with the Afroz Shah Foundation, aimed to harness the power of community action for a cleaner and greener Versova Beach.

SPECIAL MENTIONS



Mr. Tejas M. Vaishnav, of final year mechanical engineering, was nominated for ' Bank of Baroda Achiever Awards' for AY 2023-24. The Award comprises of a cash prize of Rs.31000/- and a certificate of honour.

Mr. Kaif H Badshah, of final year mechanical engineering, was nominated for 'Bank of Baroda Achiever Awards' for AY 2023-24. The Award comprises of a cash prize of Rs.31000/- and a certificate of honour





Mr. Rikson Irudayakani Arasan, of final year electrical engineering, was nominated for ' Bank of Baroda Achiever Awards' for AY 2023-24. The Award comprises of a cash prize of Rs.31000/- and a certificate of honour

SPECIAL MENTIONS

Mr. Aniruddha Deshpande, who graduated in the year 2023, got ALL INDIA RANK-1 in a prestigious Product Design MDes. Examination- 2024. The entrance examination is conducted by National Institute of Design, Ahmedabad.





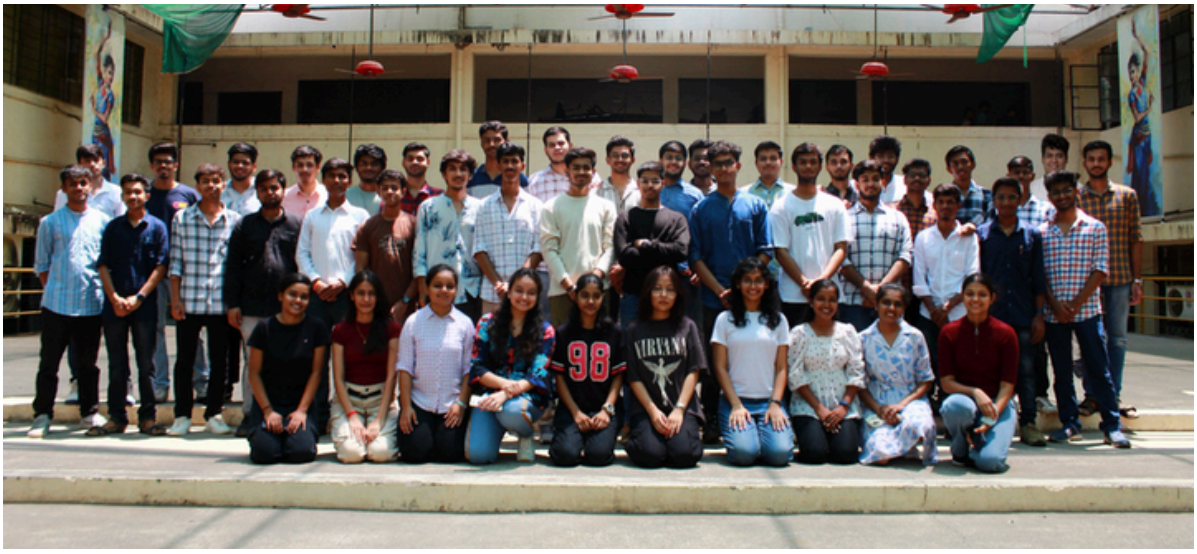
Mr. Tanishq Kale won district level best Innovation Award at Maharashtra Student Innovation Challenge organized by Maharashtra State Innovation Society and was invited for Startup-Mahakumbh organized by ASSOCHAM India, Nasscom Startups, Bootstarp Incubation and Advisory Foundation, TiE and IVCA at New Delhi

Mr. Harsh Shrivastava (TY Btech) has secured 133rd rank in Geomatics in GATE.



FIRST YEAR

CIVIL



ELECTRICAL



MECHANICAL



SECOND YEAR

CIVIL



ELECTRICAL



MECHANICAL



THIRD YEAR

CIVIL



ELECTRICAL



MECHANICAL



B.TECH YEAR

CIVIL



ELECTRICAL



MECHANICAL



M.TECH

STRUCTURAL ENGINEERING



CONSTRUCTION MANAGEMENT



ARTICLES

FICTION

Kruti Gujarathi - F.Y. Mechanical

The land of Bagru

The land where scorching rays of sun and traditions meet together. Bagru. This land has witnessed some unique heritage and interesting folklore. Through the narrow lanes of Bagru you may find small independent huts, women in vibrant sarees with a veil covering their face wearing typical Nath and men with thick mustaches and bright turbans. But this is not what this village is known for! Block printing has kept this village going for years. This simple yet elegant art has kept plates filled for many people in Bagru. Culture of block printing was bestowed to mankind nearly 4000 years ago. Savitri, a middle-aged woman dressed in a hot pink saree and maroon sweater works in a factory where block printing is done. Her aged and wrinkled hands don't get in her way. She chooses to shuttle between her two growing kids and her sick husband. Her husband is unemployed because of the allergies that affected his hands leaving him practically handicapped. Unlike the typical stereotype of an Indian household, Savitri is the "man" of the house, bringing bread to the table. One may think life must be so tough for her. Feeding 4 in less than bare minimum wage may look like living in a dark abyss but Savitri puts on a brave smile and manages to get through. After a rigorous day of manual labour, Savitri arrives home but her day has not been nearly as easy. Managing two growing kids and household chores is what she is getting started with now. Savitri outstrips our expectations by being a working woman, a housewife and a mother! There are many Savitris whose stories are unheard, many Savitris who go through hardships and yet are undermined and undervalued due to our false notions. To put that brave smile on, one has to get a perspective on mentality. When life gets tough, tough gets it going. To choose the path not taken which is filled with thorns of societies and gets onerous as it goes is commendable. She has proved to be the "one man army " of a kind. The main question stands out if any one of them even has the courage to survive what Savitri lives.

-Kruti Gujarathi
F.Y. Mechanical

POETRIES

Neelanjana Mandal - F.Y. Mechanical
Shreyas Patil - F.Y. Civil

Coffee Breaths

Is the street too busy to not notice the rain?
Or is it the chaos that drives you to neglect tranquility?
Am I the only one sitting among strangers
Gossiping over a cup of coffee?
That warmth reminds me of the love
The blanket of compassion my mother used to wrap me in
A telepathic connection I exchanged with her
Neither a stranger nor did our conscience apprehend that unbound force
Now all I share is my playlist
Filled with songs these random strangers vibe with
Are the tiny droplets of rain not touching you like the smiles you see?
Or are you engrossed among the music, cookies and coffee ?
Oh and the gossips and laughter of course
That distract you from your love for home thus help you create all fresh anew?
The stories aren't the same that my mother used to share with me
They are the tales that never run into me
The songs I sing now among these known yet unfamiliar faces
Aren't the ones I heard on the 'caravan'
I wish I'd read poems of my life to someone in this unknown place
Like I used to at my home in the laps of my mother
~ new town yet lost in her old love
-Neelanjana Mandal
F.Y. Mechanical

Indelible

Unconquerable, thought he
With stars in his eyes
Naught but a lick of sense
And a heart too big in his life
Defiance carved into his bones
Etched by stark reality
With a thousand scars he limped
Delusions staying cosmic tragedy
Tore open his nails
Shed blood, to water his soul
Just a step more he cried out
For a death he chose
An unmarked grave, an unsung hero
A terrible joke, a sum-zero
He knows this, and yet he tries
Dauntless, for he controls his life
-Shreyash Patil
F.Y. Civil

POETRIES

Umesh Lahoti - B.Tech Civil

The Boys Hostel

A quick riddle!
I'm where dudes crash, a chaotic scene, Underwear flags and socks unclean.
Snoring symphonies fill the air,
And late night talks line the walls.
What am I?
Oh yes, this is my place, my 2nd home. The Boys Hostel.
Believe me or not it's way more wild than these two few lines. A must visit place for every guy. It's a place which never dies. I'm writing this and it's around 1.00 am. My roommate is watching highlights from IPL and some guy I know, we are waiting for, is in the bathroom for the last 40 mins. Let's not wonder what he might be into, maybe washing clothes and the other guy trying to smuggle food we ordered.
These corridors have never been quiet, be it MI vs CSK or a time bomb planted somewhere no one is aware of! Right from completing syllabus one night before exams to submitting assignments late we've seen it all. Ever imagined a scenario where a small room with 3 beds which gets adjusted just to play cricket with 6 people in the game?
This can be a potential reason for our late submissions.
Wait, is it your birthday today? You better hide somewhere but, anyways that's pointless. You'll still be hunted down. And you better be not that guy who is in the hit list or else it won't matter whose birthday it was, your back will still get red.
This was a glimpse of night. Life advice for my juniors who will be joining a boys hostel.If you wanna have a bath, don't wake up at 8 for the lecture of 9.
Oops! I forgot about tomorrow's exam! I've to understand some topics from a friend who is just next door. Bye bye!
-Umesh Lahoti
B.tech Civil

POETRIES

Tejas Dabhekar -T.Y. Electrical (Hindi)
Vaishnavi Shinde - F.Y. Electrical (Marathi)

संघर्ष

रास्ता भले ही काटो से भरा हो
लेकिन उसको खतम करने में जो मजा है
वो अलग है।
आसमान से बड़े सपने है
उनको छूना भी है
आसान तो नही होगा
इस लंबे सफर को पार करना
क्योंकि खुशियों के दिन जो देखने है
तो फिर लंबी छलांग लगानी होगी
और छलांग लगाने में जो मजा है
वोह अलग है।
हर रोज उगने वाला ये सूरज
आशा की एक नई उम्मीद लाता है
लेकिन उम्मीदों से ये दुनिया नही चलती
उसके लिए संघर्ष लगता है
और इस संघर्ष भरे जीवन को जीने में जो मजा है
वोह अलग है।
ये जीवन एक बड़ा पुस्तक है
इसको वही पढ़ सकता है जिसमे जीने की ताकद हो
सपनो को पूरे करने की भूख हो
और इस भूख को मिटाने में जो मजा है
वोह अलग है।
दिन चालू होता है उम्मीदों से
ओर खतम होता है मेरे संघर्ष को देखकर
अगर असफल भी होगया तो मुझे कोई डर नहीं है
क्योंकि ये सफर बोहोत प्रेरणादाई होगा
हार ये शब्द मेरे शब्दकोश है ही नही
क्योंकि जितने की प्यास जो लगी है
इस प्यास को मिटाने के लिए कोई आकर पानी
नहीं देने वाला
मुझे मदत भी नहीं चाहिए
कोई कर्जा नही चाहिए
क्योंकि पानी का कुआं खोदने में जो मजा है
वोह अलग है।
तेजस दाभेकर
T.Y Electrical

चला देश सुधारूया

जाता रस्त्यांनी दिसला कोणी कचरा फेक्ताना,
त्याला समजून सांगुया,
कचरा कुंडीत टाकण्याची विनंती करूया,
चला देश सुधारूया.
दिसता कचरा रस्त्यावर,
शासकीय जागेवर,
आणि इतर कोठेही, तो उचलुन घेउया,
आणि इतर त्याला त्याच्या जागेवर पोहचवूया,
चला देश सुधारुया.
कोणी दिसला तोडतानी वाहातुकीचे नियम,
त्याला जीवाचे महत्त्व सांगुया,
इतरांना धोका निर्माण होण्यापासून वाचवूया,
चला देश सुधारुया
दिसता एखादा चोर
करताना दिंदुबल्यांवर
अन्याय अत्याचार
त्वरित पोलिसांना कळवूया
त्यांना हवी तेवढी मदत करूया
चला देश सुधारुया.
भुकेल्यांना जेवण देऊया,
निराधारांना आधार देऊया,
बेरोजगारांना नोकरी देऊया,
चला देश सुधारूया
चला शपथ घेऊया,
देशाच्या प्रत्येक यशात सामिल होऊया,
देशाच्या प्रगतीला आपले
अमुल्य योगदान देवूया,
चला देश सुधारूया....
चला आजच्या नवयुवकांनो,
पुन्हा एकदा आभाळाला गर्जन्याचे आव्हान देऊय,
आणि तुमच्या, माझ्या आपल्या सर्वांच्या या भारत देशातून,
पुन्हा एकदा सोन्याचा धूर निघु देवूया,
चला देश सुधारुया...
- वैष्णवी शिंदे.
F.Y Electrical

ARTWORKS





Riddhi Nayak - F.Y Electrical





Neelanjana Mandal - F.Y Mechanical



THE SECRET OF CHANGE IS TO FOCUS ALL OF YOUR ENERGY, NOT ON FIGHTING THE OLD, BUT ON BUILDING THE NEW.

~ SOCRATES