

Avinashi Road, Arasur, Coimbatore.

Department *of* Chemical Engineering



3 Issue

January - March, 2025

Vision and Mission Institute and Department

Vision and Mission Institute

Vision and Mission Department

Vision

To become a premier Institute of academic excellence by imparting technical, intellectual, and professional skills to students for meeting the diverse needs of industry, society, the nation and the world at large.

Vision

To be a center of academic and research excellence in chemical engineering to cater to the diverse needs of industry, society and the global community.

Mission

- Commitment to offer value based education and enhancement of practical skills
- Continuous assessment of teaching and learning processes through scholarly activities
- Enriching research and innovative activities in collaboration with industry and institute of repute
- Ensuring the academic processes to uphold the culture, ethics and social responsibility

Mission

- Provide quality education that integrates
 values and practical skills to ensure
 effective learning outcomes
- Promote research, innovation, and collaboration with industries and institutions of repute
- Inculcate professionalism, ethics,
 lifelong learning and social responsibilities

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Events Department



Events Department



The Department of Chemical Engineering, in association with the student chapters of IIChE, AIChE, ACS, and IEI, successfully organized the International Conference on Sustainable Water (ICSW 2025) on March 21–22, 2025, at KPR Institute of Engineering and Technology, Coimbatore, in hybrid mode.

The inaugural ceremony was graced by Dr. K. Ravichandran, Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, as the Chief Guest, and Mr. Suresh Manoharan, Secretary, Perundurai SIPCOT Textile Processors Association (PSTPA), as the Guest of Honor. Dr. D. Saravanan, Principal, KPRIET, delivered the Presidential Address. The dignitaries also released the conference souvenir in the presence of the gathering, symbolizing the beginning of an intellectually vibrant event.

The conference addressed diverse themes such as circular water economies, digital water technologies, and water security, underscoring the urgent need for interdisciplinary approaches to tackle pressing water challenges. A remarkable 167 papers were received under 11 themes, with over 300 participants presenting their research in both offline and online modes. Oral presentations were conducted across 12 sessions, each evaluated by two juries. The best two papers from every session were recognized with certificates and cash prizes, motivating researchers towards excellence in their work.

Participants attending in person received their certificates immediately after their sessions, while online presenters were sent e-certificates via email. The keynote addresses by eminent speakers, held as parallel sessions at Veena Hall, provided participants with cutting-edge insights into water innovations and global sustainability practices. These sessions encouraged meaningful discussions and opened new avenues for collaborative research.

The event concluded with the Valedictory Function on the second day, where Best Paper Awards were presented and sponsors were duly honored for their support. The conference came to a successful close with a Vote of Thanks and a group photograph, marking a memorable gathering of academia, industry, and research professionals committed to sustainable water solutions.

The collaborative spirit of ICSW 2025 highlighted KPRIET's dedication to advancing the United Nations Sustainable Development Goals (SDGs), particularly those related to clean water and sanitation. By bringing together experts from multiple disciplines and geographies, the conference not only served as a knowledge-sharing platform but also inspired young researchers to contribute towards building a water-secure future.

Session by Mr. Venkata Subramanian

Events Department



Release of Conference Souvenir by Mr. Ravi Ramamsamy, Professor of Practise KPRIET, Mr. Suresh Manoharan, Secretary, Perundurai SIPCOT Textile Processors Association (PSTPA), Dr. D. Saravanan, Principal, KPRIET, Dr. K. Ravichandran, Joint Chief Environmental Engineer Tamilnadu Pollution Control Board and Dr. S. Balasubramanian, PRofessor & Head, ChemE



Token of gratitude to our sponsors Pragna Consultancy

Events Department

Winners of Best Paper Award in ICSW 2025



IEI INAUGURAL

Events Department



The Institution of Engineers India (IEI) Students Chapter for the Department of Chemical Engineering at KPR Institute of Engineering and Technology was officially inaugurated on 22nd February 2025. The event was graced by Dr. C. Madhan Mohan, Honorary Secretary, IEI Coimbatore Local Centre, and Mr. Rohit Govindan, R&D Lead at Terracarb Private Limited, Coimbatore. The inauguration aimed to foster professional development. technical awareness, and collaborative learning among students. The presence of distinguished guests, faculty members, and enthusiastic students made the ceremony a grand success, paving the way for a vibrant and active IEI student community at KPRIET. The chapter expected to host various technical events, workshops, and industry interactions in the coming months to enhance student engagement and growth.

The Institution of Engineers (India), established in 1920 and incorporated by Royal Charter in 1935, is the largest multidisciplinary professional body of engineers in India. With over one million members across 15 engineering disciplines, it plays a crucial role in advancing the engineering profession. IEI conducts the AMIE examination, recognized as equivalent to a B.E./B.Tech. degree by the Government of India. It is acknowledged as a Scientific and Industrial Research Organization (SIRO) and actively promotes research and innovation. The institution also offers professional certifications like Chartered Engineer (India) and Professional Engineer (PE), contributing significantly to engineering excellence and standards.

ACS INAUGURAL

Events Department



The American Chemical Society (ACS) KPRIET Student Chapter was formally inaugurated on 24th February 2025. The event featured esteemed speakers including Mr. Sujan Sekhar (New Business Development Manager, ACS **Publications** India), Ms. Aparna Sharma (Program Manager - Global Strategy, ACS), and Mr. Christy Lucas John (Business Manager, Balsani Infotech Pvt. Tamil Nadu. Kerala & Pondicherry). The event aimed to empower students with global exposure to chemical professional sciences and development opportunities through ACS. The presence of distinguished guests, faculty members, and enthusiastic student participants marked the event as a significant milestone in promoting research, innovation. and international collaboration in Chemical Engineering.

The American Chemical Society (ACS) is one of the world's largest scientific organizations, founded in 1876 and headquartered in Washington, D.C. It supports scientific research and education in the field of chemistry through publications, conferences, and outreach programs. ACS publishes more than 75 peer-reviewed journals, including some of the most cited in the field. The society organizes national and regional meetings to facilitate knowledge exchange and networking among chemists. ACS also promotes public policies that support scientific research, sustainability, and STEM education. With over 150,000 members worldwide, ACS plays a vital role in advancing the chemical sciences globally. ACS offers professional development opportunities through certifications, webinars, and career resources tailored for students and professionals. It also runs numerous outreach initiatives like Chemistry Week and Project SEED, inspiring the next generation of chemists.

Guest Lecture on "Biofertilizers in Sustainable Agriculture"

Events Department



A guest lecture on "Biofertilizers in Sustainable Agriculture" was delivered by Dr. S. Karunakaran on 11th March 2025. The session highlighted the importance of biofertilizers in enhancing soil fertility, promoting eco-friendly farming practices, and reducing dependency on chemical fertilizers. Dr. Karunakaran shared practical insights into the types, applications, and benefits of biofertilizers, emphasizing their role in improving crop yield while safeguarding the environment. The interactive discussion inspired students to explore sustainable solutions in agriculture and understand their relevance in addressing global food security challenges.

Guest Lecture on "Mathematical Tools Used in Computational Fluid Dynamics"



A guest lecture on "Mathematical Tools Used in Computational Fluid Dynamics" was conducted by Dr. Prakash from the Department of Mathematics on 18th March, 2025. The session provided students with valuable insights into the mathematical foundations and techniques essential for solving complex fluid dynamics problems, bridging theory with practical computational applications. The session provided students with valuable insights into the mathematical foundations and techniques.

Interactive Session on "Journey into Chemical Engineering"

Events Department



On 7th February 2025, Mr. Ravi Ramasamy, Professor of Practice, delivered an interactive session to the first-year B.Tech. Chemical Engineering students, providing valuable insights and guidance to enhance their academic and professional journey.

Seminar on "Why not MBA?"





A seminar on "Why Not MBA?" was organized on 10th March 2025. The resource person for the session was Ms. S. Dhivya, Director – MBA, KPR Business School. The seminar aimed to enlighten students on the value of pursuing an MBA as a pathway to enhance leadership skills, strategic thinking, and career growth opportunities across diverse industries. Ms. Dhivya shared insights on the scope of management education, the importance of multidisciplinary learning, and how an MBA complements a technical background.



Dr. Muruganandam Muthiah, a Fullbright Scholar and Principal Scientist currently leading the Planning, Monitoring and Evaluation (PME) and Knowledge Management (KM) Units at the Indian Council of Agricultural Research – Indian Institute of Soil and Water Conservation (ICAR – IISWC), Dehradun visited the department on 10th January 2025. The visit was focused on assessing the technology readiness levels of the AgriBot and Smart Leaf Analyzer, innovative projects developed by Prof. Lt. Dr. A. K. Priya and her students.



Visit to Department by Director of Terracarb

Events Department



Mr. Solomon, Director of Terracarb, visited our campus and department on 14th February, 2025 for a preliminary discussion with the Principal and our department faculty regarding the establishment of a sponsored research facility or Centre of Excellence (CoE). This visit marks an important step toward potential academic-industry collaboration. Future meetings are planned to explore project scopes, funding opportunities, and student involvement in research activities.

Visit to Department by IIT Professor



On 20th February 2025, Dr. Tanmay Basak, Professor, IIT, visited KPRIET as part of the institute's ongoing efforts to strengthen academic collaboration and research engagement. The session focused on exploring potential joint initiatives, fostering faculty interactions, and identifying opportunities for collaborative projects. Faculty members actively participated in this meaningful exchange, contributing to discussions on future academic and research partnerships.





கோவை கேபிஆர் பொறியியல் மற்றும் தொழில்நுட்பக் கல்லூரியின் வேதிப் பொறியியல் துறை, ஃபீஸ்டா '25 என்ற சர்வதேச தொழில்நுட்பக் கலாச்சார விழாவின் ஒரு பகுதியாக வேதிப் பொறியியலின் நிலையான நடைமுறைகள் குறித்து மாநாட்டை நடத்தியது.



KOVAI MEDICAL CENTER AND HOSPITAL

An Industrial Conclave on "Roadmap for Sustainable Chemical Processes" was conducted on 15th March 2025. The resource persons for the conclave were Mrs. Ramya Bharatham, Managing Director & CEO, Thirumalai Chemicals Ltd, Mr. Venkat Raghavan, President, Food Ingredients Business of Thirumalai Chemicals Limited, Mr. S. Stalin, Whole Time Director (RETD.), SPIC, Ex-Project Director, Essar Refinery & Petrochemicals Ltd., and Mr. Ravi Ramsamy, Professor of Practice, CH. The conclave provided a platform for students and faculty to gain insights into emerging sustainable practices and innovations in the chemical industry. It also facilitated meaningful discussions on industry expectations and the role of academia in driving green technology solutions.

FIESTAA 2025 - Day 1 Events

Events Department





















On Day 1 of FIESTAA 2025, held on 14th March 2025. the Department Chemical Engineering hosted a vibrant lineup of events that blended fun with learning. The day with the "Squid began Game", lively and a engaging fun event that saw enthusiastic participation and cheers from students. This was followed by a Poster Presentation, where participants showcased innovative ideas and research on emerging chemical engineering topics. An Expert Talk on Green Chemistry was also organized, offering valuable insights into sustainable practices and eco-friendly technologies. Many students from various colleges across Tamil Nadu actively participated, adding diversity and energy the event. The competitions provided a great platform for students express creativity, technical skills, and

awareness on environmental issues. Winners from each event were awarded cash prizes and certificates, recognizing their talent and efforts. The success of the day reflected excellent coordination by student organizers and faculty members. The events helped foster academic exchange and interinstitutional collaboration. Overall, Day 1 of FIESTAA 2025 set a dynamic tone for the rest of the fest. The overwhelming participation and positive feedback from external students highlighted the growing reputation of FIESTAA as a vibrant academic and cultural platform. The day concluded on a high note with excitement and anticipation for the Day 2 of FIESTAA 2025.

Department

day

Presentation.

Presentation,

knowledge

Roadmap

and academia.

On Day 2 of FIESTAA 2025, held on 15th March 2025, the

of Engineering hosted a series of engaging technical events.

included

Competition, where students

showcased their technical

ideas. A Panel Discussion and Industrial Conclave on the

for

Chemical Processes brought together experts from industry

and

Chemical

Paper

Project

and a Quiz

innovative

Sustainable















were awarded cash prizes and







certificates, recognizing their excellence and creativity. The event also encouraged collaboration, critical thinking, and professional development. Day 2 concluded on a high note, leaving participants inspired and motivated. The success of the day reflected the meticulous planning and enthusiastic participation of both students and faculty coordinators. Overall, Day 2 of FIESTAA 2025 significantly contributed to knowledge exchange, innovation, and academic-industry engagement.



The vibrant spirit of Tamil culture was joyfully celebrated at KPR Institute of Engineering and Technology on 11th February 2025, as the institution marked the traditional harvest festival of Pongal. The event began with a warm welcome and an invocation, setting the tone for a day filled with cultural pride and festivity. A highlight of the celebration was the spirited participation of the Chemical Engineering Department, which secured both the Winner and Runner-up prizes in the interdepartmental competitions. Their creative kolams, energetic performances, and well-coordinated team effort impressed the judges. Traditional games, folk dances, and the preparation of sweet Pongal added authenticity and joy to the celebrations. The event fostered unity and cultural appreciation among students and staff, making it a memorable occasion for all.



Ms. L. Dharani, Assistant Professor I, Department of Chemical Engineering, visited Jai Saradha Matric Higher Secondary School, Tirupur, on 8th January 2025. During her visit, she interacted with the students and staff, presented pens as gifts to the academic toppers, and shared the Department brochure to create awareness about the programs and opportunities offered. She also highlighted the importance of engineering education and encouraged students to explore careers in STEM fields. The school management appreciated the outreach effort and expressed interest in future academic collaborations.



On 19th February, Dr. Umapriya visited Sri Raghavendra Higher Secondary School, Little Flower Matriculation Higher Secondary School, and Model Public School in Sathyamangalam. The Principals of Sri Raghavendra and Little Flower schools expressed interest in arranging career guidance sessions for their students. During the visit, Dr. Umapriya interacted with faculty members and highlighted the scope of engineering education, especially in Chemical Engineering. Pamphlets detailing KPRIET's academic programs and facilities were also distributed. The visits laid the groundwork for future collaboration, aiming to support students in making informed decisions about their higher education and career paths.

ISR Activity

Events Department













Dr. G. Surendran and Er. N. Arunkumar delivered a talk on Career Guidance at Kongu Vellalar Polytechnic College, Perundurai. Around 150 students from the Department of Chemical and Petrochemical Engineering have attended the talk

As part of the Institutional Social Responsibility (ISR) outreach activities, Dr. G. Surendran and Er. N. Arunkumar delivered inspiring career an guidance session at Kongu Vellalar Polytechnic College, 14th Perundurai. on February 2025. The session aimed to enlighten diploma students about future opportunities, career higher education paths, industry expectations. Around 150 students from the Department of Chemical and Petrochemical Engineering enthusiastically participated and benefited from the session. This initiative reflects KPRIET's ongoing commitment to empowering young minds beyond its campus through knowledge-sharing and community engagement.





ISR Activity

Events Department



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ABC Matric.











Gopal Naidu Hr. Sec.



School Building, Peels Coimbatore, Tamil Nadu 641 Lat 11.027452* Long 76.9945 06/02/2025 12:33 PM GMT





As part of the ChemE **ISR** (Institutional Social Responsibility) outreach initiative, Lt. Dr. A. K. Priva and Dr. visited Nakkeeran several schools across Coimbatore on 6th February 2025. The goal was motivate high school students to explore careers in engineering, particularly in chemical sciences and technology. They interacted with students and faculty at institutions like St. Michael's, ABC Matriculation, PSGK (CoEd and Girls), Gopal Naidu, and **PSG** Sarvajana Schools. These visits helped raise technical awareness encouraged and students to pursue opportunities STEM fields through meaningful guidance and

engagement.

ISR Activity

Events Department





Dr Laxmi Deepak Bhatlu and Er N Arun Kumar visited three schools in Coimbatore and had interactions with the students and principals today. The schools visited are: 1, Presentation Convent Matric. Hr. Sec. School 2. Sri Vishveswara Vidyalaya Matric. Hr. School and 3. RKV Senior Secondary School. It was a valuable experience engaging with the students and understanding their perspectives.

Dr. M. Laxmi Deepak and Er. N. Arunkumar visited three schools in Coimbatore on 15th February 2025 to inspire students and raise awareness about engineering education and career opportunities. The visited schools included Presentation Convent, Sri Vishveswara Vidyalaya, and RKV Senior Secondary School. They interacted with students and faculty, highlighting the mportance of personal development and higher education. The provided outreach valuable insights and motivated students to explore **STEM** pathways with confidence. The school management appreciated the initiative and expressed willingness collaborate on future guidance and awareness programs.



As part of the department's industryacademia collaboration efforts. Dr. S. Karunakaran and Dr. S. Pranav visited Conway Water Purifier Pvt. Ltd.. Coimbatore. They held a productive discussion with Mr. Ravi Chandran. Managing Director, focusing on current trends and challenges in water purification technologies. The interaction explored opportunities for academic-industry research and highlighted sustainable practices. innovations in filtration, and career prospects for engineering graduates in the water treatment sector.

Almech Enterprises, Coimbatore



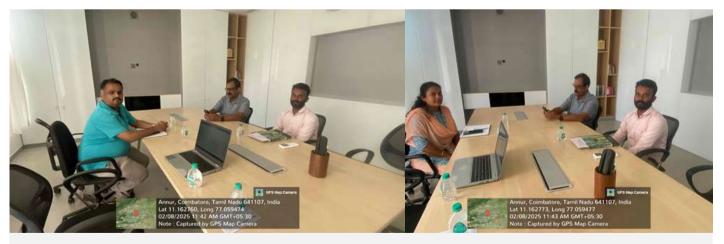
Mr. D. Naveen, Senior Lab Technician, and Mr. A. Pasupathi, Lab Technician, visited Almech Enterprises, Coimbatore, on 5th January 2025 and discussed new equipment for the department laboratories. The visit aimed to explore upgrades that would enhance hands-on learning and experimental capabilities students. They reviewed specifications of various instruments and evaluated their suitability for ongoing lab courses and research activities.



The newly introduced Open Elective courses, in collaboration with ABB, officially commenced on 26th July 2025, at ABB Global Industries, Bengaluru. As part of this initiative, a five-day intensive training program on Industrial Process Automation and Artificial Intelligence was launched. A team of eight faculty members from the CSE, Chemical, Electrical, Electronics and Communication, and Mechatronics departments participated in the program. Mr. N. Arunkumar, Assistant Professor II was apart of this team.

The training was designed to enhance academic-industry integration and equip faculty with cuttingedge knowledge and skills in smart automation and AI technologies. This marks a significant step toward aligning curriculum with evolving industry needs and preparing students for future-ready careers.

Alumni Interaction with Faculty and Juniors



Dr. S. Pranav and Ms. L. Dharani visited Wafe Auxiliary Chemicals Pvt. Ltd. on 8th February 2025 to discuss a consultancy project on the design of a rotary dryer for drying starch liquid. The meeting provided an opportunity to exchange technical insights and explore potential solutions tailored to the company's process requirements.



On 24th January 2024, faculty from the Chemical and Civil Engineering departments at KPRIET visited Wood India and L&T Construction's Water and Effluent Treatment Centre (WETC) in Chennai. At Wood India, they discussed engineering operations and sustainability practices with Mr. K. Kanna, exploring collaboration opportunities. At WETC, they interacted with alumni and Mr. Saravana Kumar on sustainable water treatment technologies and student project prospects. The visit reinforced KPRIET's focus on industry collaboration and enhancing students' practical exposure.



Dr. S. Balasubramanian, Dr. M. Laxmi Deepak Bhatlu, and Dr. S. Pranav visited East Coast Organics in Chennai. The visit offered valuable insights into organic production practices, sustainable technologies, and eco-friendly initiatives undertaken by the organization. The team also had the opportunity to understand the processes behind organic waste management, composting, and sustainable agriculture solutions. This engagement is expected to support the department's ongoing efforts to integrate sustainability-focused learning and research opportunities for students. Discussions were also held on potential student internships and collaborative projects in the areas of green technology and circular economy.

The visit strengthened the institution's vision of aligning engineering education with environmentally responsible practices.

Peps Mattresses and United Cooling Systems, Coimbatore

Events Department



On 15th February Dr. G. Surendran, Dr. R. Umapriya and Mr. A. Pasupathi, along with II B.Tech. Chemical Engineering students, visited Peps Mattresses Industry and United Cooling Systems Industry as part of an industrial exposure initiative. At Peps, the team gave a brief explanation of their manufacturing processes, followed by a thoughtful gesture—gifting a pillow to each participant. Later, at United Cooling Systems, students gained valuable insights into the design and fabrication of equipment such as furnaces, shell and tube heat exchangers, and air-based fin-type heat exchangers. The visits provided students with a practical understanding of industrial operations and reinforced classroom concepts with real-world applications. Faculty members facilitated discussions linking theory to practice, enhancing student engagement and curiosity. The industries appreciated the interest shown by the students and expressed openness to future collaborations for internships and project work.

Visit to ICAR - SBI, Coimbatore

Events Department















As part of the Honours course in Enzyme Engineering, second year students visited the ICAR-Sugarcane Breeding Institute (SBI) along with Lt. Dr AK Priya and Er L Dharani. The visit provided hands-on exposure to various advanced equipment and techniques related to enzyme applications in the sugar industry. Students observed bioreactors, spectrophotometers, and chromatography systems used in enzyme characterization. Techniques such as enzyme immobilization and kinetic studies were demonstrated. Experts explained the role of enzymes in sugarcane processing and biomass conversion. The students also explored microbial enzyme production and its industrial applications.



EXPERIENTIAL







Visit to IISC and BMS College of Engineering, Bangalore

Events Department

Open 2025 Day



Dr. S. Balasubramanian, Professor & Head of the Department of Chemical Engineering, visited BMS College of Engineering on 1st March 2025, where he interacted with faculty members and discussed possible academic collaborations and student exchange opportunities. This was followed by a visit to the Indian Institute of Science (IISc), Bangalore.

At IISc, he visited the Materials Research Centre, gaining insights into advanced research facilities and ongoing projects in the field of materials science. The visit provided a platform to explore emerging trends in nanomaterials, membrane technology, and sustainable materials. He also engaged in discussions with senior researchers on interdisciplinary collaborations and research partnerships.

The exposure to cutting-edge equipment and innovative research themes at IISc served as valuable input for strengthening the research ecosystem and fostering innovation back at KPRIET.

Visit to IISC and BMS College of Engineering, Bangalore

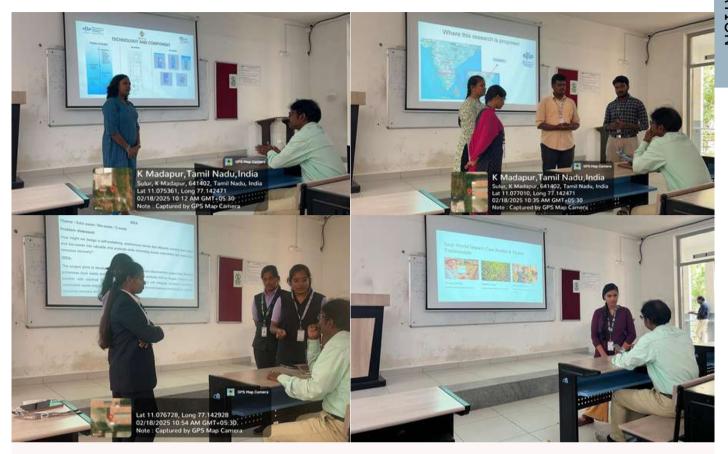
Events Department



As part of a meaningful community service initiative, Ms. L. Dharani, Assistant Professor I, distributed 100 sets of pencils, erasers, scales, and sharpeners to students of a Government School on 10th January 2025. This thoughtful gesture aimed to support and encourage young learners by providing them with essential stationery items for their academic needs.

The students expressed their happiness and gratitude, and the school staff appreciated the effort taken to uplift and motivate children from underprivileged backgrounds. Ms. Dharani also interacted with the students, emphasizing the importance of education and how small steps can lead to big achievements. This outreach effort reflects the institution's commitment to social responsibility and creating a positive impact in the community. The initiative not only fulfilled a basic academic need but also instilled a sense of care, support, and encouragement among the students.





Dr. S. Karunakaran, Associate Professor, conducted the first internal review of Naan Mudhalvan – Niral Thiruvizha 2.0 on 18th February 2025, marking a significant step in assessing the progress and impact of the initiative. The review focused on key outcomes, participant engagement, skill development metrics, and areas for improvement, with stakeholders sharing valuable insights to enhance future planning and execution.

Faculty coordinators, student representatives, and implementation teams participated actively in the session, presenting feedback and suggestions based on their experiences during the event. The review also included discussions on the effectiveness of training modules, the relevance of content delivered, and strategies to boost student participation and involvement.

This collaborative evaluation not only highlighted the strengths of the program—such as effective coordination, timely resource delivery, and enthusiastic student response—but also identified opportunities for introducing more hands-on learning activities, industry interaction, and advanced skill-building sessions in upcoming editions.

By fostering a culture of continuous improvement, the internal review laid the foundation for more innovative, inclusive, and impactful iterations of the Naan Mudhalvan – Niral Thiruvizha initiative in the future.

Innovsense 2025



Students showcased their innovative project ideas at Innovsense 2025, demonstrating exceptional creativity, critical thinking, and problem-solving skills. The event provided a dynamic platform for budding engineers to present practical solutions addressing real-world challenges across various domains, including sustainability, automation, healthcare, and digital technologies.

Dr. S. Karunakaran, Associate Professor, served as the evaluator for the session, thoroughly reviewing each team's presentation based on innovation, feasibility, societal impact, and technical depth. His constructive feedback helped students refine their concepts and strengthen their problem statements. After careful evaluation, Dr. Karunakaran shortlisted the most promising projects for advancement to the next round, where the selected teams will receive mentorship and guidance to further develop their prototypes and implementation strategies.

Innovsense 2025 not only encouraged student-led innovation but also fostered a spirit of collaboration and entrepreneurship. The event successfully ignited curiosity and inspired students to think beyond textbooks, aiming to make a meaningful impact through technology-driven solutions.



Ms. Harsha Vardhini G, Tech Lead, and Sreya M, Execom member of the IEEE KPRIET Women in Engineering Affinity Group, have been selected as finalists for the Startup Challenge at IEEE APSCON 2025 - The IEEE Applied Sensing Conference, organized by the IEEE Sensors Council at IIT Hyderabad from 20-22nd January 2025. This prestigious selection is a testament to their innovative mindset, leadership, and dedication to advancing technology through entrepreneurial initiatives. The department congratulates them and wishes them continued success in the upcoming challenge.

Student Conclave for Climate Action

IEEE Startup Challenge



Ms. G. Harsha Vardhini of III B.Tech. Chemical Engineering and Ms. R. Ashlin Roshma R of III B.E. Civil Engineering won 1st prize along with a seed funding of ₹25,000 under the Climate Smart Agriculture theme at the Student Conclave for Climate Action, organized by Startup TN and Kumaraguru College of Technology. The team was mentored by Lt. Dr. A.K. Priya, whose guidance played a key role in their success. This achievement highlights the students' innovative approach towards sustainable agricultural solutions and their commitment to addressing climate change challenges.









KER IIISTITUTE OF Engineering and Technology

கள் சந்திரகவுரி(இளநிலை கட்டிட பொறியியல்), கட்டிட கோகிலா

தலைவர் கே.பி.ராமசாமி வாழ்த்து gagus≜Bab ND

The 12th Graduation Day of KPR Institute of Engineering and Technology was celebrated with pride and enthusiasm on 1st February 2025. On this memorable occasion, degrees were conferred upon 1,010 graduates, marking a significant milestone in their academic and professional journeys.

The event commenced with a formal academic procession, followed by an inspiring welcome address and insightful speeches from distinguished dignitaries. The Chief Guest shared valuable words of wisdom, encouraging graduates to embrace innovation, integrity, and lifelong learning in their future endeavours.

The Department of Chemical Engineering is proud to share that Ms. M. Gokila from the Batch of 2020-2024 emerged as the Institute Topper, bringing great honour to the department through her consistent academic excellence and unwavering dedication.

The atmosphere was filled with a sense of pride and joy as proud parents, faculty members, alumni, and well-wishers came together to celebrate the accomplishments of the graduating class. Emotional moments were witnessed as students received their degrees, symbolizing the culmination of years of hard work, perseverance, and personal growth.

The ceremony stood as a testament to the institution's unwavering commitment to academic excellence, holistic development, and industry-readiness, reaffirming its mission to shape responsible and capable professionals for a better tomorrow.



Our student project titled "Smart Leaf Analyser" achieved outstanding recognition at Srishti 2025, a prestigious national-level project expo held at Saintgits College, Kerala, on 24–25th February , 2025. The project won 1st Prize in Chemical Engineering with a cash award of ₹12,000, and also received the Best Creative Stall Award with an additional ₹5,000 prize. This remarkable achievement is credited to the dedication and innovation of our talented student team: Archana M (IV Year CH), Haresh M (IV Year CH), Harsha Vardhini G (III Year CH), and Ashlin Roshma R (III Year CE). Their success highlights the interdisciplinary collaboration and creativity nurtured within our institution.

Kongu Engieering College, Perundurai

Student Name	Competition Name	Prize Won	Event and College Name
Ms. V. S. Prashitha	Poster Presentation	I Prize	Syllogic 2K25, Kongu Engineering College
Ms. V. S. Prashitha	Technical Quiz	II Prize	Syllogic 2K25, Kongu Engineering College
Ms. M. Thilagasri	Paper Presentation	l Prize	Syllogic 2K25, Kongu Engineering College
Ms. K. V. Kayal	Technical Quiz	l Prize	Syllogic 2K25, Kongu Engineering College
Ms. R. K. Rishika	Technical Quiz	I Prize	Syllogic 2K25, Kongu Engineering College
Mr. R. Yaswanthraj	Technical Quiz	l Prize	Syllogic 2K25, Kongu Engineering College

14th Centies Tournament at SNS College of Technology

Sports



Ms. Phersia and Ms. Jeevika of II B.Tech. Chemical Engineering, along with Ms. Haritha from I B.Tech. Chemical Engineering, were part of the team that secured the Winner's Position in the 14th Centies Tournament held at SNS College Technology. Their outstanding performance and team spirit led them to claim First Place in this prestigious intercollegiate event. Congratulations to team for their remarkable achievement and for bringing laurels to the department.

Gold medal in 5000 m



The women's Ball Badminton team from KPRIET emerged as champions in the 6th COVAI TIES Championship 2025, held at Coimbatore Institute of Technology on 11-12 March 2025. Ms. Kanchana Devi (standing first in the first row) from II B.Tech. Chemical Engineering was an integral the winning team, part of contributing to this remarkable achievement. Her consistent performance and team coordination played a key role in securing the title. This victory stands as a testament to the dedication, hard work, and sporting spirit of the team. The achievement has brought pride to the institution and fellow inspired students to actively participate in sports.



Mr. Rangwani Lee from II B.Tech. Chemical Engineering won the Gold Medal in the 5000 m event at Coimbatore Institute of Technology on 15th November 2024. He showcased exceptional endurance and determination, securing Gold in both the 5000 m and 10,000 m running events. His remarkable achievement reflects his dedication, discipline, and sporting excellence, bringing pride to the department and the institution.

Faculty



The IEI Coimbatore Local Centre has been honored with the Best Local Centre Award for the year 2023 - 2024, in recognition of its outstanding contributions to the engineering community. Special congratulations to Dr. A.K. Priya, who received appreciation for her valuable contributions as a committee member. Her dedication. active involvement, and commitment to professional development played a vital role in this achievement. This recognition highlights the Centre's continued excellence in promoting engineering knowledge and professional growth.



The Institution of Engineers (India), Coimbatore Local Centre, in association with our department, organized an IEI Technical Webinar on "Circular Economy: Engineering Solutions for Waste Reduction and Resource Recovery" on 26th February 2025. This event was held under the aegis of the Chemical Engineering Division Board and featured expert panelists including Dr. J. S. Sudarsan from the National Institute of Technology, Tiruchirappalli, Dr. S. T. Ramesh from the Institute of Road Transport, Taramani, Chennai, and Dr. K. Kannan from **KPR** Institute Engineering and Technology. Coimbatore. The session was moderated by Lt. Dr. A. K. Priya from KPR Institute of

Engineering and Technology. The event aimed to explore innovative engineering approaches for minimizing waste and promoting sustainable resource utilization. Participants also had the opportunity to earn a Certificate of Participation and CPD credit hours through IEI.

Patent

Faculty

(22) Date of filing of Application :23/02/2025 (43) Publication Date: 97/03/2025 (54) Title of the invention: COMPOSITIONS AND METHODS FOR INHIBITING AMYLOID FIBRIL AGGREGATION :A61P0025280000, A61P0025160000, A61P0025000000, C07K0016180000, G01N0033680000 classification. (86) International :NA Filing Date (87) International :NA (87) Insernational : NA
Publication No
(61) Patent of Addition
to Application Number : NA
Filling Date : NA
Filling Date : NA
Filling Date

(57) Abstract: [033] The present invention relates to compositions and methods for inhibiting the formation, propagation, and accumulation of amyfold fibrih associated with neurodegenerative and systemic amyfold disorders. The invention provides novel small molecule inhibitors, peptide-based inhibitors, antibody-based therapeutes, and nanoparticle formulations designed to prevent amyfold fibril aggregation at various stages of the misfolding process. These compositions function by stabilizing native protein conformations, disrupting oligomer formations, promoting fibril disaggregation, and enhancing cellular clearance mechanisms. The disclosed methods include therapeutic applications for treating discusses such as Alzheimer's discusse, Parkinson's discuss, and systemic amyfoldiosis, as well as diagnostic techniques for detecting anytoid deposits. Additionally, the invention includes screening assays for identifying new amyfold inhibitors. By offering innovative strategies for targeting amyfold aggregation, this invention aims to provide discussementally in the provident of the providence of th

No. of Pages: 20 No. of Claims: 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

Dr. R. Umapriya has successfully filed and published a patent titled "Compositions and Methods for Inhibiting Amyloid Fibril Aggregation." This innovation potential significance in the prevention amyloid-related and treatment of disorders, showcasing her contribution to advancing research in biomedical applications. work The patented demonstrates a novel approach that could aid in developing therapeutic strategies for conditions such as Alzheimer's disease and other protein misfolding disorders. achievement reflects This her commitment to impactful research. intellectual property development, and the translation of scientific ideas into realworld solutions, further enhancing the institution's research profile.

The Patent Office Journal No. 10/2025 Dated 07/03/2025

23432

(21) Application No 202541015737 A

Journal and Book Chapter

Events Department

Journal Publications

- 1. Balasubramanian, S., Kapoor, A., Nakkeran, E., Murugasen, K., NaveenKumar, R., Harini, S. B., & Bhatlu, M. L. D. (2025). Review on process intensification for adsorptive wastewater treatment: focus on bed geometries. Adsorption, 31(4), 64.
- 2. Bhatlu M, L. D., Ray, P., Biswal, P., Sahoo, B., & Nayak, C. (2025). Eco-Friendly Ammonia Adsorption from Aqueous Solutions Using Activated Madhuca indica Leaves Charcoal and Optimization of Parameters by RSM-BBD: A Sustainable Zero-Waste Approach. Langmuir, 41(13), 8480-8496.
- 3. Nayak, C., Loganathan, D., Saravanan, K., & Bhatlu M, L. D. (2025). Valorisation of PKM-2 Moringa oleifera leaves waste for adsorption of Titan Yellow dye from aqueous solution, modelling with RSM and ANN. Biomass Conversion and Biorefinery, 1-21.



Department *of* Chemical Engineering



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