



## K K Wagh Education Society's K K Wagh Institute of Engineering Education and Research, Nashik.

April 2025

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### ■ NBA Expert Visit



The NBA expert visit was scheduled from 4<sup>th</sup> to 6<sup>th</sup> April 2025 for six departments: Computer, Electronics & Telecommunication (E&TC), Electrical, Civil, Chemical, and Information Technology (IT). Total 13 NBA experts (including Chairman) from various universities/ colleges inspected presentation, files, documentation and facilities provided by institute. Experts also interacted with students, parent, alumni and employers. Result of said visit is awaited.

### ■ Master students Program-ISTE

On 21<sup>st</sup> April 2025, the Master's Students Program was organized by the ISTE Students' Chapter. The chief guest for the event was Mr. Rahul Shirwadkar, General Manager at Bosch Pvt. Ltd. He encouraged students to engage with industry professionals.



The theme of this year program was 'Engineers Ascend'. Topics were based on: Chasing the winds of change. Total 14 students presented various topics related to the theme. They were mentored by the senior students and the programme was attended by first year engineering students.

### ■ World Creativity and Innovation Day 2025

The Institute Innovation Council, in collaboration with the Department of MCA,

organized a vibrant event on 21<sup>st</sup> April 2025 to mark World Creativity and Innovation Day. The offline event witnessed enthusiastic participation from 83 students and 10 faculty members. Highlights included an expert session by Dr. Harsha Patil on Creative Resume Writing, where students crafted bold and unique resumes. Another major attraction was the AI-Generated Video Competition, where participants used AI tools to create innovative videos, enhancing their creativity and presentation skills. The event was coordinated by Dr. V.R. Dhawale and Swarna H. Patil, with student leaders Rani Gangurde and Pratiksha Bochara managing the competition. The event successfully encouraged students to think creatively and embrace innovation in a tech-driven world.



Celebration of World Creativity and Innovation Day

### ■ Visit of Dr. Sunil Luthra

On 24th April 2025, the institute had the honour of hosting Dr. Sunil Luthra, Director, Training & Learning Bureau, AICTE, for an academic interaction and institutional visit. During his visit, Dr. Luthra conducted a faculty guidance session on the topic "Research Publication in Quality Journals". He systematically explained the process of writing and publishing research papers in reputed, peer-reviewed journals, offering practical insights and simplifying complex concepts for all faculty members. His session was highly engaging and instrumental in enhancing the research orientation of the academic community. Following the lecture, Dr. Luthra visited several key facilities of the institute, including the Central Library, Training & Placement Office, Engineering



Workshop, and the AICTE IDEA Lab. At each location, he interacted with faculty and staff, offering valuable suggestions and constructive feedback to further strengthen the academic and innovation ecosystem of the institute. The visit was highly motivating and has laid the groundwork for future improvements in research practices and institutional development.



Felicitaton of Dr. Sunil Luthra



Visit to Idea Lab by Dr. Dr. Sunil Luthra

### ■ Bharat Ratna Dr. Babasaheb Ambedkar Jayanti



Celerabrtion of Bharat Ratna Dr. Babasaheb Ambedkar Jayanti

The National Service Scheme (NSS) unit of the institute organized a respectful and enthusiastic celebration of Bharat Ratna Dr. Babasaheb Ambedkar Jayanti. The event was graced by the presence of Prof. Pravin B. Surwade (Coordinator, SC/ST Cell). He elaborated on Dr. Ambedkar's immense contributions towards the upliftment of marginalized communities and the empowerment of women in society. He also highlighted Dr. Ambedkar's invaluable role in the drafting of the Indian Constitution. Ms. Sharayu Kakad, a third-year student, led a collective reading of the Preamble of the Constitution,

providing all students with important insights into its significance. The active participation of students and faculty made the event a memorable and impactful occasion.

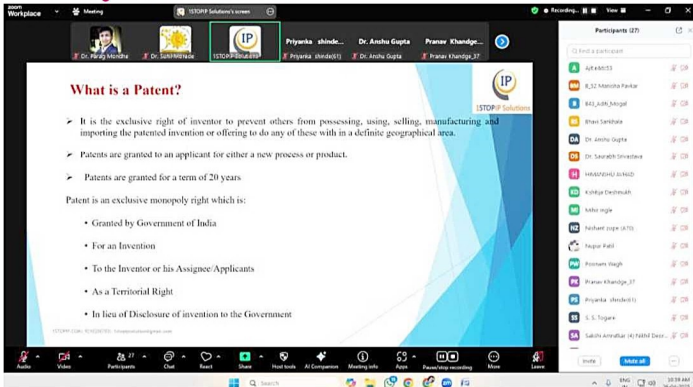
### ■ Campus Placement Felicitation Ceremony



Felicitaton of Students and their Parents

K K Wagh Institute of Engineering organized a felicitation ceremony on April 28, 2025, to honor 88 students selected through campus placements, along with their parents. These students, from various departments like Computer, IT, AIDS, CSD, Chemical, Civil, Electrical, Mechanical, Robotics and Automation, MCA and MBA received job offers averaging ₹4.80 LPA from over 165 reputed companies, including Infosys, IBM, Tech Mahindra, HSBC, KPIT, WinJit Technologies, etc. The event aimed to acknowledge the collective efforts of students, parents, and educators. Institute Principal Dr. Keshav Nandurkar and other dignitaries congratulated the achievers. Concerned students and their parents expressed gratitude to the institute and teaching and placement staff.

### ■ IPR Day Celebration



Intellectual Property Rights (IPR) Day was celebrated on 26<sup>th</sup> April 2025 through online expert talk organized to raise awareness about the importance of IPR in innovation and creativity. The session was conducted by Ms. Swati Varshney, an IPR expert from 1STOPIP

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Solutions, Delhi. The talk provided valuable insights into patent filing, copyrights, trademarks, and the role of IPR in protecting innovations. The event witnessed enthusiastic participation from students and faculty.

### ■ Gokhale T20 Cricket Tournament

The Gymkhana Department of K K Wagh Institute of Engineering Education and Research continues to nurture sporting excellence, and this was evident in the recently held Gokhale T20 Cricket Tournament, where our college team emerged as the runner-up after an exciting series of matches.



In the semi-finals, our team delivered a phenomenal performance against KVN Naik College, Nashik restricting them to just 76 runs while defending a target of 216 runs. This outstanding win set the stage for an intense final against R H Sapat Engineering College, Nashik. In the final match, K K Wagh Engineering College won the toss and choose to bat, setting a competitive target of 119 runs. The team fought hard, but the host college chased the target in 18 overs, securing a 6-wicket victory.



Our players showcased remarkable talent throughout the tournament, with:

- ❖ 🏏 **Om Pawar** winning the **Man of the Series & Best Bowler** titles
- ❖ 🏏 **Prithvi Shinde** earning the **Best Batsman** award

### ■ CONGRATULATIONS

#### **Victory for Team Jal Janardhan!**

Computer Science and Design department final year students, Jatin Gade (Leader), Atharva Baradkar, Sarthak Mali, and Suyash Deshpande

secured First Prize at I-Rise 2k25, a state-level project competition held on 19<sup>th</sup> April 2025 at GES R.H. Sapat College of Engineering. Project title, “Water Quality using Multispectral Satellite Imagery”, was recognized for its innovation and impact among 50 competing teams



### ■ Big Win for Our Stellar Team!

Final Year Computer Science and Design students Asim Avhad, Aditi Ahirrao, Shaunak More, and Kaustubh More triumphed at IEEE Technovation held on 5<sup>th</sup> April 2025 at KBTCE, Nashik. Project Title, “Galaxy Morphology Classification and Redshift Estimation”, stood out for its fusion of AI and Astrophysics, streamlining galaxy classification and redshift calculations.



### ■ Expert Lecture/Seminar/Courses/Workshop Organized

- The Mechanical Engineering organized an expert talk on “Advanced Finite Element Analysis” by Mr. Satish Maniyar, CEO Technocad Nashik on 11<sup>th</sup> April 2025.
- The Electrical Engineering organized following informative events in April 2025
  - An expert talk on "Earthing" for Third Year Electrical Engineering students by Mr. Mangesh Dalvi, Additional Executive Engineer, MSETCL on 17<sup>th</sup> April 2025.
  - An expert talk on "Transmission Lines and Transformers" for Third Year Electrical Engineering students by Mr. Ayush Shah, Deputy Executive Engineer, MSETCL, Chandwad on 11<sup>th</sup> April 2025.
  - An expert talk on “PLC and SCADA: Industrial Protocols for Communication” for third-year

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students by Mr. Sumedh Narayane, Tech-Fusion Robotics, Nashik, on 04<sup>th</sup> April 2025.

- ▶ An expert talk on “Design Thinking and Its Application: from Idea to Start-Up” for Second-year students by Mr. Mayur Tambe on 25<sup>th</sup> April 2025.
- ▶ An expert talk on “GIS Insulated Switchgear” by Mr. Rahul Patil Sr. Manager, R&D GIS CG Power, Nashik on 25<sup>th</sup> April 2025.
- Department of Information Technology organized an expert talk on “MERN Stack- Full-Stack Web Development Framework” by Mr. Shaan Shimpi, NEXT-GEN Web Architect on 24<sup>th</sup> April 2025.
- The Department of Master of Computer Applications organized an expert talk on “GeoAI” by Mr. Nikhil D. Baravkar, Sr. Executive-Training & Certification at Passenger Drone Research Pvt. Ltd. on 28<sup>th</sup> April 2025.

■ **Expert Lecture/Seminar/Courses/Workshop Attended: -**

- Chemical Engineering Department Faculty, Dr. S. N. Jain, Prof. V. N. Mawal, Dr. G. B. Daware, Prof. S. N. Derle, Prof. P. P. Joshi, Prof. Z. K. Deshmukh, Prof. T. B. Mahale, Dr. Yennam Rajesh and Dr. Ravula Rajasekhar, successfully completed National Level One Week Online Faculty Development Program on “Process Intensification: sustainability in chemical Engineering” from 07<sup>th</sup> April to 11<sup>th</sup> April 2025 organized by Datta Meghe College of Engineering, Mumbai.
- Dr. Yennam Rajesh along with the final year Chemical Engineering students, Miss. Panchal Saloni and Miss. Shravya Bangera have won 1<sup>st</sup> Prize in Paper Pulse (online) National Level Technical Symposium organised by Agni College of Technology, Tamil Nadu on 05<sup>th</sup> April 2025.
- Chemical Engineering Department Faculty, Dr. Prashant Kumar successfully completed the 12 Week Faculty Development Program on “Machine Learning for Engineering and Science Applications” organized by NPTEL-AICTE from January to April 2025.

■ **Paper Publications/Presentations:**

**Title: Feature Stream Selection using Alpha Investing with XGBoost for Improving Predictive Accuracy of Classifier**

Prof. I. Priyadarshini, Prof. Dr. S. S. Sane.

(Published in National Conference on

Applications of Artificial Intelligence in Engineering on 11<sup>th</sup> & 12<sup>th</sup> April 2025, ISSN: 2249-9016, Page no. 558-561.)

**Abstract :** Feature selection is a data preprocessing technique used in machine learning to select the relevant set of features from the available features of the data set to build a machine learning model. The Predictive accuracy of machine learning models such as regression can be increased by selecting relevant and optimal numbers of features from the data and using only those features for training the model. There exists a greater issue and challenge in selecting the features from a data set, when the number of that would be arriving is not known in advance and new features would be arriving at a different instance of time which are called a feature stream. For Example, in a texture-based image processing application in which there exist thousands of features for the image and computation time in generating all the features is high, and instead of waiting for all the features to arrive, the selection process is performed with the available features, and other features are considered for selection as and when they arrive. There are many existing algorithms for feature selection for feature streams, but they have limitations over the time required to select the relevant features, the prediction accuracy of the model trained with the selected feature, and the number of relevant features selected. So, In this paper, we propose a novel methodology that combines Alpha Investing an online streaming feature selection technique with XGBoost an tree-based classifier for feature selection, resulting in improved predictive performance on high-dimensional datasets. It is a n efficient feature selection technique that initially selects the relevant features using Alpha investing and then refines the result using XGBoost. The experimental result shows the proposed method has greater predictive accuracy and a smaller number of selected features when compared to existing feature selection methods on various datasets.

■ **Title: A Study on Feature Subset Selection for Feature Streams of Dynamic Data**

Prof. I. Priyadarshini, Prof. Dr. S. S. Sane

(Published in International Conference on Innovative Approaches in Multidisciplinary Engineering and Technology, on 8<sup>th</sup> to 10<sup>th</sup> April 2025.)

**Abstract :** As the use of real-time data with high  
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dimension continues to expand across various domains selecting important features from the dataset is a key step to improve the predictive accuracy and time taken to build machine learning model. In datasets where all features are not available at same time and we are unaware of total number of features, and features arrive at different time stamps, for example in real-time patient monitoring in a hospital's intensive care unit (ICU), feature selection becomes even more challenging. In an ICU, patients are continuously monitored using various medical instruments with sensors for monitoring heart rate, blood pressure, oxygen saturation, and electrocardiograms (ECG) etc. These devices stream data at different intervals, often providing updates asynchronously. The goal is to detect early signs of deterioration in a patient's condition and alert medical staff in real time. In such cases, an efficient feature stream selection algorithm is needed to select features from the available set and incorporate new ones as they arrive. This paper provides a study of the various methods available for online feature stream selection along with the methodologies used and then identifies various issues and challenges that are needed to be addressed for feature stream selection. To provide practical insights, several existing approaches are implemented and analysed. Additionally, key challenges and future directions in feature stream selection are identified and discussed.

■ **Title: Mechanical and wear study of AA6061-egg shell powder-Y2O3 metal matrix composite**

Pankaj Beldar, Dr. Snehal Kadbhane

(Organizer: Materials Letters)

**Abstract :** This work examines the mechanical and wears traits of metal matrix composites (MMCs) based on AA6061-T6 reinforced with yttrium oxide (Y2O3) and egg shell powder (ESP). The composites were fabricated with varying reinforcement contents (ESP: 3–6 wt%, Y2O3: 2 wt%), and their effects on tensile strength (TS), hardness (HV), impact strength, elongation, wear rate, and friction coefficient were analyzed. Experimental results indicate a significant improvement in mechanical characteristics when reinforcements are added. While hardness and impact strength increased by 28.83 % and 23.33 %, respectively, tensile strength showed a maximum rise of 22.58 %. A reduction in elongation of up to 25 % was observed, indicating increased brittleness. Wear rate analysis

demonstrated a substantial decrease with the lowest wear rate recorded at 2.978 mm<sup>3</sup>/min reflecting enhanced wear resistance, The friction coefficient also decreased, highlighting the role of ESP and Y2O3 in improving tribological performance. The findings confirm that the addition of ESP and Y2O3 enhances the overall performance of AA6061-T6, making it a promising material for structural and wear-resistant applications.

■ **Title: Exploring the Efficacy of Open-Ended Questions in Theory-Based Subjects Authors**

Pankaj Beldar

(Published in Journal of Engineering Education Transformations on 29/04/2025)

**Abstract :** This paper explores the significance of utilizing open-ended assignments as a valuable assessment tool in theoretical subjects lacking practical or oral assessment components, particularly within elective courses. By examining the role of open-ended assignments in facilitating deeper understanding and critical thinking skills, this study delves into their potential to effectively map program outcomes. Through a comprehensive review of literature and empirical analysis, it investigates how these assignments promote student engagement, foster independent inquiry, and enhance learning outcomes in elective subjects. The findings underscore the importance of integrating open-ended assignments into curriculum design to align with program goals and maximize student achievement. This paper offers insights into the pedagogical benefits of open-ended assignments and provides recommendations for their implementation to enrich educational experiences and promote holistic student development within theoretical disciplines.

■ **Title: Case Study-Enhancing Learning in C Programming Through Gibbs Reflective Cycle.**

Pankaj Beldar

(Published in Journal of Engineering Education Transformations on 29/04/2025)

**Abstract :** This study focuses on the importance of mastering basic coding concepts, particularly in C programming, as a foundational step in learning highlevel languages. It highlights the effectiveness of using the Gibbs reflection cycle as a method to teach programming fundamentals, emphasizing reflective learning to engage students in the teaching process. Rather than

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solely focusing on coding concepts like recursion, functions, and loops, the study utilizes the Gibbs reflection cycle to guide problem-solving activities. Students analyze their thoughts, emotions, experiences, assessments, analyses, conclusions, and action plans, particularly in the context of computing factorials using various techniques such as algorithms, recursive functions, and iterative loops. The analysis of students' reflections yields multiple solutions to the same problem, encouraging collaborative learning and drawing on past experiences to find the most effective solution. Through the administration of multiple-choice question tests before and after applying the Gibbs reflection cycle, the effectiveness of this strategy in enhancing problem-solving skills and conceptual understanding is evaluated. The study underscores the strengths of using the Gibbs reflection cycle to explore different factorial computation methods in C programming, leading to the discovery of eight different solutions for the same problem. It emphasizes the importance of reflective learning in improving student satisfaction, comprehension, and performance. Overall, integrating the Gibbs reflection cycle positively impacts learning experiences, resulting in improved performance, scores, and reduced variability. Research suggests that reflective approaches can effectively enhance problem-solving abilities and broaden conceptual knowledge in C programming.

#### ■ Title: Removal of Microplastic using a dual bed zeolite system via sorption method

Dr. Yennam Rajesh, Shravya Bangera, Saloni Panchal

(Published in International Conference organized by Woxsen University, Hyderabad, Telangana on 08/04/2025)

**Abstract:** As plastics have become ubiquitous, the presence of microplastics in water bodies and drinking water is increasing, posing serious threats to human health, the environment, and ecosystems. This study addresses the urgent issue of microplastic contamination by employing Amino-Functionalized Zeolite (AFZ) and potassium hydroxide (KOH) activated biochar in a dual-bed column system using sorption technology. The first bed contains KOH activated biochar prepared from tea waste (TAC), combined

with Zeolite Clinoptilolite for high adsorption capabilities. The second bed uses Zeolite Beta, known for its excellent ion-exchange properties and high surface area. Water samples from a nearby polymer industry were treated to evaluate the system's effectiveness, simulating real-world conditions. The study focused on the removal efficiency of AFZ, revealing significant changes in microplastic surface morphology post-treatment. The dual mechanisms of chemisorption and physisorption were crucial in achieving comprehensive microplastic removal. The results demonstrated that combining TAC and clinoptilolite zeolite, the dual-bed column setup significantly reduces microplastic concentrations. This research highlights a viable solution to microplastic pollution, contributing to sustainable water treatment technologies and environmental protection.

#### ■ Training and Placements

SNo	Company Name	Department Name	Placed Students
1	Ekhade Agrochemicals Pvt Ltd, Nashik	Chemical Engineering	02
2	Laxmi Organic Industries Ltd., Mahad	Chemical Engineering	01
3	Catapharma Chemicals Pvt. Ltd., Sinnar	Chemical Engineering	03
4.	Mahindra & Mahindra	Electronics & Telecomm.	09
		Mechanical Engineering	09
		Electrical Engineering	05
		Robotics and Automation	04
5.	Stel Mec Pvt. Ltd.	Robotics and Automation	01
6.	Ralsen Tyre	Robotics and Automation	03
7.	Legrand	Mechanical Engineering	01
8.	Ray Engineering	Mechanical Engineering	02
9.	Lucky Deep Cleanroom	Mechanical Engineering	05
10.	ESDS with Package 4.25 LPA	Computer Sci. & Design	02
11.	LTI Mind tree with 4.05 LPA	Information Technology	01
		Computer Sci. & Design	05
		Information Technology	01
12.	TCS With Package 7.08 LPA	Computer Sci. & Design	01
13.	KSB	Electrical Engineering	01
14.	CIE Automotive India Ltd	Electrical Engineering	02
15.	Stelmec	Electrical Engineering	02
16.	NCR Ateos IT	Information Technology	01
17.	Fox Solutions	Information Technology	01

#### ■ Industrial Visits

SNo	Company Name	Department	Class	Date
1	Kadawa Sahkari Sakhar Karkhana, Dindori road, Nashik	Chemical	Second Year	15/04/2025
2	ESDS Solution Pvt.Ltd, Nashik	Information Technology	Third Year	07/04/2025



**Prof. Dr. K. N. Nandurkar**  
PRINCIPAL

