

**COLLEGE OF ENGINEERING & TECHNOLOGY, AKOLA 444104**



**Research and Development Cell**

**“TECHNICAL NEWS LETTER”**

**March-2025 To June-2025**

**Academic Year: 2024-2025**



## COLLEGE OF ENGINEERING & TECHNOLOGY, AKOLA

March 2025 to June 2025

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## From Editorial Desk

This technical newsletter issue would be a snapshot of the various activities of different departments. Proper communication plays a vital role in the developments of the institution, this newsletter will serve to reinforce and allow increased awareness, improved coordination and integration among all the departments. It provides a platform for exposing the merits and academic achievements of the faculty and students of various departments. This enhances the documentation culture of the institute.

I invite all the staff and students to read this technical newsletter.

Sincerely

Dr. R. S. Jaiswal

# FIRST YEAR

Faculty Contribution in Research Paper/STTP/FDP/Conference/Workshop						
Sr. No	Name of Faculty	Title of Research Paper/Work shop/STTP/FDP/ conference/Patent /Copy right	Research Paper/Conference/ Seminar/ STTP/Patent /Copy right	Name of Journal	ISSN No./Vol. No./Page No.	Duration From – To
1	Dr. P. S. Ardkak	5th International Conference On “Recent Trends in Science, Engineering & Technology” ICRTSET-2025	Conference	-	-	28 & 29 March, 2025
2	Dr. P. S. Ardkak	Transforming Ideas into Solution: A Multidisciplinary Approach	Conference	-	-	24 April 2025
3	Prof. K. V. Nile	‘NPTEL Online Certification (Elite)’ for the course “Partial Differential Equations (PDE) For Engineers: Solution by Separation of Variables”	NPTEL	-	-	Jan-Feb 2025
4	Prof. S. J. Ningwal	Measurement of soil moisture by using sensors	Conference Attended and paper published	IJSRST	IJSRST: ISSN: 2395-6011	12 March 2025
5	Prof. S. J. Ningwal	A review of Technical & Natural Fibre for Composite Manufacturing in Industrial Applications	Conference Attended and paper published	IJSRST	IJSRST: ISSN: 2395-6012ISSN: 2456-236X Vol. 06 Issue 01   2021	12 March 2025

6	Dr Mrs.D.D.Raut	Dynamics of Non-statics Isotropic Universe with Special Form of Deceleration Parameter	Research Paper	International Journal of Scientific Research in Engineering & Management	ISSN:2582-3930 volume 08 Issue 04 April 2024	IMPACT FACTOR 8.448
7	Dr Mrs.D.D.Raut	Functional Differential Inclusion of Fractional Order in Banach Algebras	Research Paper	International Journal on Recent Trends in Computing & Communication	ISSN:2321-8169 Volume:2 Issue:2	IMPACT FACTOR 5.837
8	Dr Mrs.D.D.Raut	Research Methodology	One Day Workshop	-	-	25-Mar-25
9	Dr Mrs.D.D.Raut	Outcome Based Education & Accreditation	STTP	NITTR Bhopal	-	17 to 21 March 2025
10	Dr. Jyoti Shegokar	In Vitro Anti-Microbial Study of Nanoparticles of Bis Chalcone and Their Substituents'	Research Paper	International Journal of scientific research in science and Technology.	Offline ISSN-2395-6011 IF-8.02 Online ISSN-2395-602X IF-8.02	March-April-2025
11	Dr. Jyoti Shegokar	Outcome Based Education & Accreditation	STTP	NITTR Bhopal		17 to 21 March 2025
12	Dr. Jyoti Shegokar	Integration of Indian Knowledge in present education system	Two weeks	-	FDP/2025-26/5555	23rd June to 3rd July 2025
13	Prof. S.D.Deshmukh	Research Methodology	One Day Workshop	-	-	25-Mar-25
14	Prof. S.D.Deshmukh	Outcome Based Education & Accreditation	STTP	NITTR Bhopal	-	17 to 21 March 2025
15	Prof. S.D.Deshmukh	ST. FRANCIS DE SALES COLLEGE	Poster presentation	-	-	7 & 8 March 2025

16	Dr.V. R. Thakare	International Conference on Emerging Trends in Physical Sciences	Conference	-	-	12-Mar-25
17	Dr.V. R. Thakare	National Conference on Transforming Ideas into Solutions: A Multidisciplinary Research,	Conference	-	-	24-Apr-25
18	Dr.V. R. Thakare	FDP on Sustainable Carbon Free Technologies for Hydrogen Generation and storage	FDP	-	-	24 Feb 2025 to 1 March 2025
19	Dr.V. R. Thakare	Physio-Chemical Study of Impact of Industries on Water Bodies of Chandrapur City (MS)	Research Paper	7.101	Volume 12, Issue 8, Page Number: 427-435	March-April-2025
20	Dr.V. R. Thakare	Impact of Chandrapur MIDC (M.S.) on Air Quality during winter 2010	Research Paper	6.03	ISSN: 2456-236X ,Vol. 09 Issue 02	2025
21	Dr.V. R. Thakare	Study of Physiochemical impact of Industries on underground water of Chandrapur City	Research Paper	7.81	-	Accepted

# MECHANICAL ENGINEERING

## ❖ Activities Conducted/ organized by the Mechanical Engineering Department

**A) Department of Mechanical Engineering organized Expert Lecture on the topic “AUTOMATION” for Mechanical Engineering Students on 01<sup>st</sup> March 2025.**

**Expert: Dr. S. K. Patil, Professor & HOD**

- A subject expert Dr. S. K. Patil was invited to deliver the session on automation technologies and their applications in various industries.
- The talk covered topics such as PLC programming, robotic automation, mechatronics systems, and future trends in industrial automation. Students actively participated, interacted with the expert, and clarified their doubts. The Department of Mechanical Engineering coordinated the event to ensure maximum learning benefits for students.

### Photographs:



## B) Parents-Teachers Meet on 19<sup>th</sup> March 2025

- A Parents-Teachers Meet was organized on 19<sup>th</sup> March 2025 by the Department of Mechanical Engineering.
- The objective of the Parents-Teachers Meet is to establish effective communication between parents and faculty members regarding the academic performance, attendance, and overall development of students.
- Faculty members interacted with parents and discussed the academic progress, attendance, and behavior of students. The department also presented information about upcoming expert talks, industrial visits, training programs, and placement opportunities.
- Parents shared valuable feedback and suggestions, which were noted for further improvement. The meet strengthened the relationship between parents and the department, ensuring a collaborative approach toward the growth and success of students.

### Photographs:



## C) One Day Workshop on Nano Fluids and Basic Concepts of Heat Transfer on Dated 25<sup>th</sup> March 2025

➤ The objective of this one-day workshop was to deepen the technical understanding of Mechanical Engineering students in two significant areas — Nano Fluids and Heat Transfer. The workshop aimed to strengthen fundamentals, introduce students to recent research developments, and highlight the industrial relevance of these topics.

### ➤ Session 1: Nano Fluids

Conducted by **Dr. D. V. Wele**, Department of Chemical Engineering.

The session covered fundamentals of Nano fluids, preparation methods, thermal performance, industrial uses, and ongoing research trends.

### ➤ Session 2: Basic Concepts of Heat Transfer

Conducted by **Dr. G. S. Zamre**, Department of Chemical Engineering.

This session included detailed explanations on conduction, convection, radiation, heat exchanger applications, and analytical approaches used in mechanical systems.

### Photographs:



## D) Expert Talk on Cyber Security and Big Data on 26th March 2025

- The objective of this expert talk is to provide students with awareness and understanding of two rapidly growing fields — Cyber Security and Big Data. The session aims to highlight the importance of data protection, online safety, and secure communication along with the role of Big Data in decision-making, analytics, and industrial applications.
- Total 59 Students of Mechanical Engineering students were present during the sessions
- **Session 1: Expert talk on “Cyber Security”**

Expert Name: **Prof. K. P. Barabde**

- **Session 2: Expert Talk on “Big Data”**

Expert Name: **Prof. R. J. Deshmukh m,**

### Photographs:



## ❖ **Faculty Achievements of Mechanical Engineering Department**

- To strengthen the research culture within the department, the faculty members of Mechanical Engineering have successfully published the following patents during the academic year 2024-2025

### ❖ **Patent Title: Device to Measure Heat of hydration in Cement & Concrete.**

- *Prof. S. R. Thakare*
- *Prof. M. R. Pundkar*
  - Date of Publications: 05 June 2025
  - Application Number: 452948-001
  - Published by: The Patent Office, Government of India

### ❖ **Patent Title: Coconut Cutter**

- *Prof. S. R. Thakare*
- *Prof. M. R. Pundkar*
- *Prof. A. S. Tolmare*
  - Date of Publications: 09 June 2025
  - Application Number: 446403-001
  - Published by: The Patent Office, Government of India

# ARCHITECTURE

## 1. NATURE CLUB ACTIVITY -VISIT TO PDKV

- VISIT TO PDKV - Students of School of Architecture, C.O.E.T. Akola along with Ar Malini Nathe, visited Dr PDKV Krishi Vidyapith, Horticulture Department on date 3 March 2025.
- This Activity was under Nature Club. Students studied landscape and studied different flowers, their varieties, colors etc. Students were very much happy to see different varieties of beautiful flowers in our region.
- This activity was carried out to study landscape design and also to know about Nature and to develop love and awareness about Nature.

### Photographs:



## 2. SITE VISIT FOUNDATION OF COMPUTER BUILDING BABHULGAON

- Site visit was done on date 4<sup>th</sup> March 2025 students of Second Year B. Arch to study foundation of column and its reinforcement on site. Ar Malini Nathe explained column footing its reinforcement etc. to students

### Photographs:



## 3. PARTICIPATION IN TECHNOBLIZ 2K25

- Students of architecture participated in TECHNOBLIZ 2K25 Date 7<sup>th</sup> March 2025
- Afrin Sultana - Final Year B.Arch. got first prize in Group discussion of Skill buster event- TECHNOBLIZ 2K25 COET Akola

### Photographs:



#### 4. CELEBRATION OF INTERNATIONAL WOMENS DAY 8<sup>th</sup> March 2025

- Women's Day was celebrated at the College of Engineering and Technology, Akola to honor the lady faculty members, women supporting staff, and girl students of the college.
- Ar. Malini Nathe and Ar. Radhika Raut from the Architecture Department were also felicitated on this occasion. Speeches on topics such as Women Empowerment, 'Women: Then and Now', and the challenges and responsibilities faced by women in today's world were delivered by faculty members and students. The discussions highlighted how women skillfully and confidently handle these challenges in modern times.

##### Photographs:



## 5. TRADITIONAL DAY CELEBRATION: SCHOOL OF ARCHITECTURE

➤ Date: 28 MARCH 2025

Title: TRADITIONAL DAY 2024-2025

Venue: College of Engineering and Technology Akola

Objective: To promote cultural activities and to help students understand our culture and traditions.

Photographs:



## 6. PARTICIPATION IN BLOOD DONATION CAMP- Date – 15<sup>th</sup> April 2024

➤ On the occasion of Dr. B. R. Ambedkar's birth anniversary, a grand blood donation camp was organized on 15th April 2025 by the National Service Scheme. All students were invited to participate in the blood donation drive. This initiative stands as an important step towards social service.

### Photographs:



# CHEMICAL ENGINEERING

## 1. TWO-DAY WORKSHOP ON MANUFACTURING OF UTILITY CHEMICALS AND ENTREPRENEURSHIP DEVELOPMENT

- Date of Conduction: 17–18<sup>th</sup> March 2025
- Expert Speaker: **Mr. Pankaj S. Rathi**, expert in Chemical Manufacturing and Business Development
- Objective: To provide students with practical insights into utility chemical manufacturing and to develop an entrepreneurial mindset for small-scale industrial ventures.
- Session 1 (Day 1): Focused on entrepreneurship mindset, setting up a small-scale industry, funding options, product marketing, and essential legal registrations.
- Session 2 (Day 2): Covered utility chemical types, manufacturing procedures, raw material selection, safety measures, and live demonstrations for real-world understanding.

### Photographs:



# COMPUTER SCIENCE & ENGINEERING

## 1. National Level Student Technical Event “TechnoBlitz-2k25”

- National Level Student Technical Event “TechnoBlitz-2k25” was successfully organized by CSE department of C.O.E.T., Akola on 7th March 2025. Six innovative events were conducted in parallel. We got a very huge response from students of various colleges and school. Around 500+ participants have participated in this national level event. Prizes were distributed to the participants in form of medals, trophies, hampers and gift vouchers.

Event	Coordinator
Inter School Quiz Competition – Q-Fiesta	Dr. R.A. Taley & Prof. K.P. Barabde
Robotic Dog show	Dr. S. S. Agrawal & Dr. S. A. Awachar
Skill Buster	Prof. P. A. Tayade
LAN Gaming	Prof. K.R. Gawande
Movie Mania	Prof. R. J. Deshmukh, Prof. V. Y. Gaud & Prof. A. P. Jaware
Googler	Prof. M.S. Shegokar

### **A) Inter School Quiz Competition– Q-Fiesta:**

- This event is very popular in Vidarbha region. School students are excited to participate in this inter school quiz competition. The event was conducted at auditorium by staff coordinators, Dr. R. A. Taley and Prof. K. P. Barabde with nine student coordinators.
- Ten schools participated in “Q-Fiesta” Quiz Competition. There were total 5 rounds in the competition. School students were very happy as they got so many prizes (Trophies, medals, school bag, tab, T-shirts, city walk coupons and certificates) and got a very good platform to show their talent. Winning schools are Jawahar Navoday Vidyalaya, Podar international School and Rajeshwar convent, Akola.

#### **Photographs:**



### **B) Googler:**

- Googler, another popular competition was organized which had participants from various school and colleges. The event was inaugurated by dean admin Mr. Sonkhaskar. Rules of the quiz were explained at the beginning. Participants have to write answers of questions by searching fast on google.
- The questions were based on Technical, politics, sports, history, literature, festivals and international activities. The event was coordinated by Prof. M. S. Shegokar. The student coordinators played a crucial role for success of this event. More than 200 students were registered for the Googler.

### Photographs:



### C) LAN Gaming:

- LAN gaming is very popular in college students. LAN gaming at COET, Akola is a thrilling experience. As usual, LAN gaming got a huge response. LAN gaming require skills, strategy and team work. Three challenges for participants were provided – Volorent, Free fire and PubG. Total 64 students participated in LAN gaming. The event was coordinated by Prof. K. R. Gawande

### Photographs:



#### D) Movie Mania:

- Movie Mania is a fun and engaging event to showcase creativity through short video clips of 3 to 4 minutes based on some social messages. This is a platform where students can represent their talent of acting and cinematography. The event was inaugurated by chief guest Dr. A. R. Gupta, HOD of Civil engineering department. There were 30+ short video clips created by 70+ students played in classroom decorated as a theatre.
- There was also ticket counter at entrance. The short films that have been shortlisted by the judges were based on the creativity, directions, social message given through the film.
- The judges for the event were Prof. Amar Tolmare and Prof. Radhika Raut. The student coordinators and faculty coordinators Prof. R. J. Deshmukh, Prof. V. Y. Gaud and Prof. A. P. Jaware worked tirelessly for success of the event.

#### Photographs:



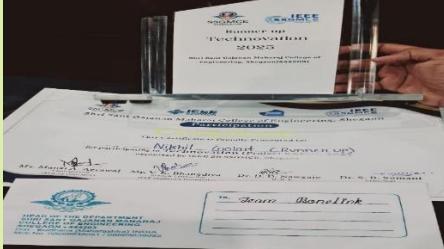
### E) Skill Buster:

➤ This is an innovative event introduced in TechnoBlitz-2k25. In Skill Buster event, three challenges were organized which examine the grammar, fluency and communication skills of students. Total 64 participants registered for the event and gone through challenges. The event was coordinated by Prof. P.A. Tayade with four student coordinators.

#### Photographs:



## 2. Students Achievements:

Date	Name of Students	Details	Photographs
March 2025	Nikhil Golait	2 <sup>nd</sup> Prize in Technovation at SSGMC, Shegaon	
22 March 2025	1 <sup>st</sup> Prize Maria Gandhi 2 <sup>nd</sup> Prize Ruchitra Jasmatia 3 <sup>rd</sup> Prize Maitreyee Joshi	Paper Presentation organized by Civil Engineering Department, COET, Akola	
22 March 2025	1 <sup>st</sup> Runner-up Tanvi Ayachit	Photo Competition organized by Civil Engineering Department, COET, Akola	

## FROM EDITORIAL TEAM

We are indeed enthusiastic to publish the Technical News Letter. Meticulous efforts have been put forward to consolidate, capture all the events of various departments. We strongly hope this newsletter would serve to be more informative for faculty and students. We express our sincere thanks to Dr. P. V. Thorat (Principal) and Dr. R. S. Jaiswal (Overall Coordinator) who have given us the opportunity to work on this. Any Suggestions and feedback will be most welcome.

- Report compiled and submitted by- Prof. M. R. Pundkar

### Editorial Team

1. Dr. S. V. Khedkar	2. Dr. S. S. Agrawal
3. Dr. A. R. Gupta	4. Dr. J. V. Shegokar
5. Ar. Malini Nathe	6. Prof. M. R. Pundkar