



Learn Beyond

KPR Institute of
Engineering and
Technology
(Autonomous, NAAC "A")

Avinashi Road, Arasur, Coimbatore.



Department of Chemical Engineering

AGGLOMERATION

NEWSLETTER

Academic year 2023-2024

Odd Semester



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Vision and Mission Institute and Department

Vision and Mission Institute

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 and Mission Department

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

Message from Head of the Department

Dr. S. Balasubramanian
Prof. & Head, ChemE



Greetings from the Department of Chemical Engineering!

The academic year 2023-24, odd semester has been a remarkable journey of growth, innovation, and excellence. With a student strength of 267, our department continues to thrive as a hub of academic and research pursuits. Our faculty and students have demonstrated an enduring commitment to research, filing 10 patents and publishing 21 papers, with the highest impact factor reaching an impressive 9.8.

Our department actively organized and participated in a plethora of events, including national seminars such as the All India One-Day Seminar on "Microplastics Accumulation Prediction Using ML" and the seminar on "Innovative Trends and Aspects of Nanotechnology," both sponsored by IEI. Webinars like "Know Your Industry" and "Overview of Water Treatment and the Role of Chemical Engineers" provided insightful knowledge to our students. We were honored to welcome our visiting professor Yoshimitsu Uemura from Japan, who presented technical talks and guest lectures on advanced topics, including Optimization Techniques in Research and Outcome-Based Education. Additionally, he handled a subject on Bioenergy for our final year students. Furthermore, he offered support to our faculty members in research and teaching-learning.

A major highlight was enthusiastic participation of our students' in industry interactions and visits to reputed organizations, including ABB India Limited, ITC Limited, Seshasayee Paper and Boards, and V-Guard Industries. The AIChE Student Chapter successfully organized an Idea Pitch Competition, drawing participation from over 40 teams across multiple institutions. Our students showcased their talents through project presentations, conference participation, and competitions such as the State Level Hackathon and the Yukthi Innovation Challenge. We take immense pride in one of our students being recognized as the Student Ambassador for Academic Reforms under NEP Sarathy by UGC.

On the sports front, our students excelled, emerging as champions in the Anna University Zone IX Football Tournament and securing gold in Aeromodelling at the Inter Air Squadron Competition held at the Air Force Station, Tambaram. Faculty achievements were equally commendable, receiving StartupTN support and being honored at The IE(I) Coimbatore Local Centre. Our faculty members also made significant contributions through journal publications, book chapters, and participation in Faculty Development Programs.

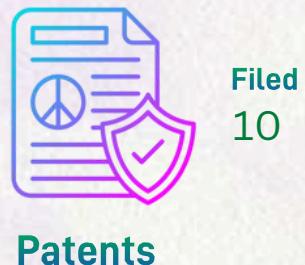
We take this opportunity to express our sincere gratitude to our esteemed Management for their continuous support, guidance, and encouragement in all our endeavors. Their vision and commitment to excellence continue to inspire us to reach new heights.

As we reflect on accomplishments of this year, on behalf of Department of Chemical Engineering, KPRIET, I extend my heartfelt appreciation to all our students, faculty members, staffs and stakeholders for their relentless dedication and enthusiasm. Let us continue this journey of excellence and innovation, striving for greater heights in the upcoming semesters as well.

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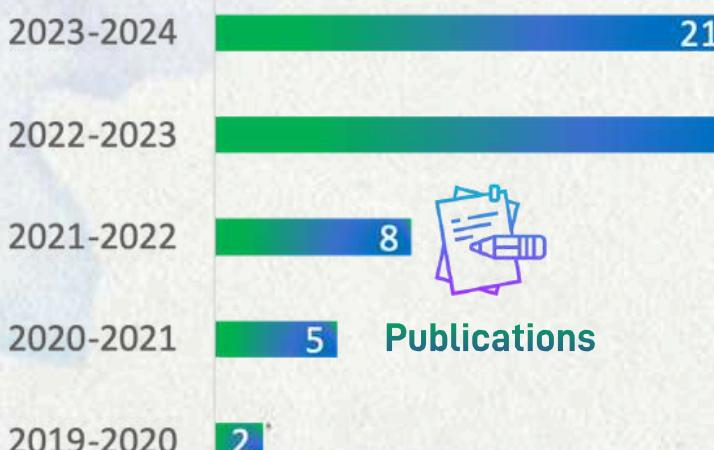
About Department



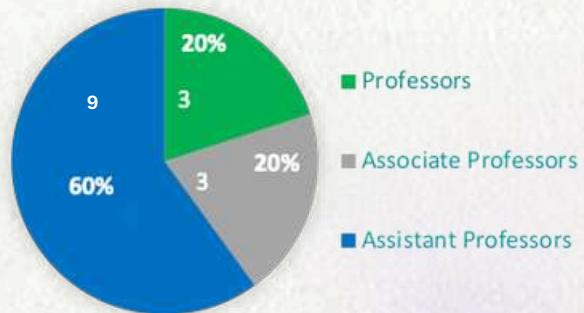
Faculty Research Area

1. Advanced Process Control
2. Biofertilizers
3. Bioremediation
4. Ceramic Membranes
5. Computational Fluid Dynamics
6. Crude Oil Fouling
7. Industrial IOT
8. Microfluidics (Lab-on-a-Chip)
9. Nanomaterial

**B. Tech. Chemical Engineering
Started in the Year 2018**



Faculty Cadre Distribution



Faculty Research Area

9. Nanomaterial
10. Perovskite solar cells
11. Process Modeling and Simulation
12. System Identification
13. Water and Wastewater Treatment



The Department of Chemical Engineering, KPRIET in association with The Institution of Engineers (India), Coimbatore Local Chapter organized a one day seminar on Microplastics Accumulation Prediction Using ML: Environmental and Public Health Impacts. “The registration commenced at 9.00 am and went on till 09:45 am at Chemical Engineering Department, KPRIET. The Inaugural function started at 10:00 am and Dr. S. Shanmugam, Chairman, IE(I) presented the welcome address and briefed upon the activities of IE(I) in promoting Science and Technology. Dr. E. Nakkeeran, Associate Professor, Department of Chemical Engineering, KPRIET presented an overview of the one day Seminar. Dr. K. Kadirvelu, Senior Scientist, DRDO Ministry of Defence & Director, DRDO Industry Academia Center of Excellence (DIA COE), BU Campus Coimbatore delivered the chief guest address elaborating the significance of microplastic and its existence in the environment. Er. L. Dharani, Assistant Professor, Department of Chemical Engineering, KPRIET briefed about chief guest and Lt. Dr. A. K. Priya, Professor, proposed the vote of thanks.

The first technical session started at 10:30 am was on “Emerging Environmental Contaminants: Microplastics an Overview” by Dr. K. Kadirvelu, Senior Scientist, DRDO Ministry of Defence & Director, DRDO Industry Academia Center of Excellence (DIA COE), BU Campus. The speaker shared his views on microplastics, various sources and impacts on India. He also discussed how to handle and treat the plastic waste and control the pollution level in the environment.

The second keynote session commenced at 11:30 pm delivered by Dr. K. R. Priyadarshini, Pathologist, PSG Institute of Medical Sciences & Research, Coimbatore shared her expertise on “Effects of Microplastics in Human Health”. She briefed about the various health impact due to microplastics. She also discussed food habits and related health issues due to microplastic accumulation in food.

The third keynote session commenced at 02:00 pm delivered by Mr. Karthiganesh Durai, Chief Quantum Architect, BosonQ Psi (BQP), Bangalore shared his views on “Software Ecosystem”. He presented the recent advancements in Machine learning and usage of ML in microplastic detection. He also discussed the xenobiotic components handling using ML and monitoring the disposal ways into the environment using advanced technologies.

The fourth keynote session commenced at 03:15 pm delivered by Dr. S. Karunakaran, Associate Professor/ChemE, KPRIET shared his views on “Environmental Consequences of Microplastic Pollution”. He discussed the various consequences of microplastic pollution in the environment. He briefed about the technology for detecting and treating microplastics.

The valedictory session began by 04:15 pm and the certificates were presented to the participants by Dr. S. Balasubramanian, Professor & Head, Department of Chemical Engineering, KPR Institute of Engineering and Technology, Coimbatore. Feedback from the participants was obtained. The Seminar came to an end by 04.30pm.

All India Seminar on “Microplastics Accumulation Prediction Using ML: Environmental and Public Health Impacts”

Events Department



Technical session – 2 by
Dr. K. R. Priyadarshini, Pathologist,
PSG Institute of Medical Sciences &
Research, Coimbatore



All India Seminar on “Microplastics Accumulation Prediction Using ML: Environmental and Public Health Impacts”

Events Department



Technical session – 4 by
Dr. S. Karunakaran,
Associate Professor/ChemE,
KPRIET

Technical session – 3 by
Mr. Karthiganesh Durai, Chief Quantum Architect, BosonQ Psi (BQP) Bangalore



Vote of Thanks and Valedictory

The Institution of Engineers (India), Coimbatore Local Centre organized an All India Seminar on “Innovative Trends and Aspects of Nanotechnology: Fueling the Chemical Industry's Future” in association with Department of Chemical Engineering, KPR Institute of Engineering and Technology (KPRIET), Coimbatore during September 22 - 23, 2023. The details of the sessions are presented in the next page.

All India Seminar 22 September 2023

All India Seminar on “Innovative Trends and Aspects of Nanotechnology: Fueling the Chemical Industry's Future”

Events Department

Day-1 (21/09/2023)

Inaugural session

The Inaugural function started with welcome and presidential address by Dr. S. Shanmugam, Chairman, IE(I), Coimbatore Local Centre in which he briefed upon the activities and the importance of the seminar. Dr. S. Balasubramanian, Professor and Head, Department of Chemical Engineering, KPRIET presented an overview of the seminar. Dr. Nitu Kumari, Assistant Professor (Sr. G), Department of Chemical Engineering, KPRIET gave brief introduction about the chief guest. Dr. Yoshimitsu Uemura, visiting professor of Chemical Engineering Department, KPRIET delivered the chief guest address elaborating the importance of Nanotechnology in Chemical Industries. The souvenir was released by the dignitaries. Lt. Dr. A. K. Priya, Professor, Department of Chemical Engineering, KPRIET proposed the vote of thanks.

Technical Session - I

The first technical session started on “Supported metal catalyst: metallic nanoparticles” by Dr. Yoshimitsu Uemura, Visiting Professor, Department of Chemical Engineering, KPRIET. The importance of supported metal catalysts featuring metallic nanoparticles was explained during the talk. The significance of each technique in supported metal catalysts quality and detecting defects was emphasized.

Technical Session - II

The second keynote session was delivered by Dr. R. Selvakumar, Professor and Head, Department of Nanotechnology & Biotechnology, PSG Institute of Advanced Studies (PSGIAS), Coimbatore. He has shared his expertise on ‘Antibiotic mitigation using nano bio approach. The Resource person highlighted the benefits of Nano bio approaches and told that it can improve the delivery of antibiotics to target pathogens, ensuring more effective treatment. Nanoparticles can encapsulate or carry antibiotics directly to infection sites, increasing their concentration where needed.

Technical Session - III

The Third keynote session was delivered by Dr. Udaya Bhaskar Reddy Ragula, Associate Professor, Department of Chemical Engineering and Material Sciences, Amrita Vishwa Vidyapeetham, Coimbatore. The topic " Nanocatalysis for Hydrogen Production" was presented by the resource person. The critical importance of a nano particles was discussed as it provides a higher surface area-to-volume ratio, allowing for increased catalytic activity. This means that nanocatalysts can facilitate hydrogen production reactions more efficiently than bulk catalysts, potentially lowering the energy input required. were discussed.

Technical Session - IV

The fourth keynote session was delivered by Dr. R Ranjithkumar, Co-Founder & Chief Scientific Officer, Viyen Biotech LLP, Coimbatore, about the topic “Potential applications of green chemistry in nanotechnology and opportunities”. The speaker highlighted the benefits of green chemistry principles applied to nanotechnology offer several significant benefits, promoting more sustainable and environmentally friendly approaches to nanomaterial synthesis and applications: Reduced Environmental Impact: Green chemistry principles prioritize the design and synthesis of nanomaterials with minimal environmental harm. This approach minimizes the release of hazardous byproducts, toxic substances, and waste materials into the environment, mitigating potential harm to ecosystems and human health.

Day-2 (22/09/2023)

Technical Session - V

The technical session V was delivered by Dr. G. Surendran, Associate professor, Department of Chemical Engineering, KPRIET. The Speaker discussed about Dispersion modelling. It is often used in environmental science and engineering, is a computational tool for predicting the distribution and concentration of pollutants or particles in the air, water, or soil. It considers factors such as emission sources, meteorological conditions and terrain to simulate how pollutants disperse and spread over time. By providing insights into the spatial and temporal behaviour of pollutants, dispersion modelling helps assess air quality, plan for emergency responses, design effective pollution control measures and make informed decisions for environmental protection and public health.

Technical Session - VI

The technical session V was delivered by Dr. M. Laxmi Deepak Bhatlu, Assistant Professor (Sl.G), Department of Chemical Engineering, KPRIET. The presentation focussed on addressing Nanotechnology's Role in Clean Water: Innovations in Water Treatment as:

Nanotechnology plays a pivotal role in advancing clean water technologies by offering innovative solutions for water treatment. Nano-enabled water treatment methods utilize nanomaterials like nanoparticles and nanocomposites to efficiently remove contaminants from water sources. These nanomaterials possess high surface areas and reactivity, making them effective in adsorbing, degrading, or filtering pollutants such as heavy metals, organic compounds and pathogens. Nano-enhanced membranes and filtration systems improve water purification processes by enhancing efficiency and reducing energy consumption. Additionally, nanotechnology aids in the development of portable, affordable, and sustainable water treatment systems, addressing global challenges related to clean and safe drinking water access.

Technical Session - VII

The technical session VII was delivered by Ms. L Dharani, Assistant Professor, Department of Chemical Engineering, KPRIET. The presentation focussed on addressing Nanomaterials: Building Blocks of the Future. Nanomaterials are the foundation of the future, offering unprecedented potential in various fields. These materials, engineered at the nanoscale, exhibit unique properties and versatility. They enable breakthroughs in electronics, medicine, energy storage, and more. Applications range from ultra-efficient solar cells and drug delivery systems to lightweight, high-strength materials. Nanomaterials also hold promise for addressing environmental challenges like pollution cleanup. As we harness their capabilities, nanomaterials are poised to revolutionize technology, improve healthcare, and drive sustainable innovations, shaping the future in remarkable ways.

Technical Session - VIII

The Technical Session VIII was delivered by Dr. Nitu Kumari, Assistant Professor (Sr.G), Department of Chemical Engineering, KPRIET. The session showcased Dr. Kumari's expertise in solar cell technology, with a focus on the use of nanomaterials to enhance their efficiency. She provided an in-depth explanation of the optimization techniques for each layer of the solar cell, emphasizing their critical role in improving performance and real-life applications. Dr. Kumari also discussed the challenges in scaling up nanotechnology for industrial use and how advancements in materials science can address these hurdles. She highlighted recent breakthroughs in nanostructured materials and their impact on the energy conversion efficiency of solar cells. The session underscored the importance of interdisciplinary research in achieving sustainable energy solutions. Participants were inspired by the practical examples and future prospects outlined, making the session highly engaging and informative.

The program ended with valedictory session.

Events Department

All India Seminar on “Innovative Trends and Aspects of Nanotechnology: Fueling the Chemical Industry's Future”



Photo of Inaugural Session with banner of IEI



Souvenir released by the dignitaries



Technical session - 1 by

Dr. Yoshimitsu Uemura, Visiting Professor,
Department of Chemical Engineering,
KPRIET



Technical session – 2 by

Dr. R. Selvakumar, Professor and Head,
Department of Nanotechnology &
Biotechnology, PSG Institute of Advanced
Studies (PSGIAS), Coimbatore

All India Seminar on “Innovative Trends and Aspects of Nanotechnology: Fueling the Chemical Industry's Future”

Events
Department



Technical session - 3 by

Dr. Udaya Bhaskar Reddy Ragula,
Associate Professor, Department of
Chemical Engineering and Material
Sciences, Amrita Vishwa Vidyapeetham,
Coimbatore

Technical session - 4 by

Dr. R. Ranjithkumar, Co-Founder &
Chief Scientific Officer, Viyen Biotech
LLP, Coimbatore



Technical sessions - 5 by

Dr. G. Surendran, Associate Professor,
Department of Chemical Engineering,
KPRIET

All India Seminar on “Innovative Trends and Aspects of Nanotechnology: Fueling the Chemical Industry's Future”

Events Department



Technical sessions - 7 by

Ms. L. Dharani, Assistant Professor,
Department of Chemical Engineering,
KPRIET

Technical sessions – 6 by

Dr. M. Laxmi Deepak Bhatlu, Assistant
Professor (Sl.G), Department of Chemical
Engineering, KPRIET



Technical sessions - 8 by

Dr. Nitu Kumari, Assistant Professor (Sr.G),
Department of Chemical Engineering,
KPRIET



Webinar 12th August 2023

Events Department



KNOW YOUR INDUSTRY - SERIES 1 (ONLINE MODE)

TOPIC: UNDERSTANDING TRANSPORTATION EMISSIONS, ENERGY, AND HEALTH SCIENCE

Organised by
AIChE Student Chapter

SATURDAY
12 AUGUST 2023
9.00 AM

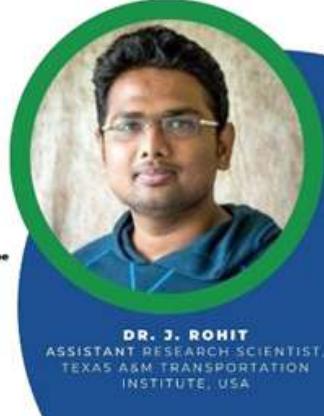
Scan to Join



<https://meet.google.com/mwe-sjy-aoe>

Faculty Incharge
Rohan, J
Umapriya, R

Student Coordinators
Varshini, J
Alagu Sowdeswaran, M



DR. J. ROHIT
ASSISTANT RESEARCH SCIENTIST,
TEXAS A&M TRANSPORTATION
INSTITUTE, USA

The Department of Chemical Engineering organized a webinar on Understanding Transportation Emissions, Energy and Health Science as a part of Know Your Industry – Series on 12th August 2023. The resource person for the webinar was Mr. J. Rohit, Assistant Research Scientist, Texas A&M Transportation Institute USA. Mr. Rohit shared his expertise, offering a comprehensive understanding of the relationship between transportation systems and their impact on public health. His insights were invaluable, shedding light on the challenges and opportunities in this critical area of study. The webinar provided our participants with a platform to delve into the latest research findings, industry trends, and innovative solutions.

Webinar 30th September, 2023



WEBINAR

OVERVIEW OF WATER TREATMENT AND ROLE OF CHEMICAL ENGINEERS

<https://meet.google.com/zwr-cnzp-hjm>
dial +91 1585-301-4271
PIN : 679 142 089#

30.09.2023 | 10.00 AM

Faculty Co-ordinator
Ms. L. Dharani, AP

Student Co-ordinators
Ms. B. Nikitha
Mr. R. Manikandan

DEPARTMENT OF CHEMICAL ENGINEERING

Mr. Harish Vasu
Associate Engineer
Veolia Water Technologies
Karnataka

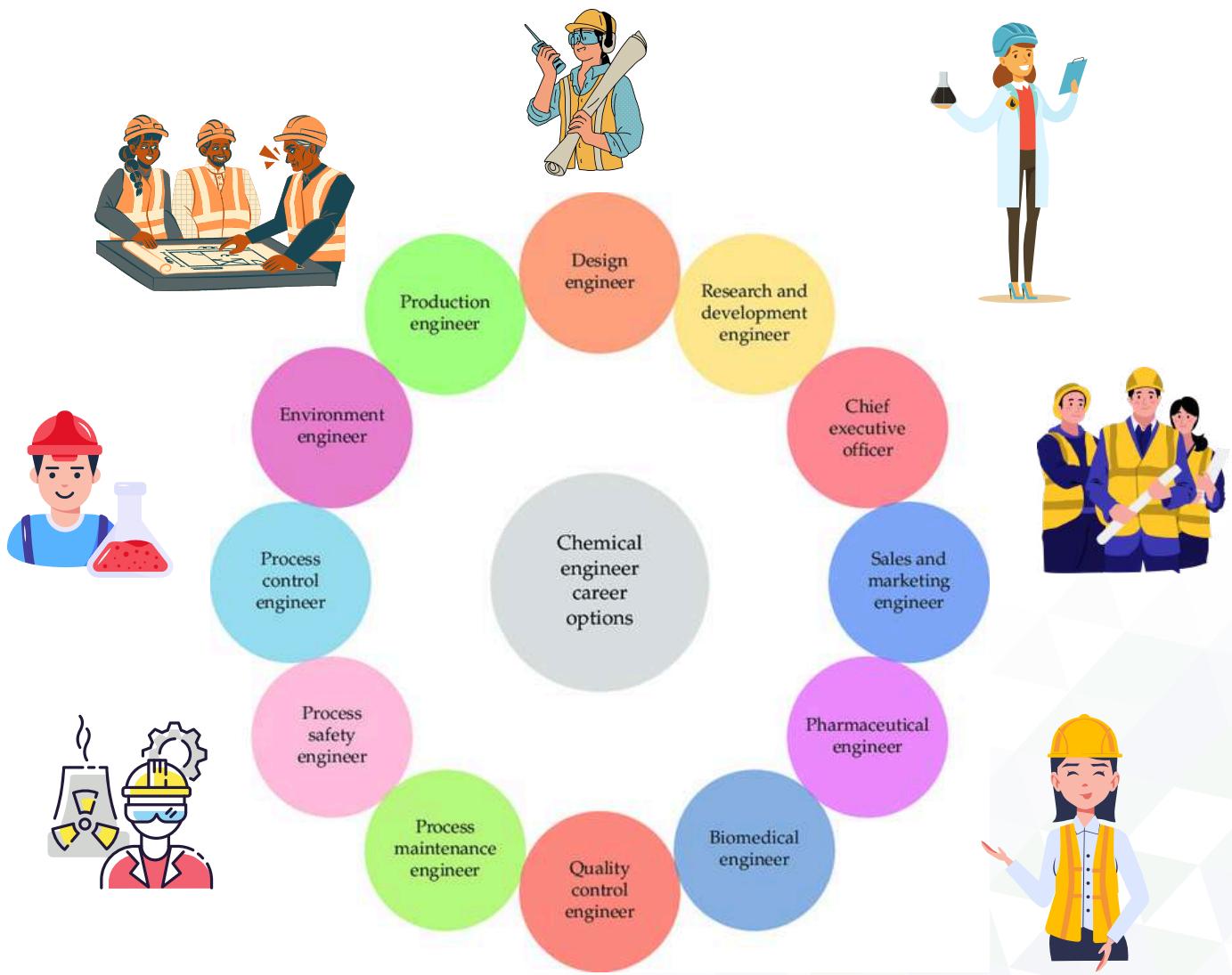
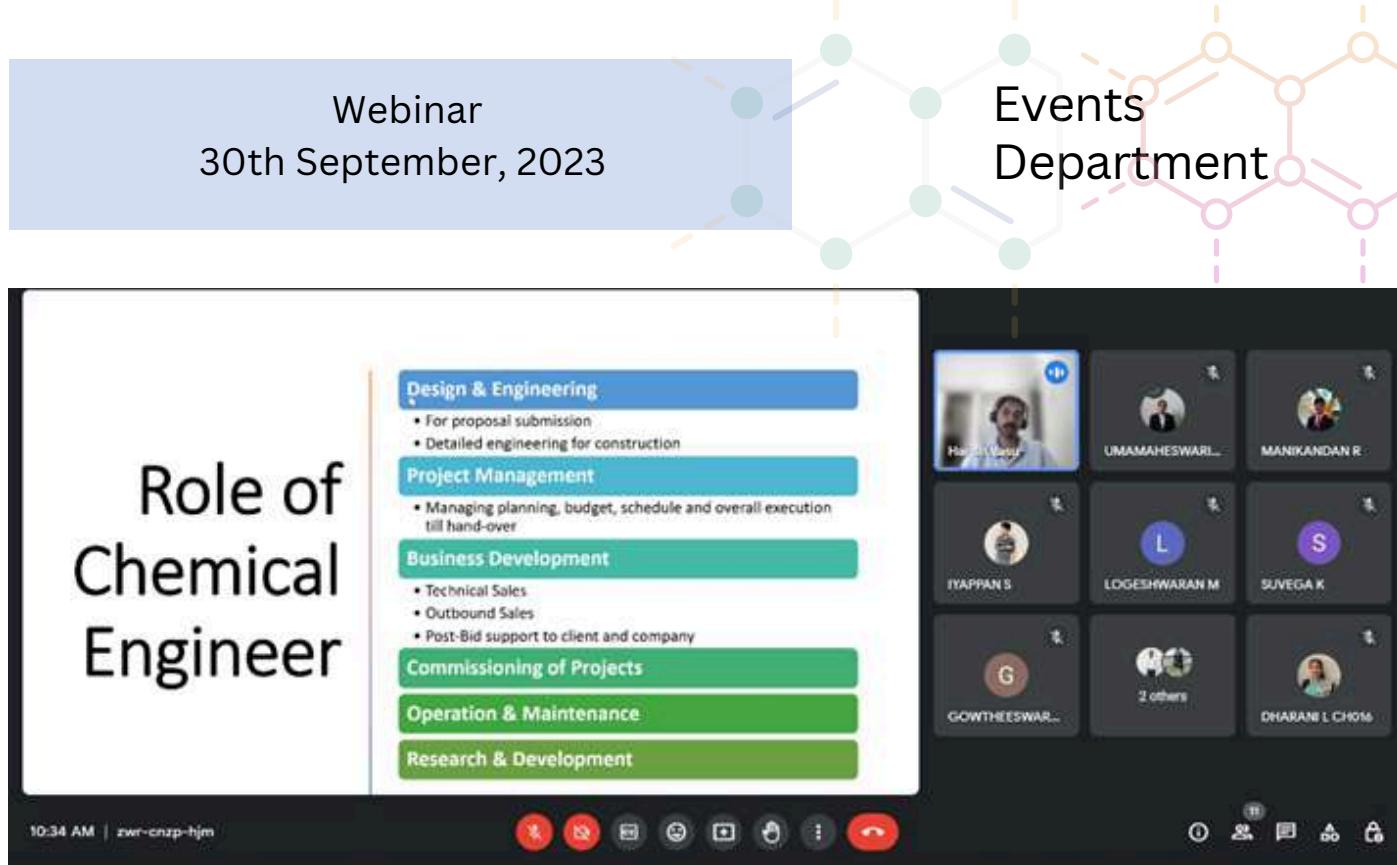


The Department of Chemical Engineering conducted a webinar on 'Overview of Water Treatment and Role of Chemical Engineers' on 30th September, 2023 in online mode through google meet. The resource person Mr. Harish Vasu, Associate Engineer, Veolia Water Technologies, Karnataka, India delivered a highly informative presentation, covering several crucial aspects of water treatment and the integral role played by chemical engineers. The webinar aimed to explore the critical topic of water treatment and emphasize the significant contributions made by chemical engineers in this field. The interactive nature of the session

encouraged meaningful discussions and knowledge sharing among the attendees. The participants expressed their appreciation for the insightful content and engaging delivery style of Mr. Harish Vasu. We firmly believe that events of this nature are instrumental in enhancing the knowledge and understanding of our students enabling them to make meaningful contributions to society through their expertise in chemical engineering.

Webinar

30th September, 2023



Principal Interaction with Internship Students at ABB India Limited, Bangalore

Events Department



Respected Principal Dr. M. Ramasamy, Dr. R. Kiruba Shankar, Head, Industry Institute Partnership Cell, KPRIET with our students at ABB India Limited, Bangalore

Respected Principal Dr. M. Ramasamy, interacting with final year students of B.Tech. Chemical Engineering Ms. M. Gokila, Ms. M. Judith Infanta and Mr. R. Sakthi Shankar



Respected Principal, Dr. M. Ramasamy, and Dr. R. Kiruba Shankar, Head of IIPC, visited ABB India Limited, Bangalore, on 29th August 2023. During the visit, they interacted with the students of KPRIET who are currently undergoing their internship at ABB. This interaction served as a platform for our students to showcase their skills, knowledge, and dedication in a real-world professional setting. It also provided them with a chance to gain insights from industry experts, enhancing their understanding of the practical applications of their academic learning.

The visit reinforced the strong relationship between KPRIET and ABB India Limited, highlighting the institute's commitment to bridging the gap between academia and industry. The students demonstrated their involvement in live projects, reflecting their adaptability and problem-solving abilities in dynamic environments. Dr. M. Ramasamy and Dr. R. Kiruba Shankar engaged in discussions with ABB officials, exploring potential collaboration opportunities for advanced training and research. They emphasized the importance of internships in shaping students' professional growth and preparing them for future challenges. The interaction also encouraged students to align their academic pursuits with the demands of the evolving industry landscape. The visit concluded on a positive note, inspiring students to strive for excellence in their careers.

Welcoming Our Visiting Professor Y. Uemura from Japan

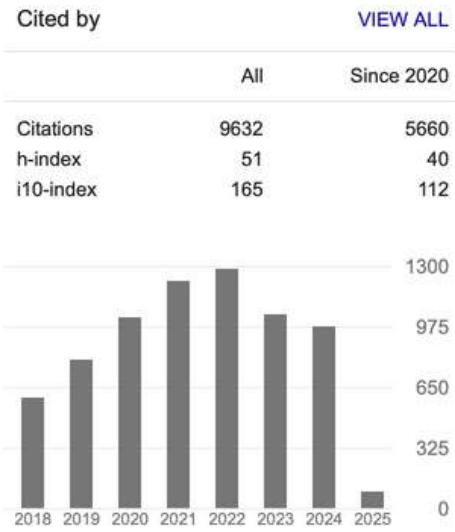
Events Department



From left to right: Dr. M. Laxmi Deepak Bhatlu, Assistant Professor (SL.G), Department of Chemical Engineering, KPRIET, Dr. S. Balasubramanian, Professor & Head, Department of Chemical Engineering, KPRIET, Respected Principal Dr. M. Ramasamy, Visiting Professor, Dr. Yoshimitsu Uemura, Mr. A. Manikandan, Director, KPR International Centre

The Department of Chemical Engineering, KPRIET is delighted to extend a warm and enthusiastic welcome to Prof. Uemura Yoshimitsu, who joins us as a Visiting Professor from Japan. His esteemed presence in the department promises to be an invaluable addition to our academic community. Prof. Yoshimitsu Uemura brings with him a wealth of knowledge and experience in the field of Chemical Engineering. With a distinguished career spanning, he has made significant contributions to various aspects of chemical engineering. During his tenure at KPRIET, Prof. Yoshimitsu Uemura will engage with both students and faculty members through a range of activities, including guest lectures, workshops, seminars, research collaborations and one-on-one consultations.

BIODATA



Name, Family name:	Uemura
Forename:	Yoshimitsu
Sex:	Male
Date of birth:	17 December 1954
Place of birth:	Osaka, Japan
Marital status:	Married
Nationality:	Japanese
Contact:	yuemura.my@gmail.com



Education and degree
1970-1975 Department of Applied Chemistry Osaka Prefecture University College of Technology
1975-1977 Department of Chemical Engineering Tokyo Institute of Technology
1977-1979 Graduate School of Chemical Engineering Tokyo Institute of Technology

Awarded the degree of BS in 1977 "Mass Transfer in Slurry Reactor"
 Awarded the degree of MS in 1979 "Studies on Preparation of Supported Metal Catalyst"
 Awarded the degree of Ph.D. (part time) in 1990 "Study on Supported Nickel/Alumina Catalyst"

Research and professional experience

1979-1982	Research Associate at Mitsui Chemicals Inc.
1983-1989	Research Associate at Kagoshima University
1989-2005	Associate Professor at Kagoshima University
1992	Visiting Research Associate at University of Western Ontario, Canada (from 2 July to 20 August)
1993-1995	Post Doctoral Fellow at the University of Toronto, Canada (from July 1993 to July 1995)
2005-2009	Visiting researcher, Kagoshima TLO Co., Ltd.
2005-2010	Board member, Medical Corporation Egao, Japan
2007-2016	Board member, Meteorological Data System Co., Ltd., Japan
2009-June 2018	Professor, Dept of Chem. Eng., Universiti Teknologi Petronas (UTP)
Oct 2018 -Sep 2019	Research Professor, Center for Biofuel & Biochemical Research, UTP

Inauguration of Chemical Engineering Association

5th October 2023

Events Department

KPR Institute of Engineering and Technology
(Autonomous, NAAC 'A'*)

Inauguration of Association of Chemical Engineering Department

Cordially Welcome You All

05/10/2023 | 2 - 4 PM
SANGAM HALL

kpriet.edu.in | KPRIETonline



The Department of Chemical Engineering inaugurated the Chemical Engineering Association on 5th October 2023. The association was inaugurated by Dr. Thirugnasambandam G. Manivasagam, Associate Professor, Department of Chemical Engineering and Material Science, Amrita Vishwa Vidyapeetham, Coimbatore. The event was graced with the presence of our Respected Principal Dr. M. Ramasamy and Visiting Professor Dr. Yoshimitsu Uemura. The inauguration ceremony marked a significant milestone, aiming to foster innovation and collaboration among students and faculty in the field of Chemical Engineering.



Respected Principal Dr. M. Ramasamy honoring the chief guest, Dr T G Manivasagam with a memento

From left to right: Dr. S. Karunakaran, Associate Professor/ChemE, Dr. S.Balasubramanian, Professor and Head/ChemE, Respected Principal Dr. M. Ramasamy, Chief guest Mr. Thirugnasambandam G Manivasagam, Assistant Professor, Department of Chemical Engineering and Material Science, Amrita Viswa Vidyapeetham, Coimbatore, Visiting Professor. Yoshimitsu Uemura, KPRIET.

Inauguration of Chemical Engineering Association

Events Department



Welcome address given by
Dr. S. Balasubramanian,
Professor & Head,
Department of Chemical Engineering,
KPRIET

Chief guest speech by
Mr. Thirugnasambandam G Manivasagam,
Assistant Professor, Department of
Chemical Engineering and Material
Science, Amrita Viswa Vidyapeetham,
Coimbatore



Respected Principal Dr. M. Ramasamy
honoring students with certificates and
batch

Seasonal
EXCLUSIVES

KPRIET
Chemical Engineering

Inauguration of Chemical Engineering Association



In an inspiring address, our Respected Principal Dr M. Ramasamy shed light on the pivotal role of the AIChE Student Chapter in shaping the careers of chemical engineers of tomorrow. He emphasized that the American Institute of Chemical Engineers (AIChE) provides an invaluable platform for students to build skills, network with professionals, and stay abreast of cutting-edge industry developments.

"AIChE is not just an organization; it is a gateway to countless opportunities for chemical engineers," remarked the principal, underlined how the AIChE journey supports individuals throughout their professional lifecycle—from students striving to grasp foundational knowledge, to seasoned experts leading innovations in the industry.

Events Department



Teaching Fraternity of chemical Engineering Department with Office Bearers of AIChE Student Chapter

Dr. S. Balasubramanian,
Professor and Head,
Department of Chemical Engineering and
Visiting Professor Yoshimitsu Uemura releasing
the AIChE Student Chapter of KPRIET



Industrial Visit

Events Department

Kavin Engineering and Services Pvt Ltd, Coimbatore



(From left to right) Mr. P. Murugan, Manager-Engineering, Kavin Engineering and Services Pvt Ltd, Coimbatore, Dr. G. Surendran, Associate Professor, ChemE, KPRIET, Dr. E. Nakkeeran, Associate Professor, ChemE, KPRIET, S. Kanagaraj, Process Manager, Kavin Engineering and Services Pvt Ltd, Coimbatore

Department of Chemical Engineering visited Kavin Engineering and Services Pvt Ltd, Coimbatore on 14th July 2023. The purpose of this visit was to explore various opportunities for our students, including industrial visits, Memorandum of Understanding (MoU), placements, and expert talks. The visit to Kavin Engineering and Services Pvt Ltd proved to be highly fruitful, with both parties engaging in meaningful discussions and exploring avenues for collaboration.

Saipem, Coimbatore



Placement coordinators of KPRIET with recruitment team of SAIPEM, one of the global players in Engineering, Procurement and Construction company (EPC) in Chennai.
During their Visit to Coimbatore.

The placement coordinator of the department of chemical engineering, Dr. G. Surendran visited Saipem, Coimbatore on 22th July 2023. Saipem is a world leader in engineering and drilling activities and in the development of major projects, in the energy and infrastructures sectors. We remain committed to fostering more such collaborations that bridge the gap between academia and industry, ensuring our graduates are well-prepared to tackle the challenges of the professional world.

Industrial Visit

Events Department

ITC Limited, Coimbatore



Dr. E. Nakkeeran,
Associate Professor,
Department of Chemical Engineering,
KPRIET
and
Mr. Stanley, ITC Senior Manager

Dr. E. Nakkeeran, Associate Professor, Department of Chemical Engineering, KPRIET visited Mr. Stanley, ITC Senior Manager as a part of IIPC activity on 27th July, 2023. The IIPC strives to bridge the gap between academia and industry, and this event was a true testament to that mission. Dr. Nakkeeran's visit served as an exceptional platform for knowledge exchange and collaboration.

KG Denim Ltd, Coimbatore



From left to right:
Mr. K. S. Rajan, HR Manager and
Mr. Velusamy, QA Manager of KG Denim
Ltd and Dr. E. Nakkeeran, Associate
Professor, Department of Chemical
Engineering, KPRIET

Dr. E. Nakkeeran, Associate Professor, Department of Chemical Engineering, KPRIET visited HR Manager Mr. K. S. Rajan and QA Manager Mr. Velusamy of KG Denim Ltd, as a part of IIPC activity on 27th July, 2023. The IIPC is committed to facilitating such meaningful interactions that enrich both academia and industry. Dr. Nakkeeran's visit has set a precedent for future collaborations, inspiring us to continue fostering relationships that nurture growth, learning, and innovation.

Events Department

Industrial Visit

V-Guard Industries LTD, Perundurai

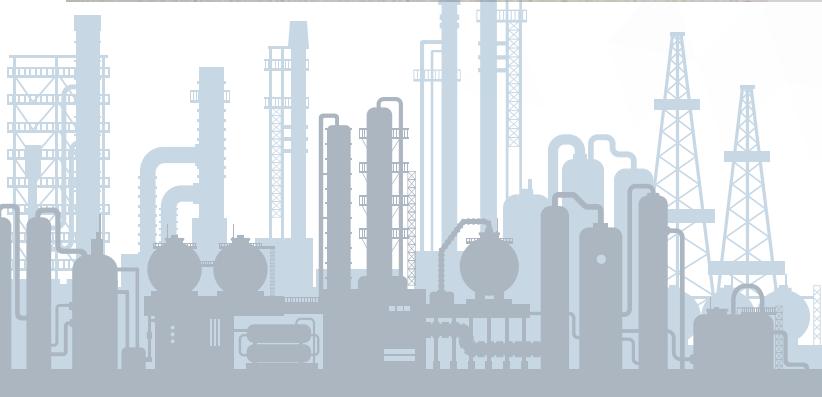


Dr. R. Umapriya, Assistant Professor (Sl.G) and Mr. J. Rohan, Assistant Professor (Sl.G), Department of Chemical Engineering visited V-Gurad Industries LTD, Sipcot Industrial Growth Centre, Perundurai, Tamilnadu on 30th July, 2023. We extend our heartfelt gratitude to the team at V-Guard Industries Ltd. for their warm reception and enlightening discussions. This visit has opened doors to new horizons of learning and growth, emphasizing the relevance of hands-on experiences in shaping the future professionals of the industry.

ITC Limited, Mettupalayam, Coimbatore



The Department of Chemical Engineering organized an Industrial Visit to ITC Limited, Paperboards and Speciality Papers Division, Mettupalayam, Coimbatore on 9th September 2023. During the visit, our students had the privilege to explore the state-of-the-art facilities of ITC Limited, a renowned leader in the paper and packaging industry. Guided by knowledgeable professionals, the students gained valuable insights into the intricate processes of paper production. The visit not only showcased the practical applications of chemical engineering principles but also emphasized the importance of sustainability and environmental consciousness in industrial practices.



Industrial Visit

Events Department

Seshasayee Paper and Boards Limited



The Department of Chemical Engineering organized an industrial visit to Seshasayee Paper and Boards Limited on 12th September 2023. Students explored the production process from raw materials to the final product and interacted with industry experts. The visit provided valuable insights and networking opportunities.

Field Visit to City Compost Yard, Coimbatore



Students from the Department of Chemical Engineering visited City Compost Yard, Coimbatore on 30th September 2023. The field visit was arranged as a part of Waste Management Elective course. Accompanied by dedicated faculty members, our students had the opportunity to witness firsthand the intricacies of waste management at the City Compost Yard. The visit provided valuable insights into composting techniques and innovative recycling processes.

Kerala Electrical and Allied Engg. Co. Ltd, Kerala



The Department of Chemical Engineering organized an Industrial visit to Kerala Electrical and Allied Engg. Co. Ltd, Kerala on 6th October 2023. A group of 51 students along with Mr. K. Murugesan, Assistant Professor (Sr.G), Mr. A. Pasupathi, Lab Technician

and Ms. R. Gomathi, Research Scholar visited the company. Dividing into groups of two, the students were guided through the intricacies of the manufacturing process, specifically focusing on electrical parts. Transformers, the cornerstone of the electrical industry, were demystified. Their vital role in regulating voltage levels, ensuring seamless energy transmission, and safeguarding the electrical grid was elucidated. We extend our sincere thanks to Kerala Electrical and Allied Engineering Company Ltd for opening their doors to our students and providing an educational and enlightening experience.

Industrial Visit

Events Department

Ammarun Enviguard Industries Pvt.Ltd, Coimbatore



Dr. M. Laxmi Deepak Bhatlu, Assistant Professor (Sl.G) and Mr. N. Arunkumar, Assistant Professor (Sr.G) / ChemE with team Ammarun Enviguard Pvt. Ltd

Dr. M. Laxmi Deepak Bhatlu, Assistant Professor (Sl.G) and Mr. N. Arunkumar, Assistant Professor (Sr.G) from the Department of Chemical Engineering visited Ammarun Enviguard Industries Pvt.Ltd, Coimbatore on 4th October, 2023. The company specializes in manufacturing grey iron, compacted graphite iron (vermicular graphite iron) and ductile iron (spheroidal graphite iron) castings through the green sand moulding process. Witnessing their innovative techniques and high-quality production was not only insightful but also inspiring. This visit provided valuable insights into the industry practices and technological advancements in iron castings. We express our gratitude to Ammarun Enviguard Industries Pvt. Ltd for their warm hospitality and knowledge-sharing. Such industry interactions greatly contribute to our academic and professional growth.

WAFE Auxiliary Chemicals Pvt.Ltd, Coimbatore



Dr. E. Nakkeeran, Associate Professor and Dr. G. Surendran, Associate Professor from the Department of Chemical Engineering visited WAFE Auxiliary Chemical P. Ltd, Coimbatore on 10th October 2023. This visit provided a priceless chance to learn a great deal about the company's intricate operations. It was instructive and eye-opening to see their cutting-edge techniques and creative methods in the field of chemical engineering up close.

We sincerely thank WAFE Auxiliary Chemical Pvt. Ltd. for hosting our faculty members with such grace. These kinds of cooperative projects are essential to growing our body of knowledge and creating deep ties between academics and business.

Industrial Visit

Events Department

Faraday Ozone



From Left to Right: Dr. S. Balasubramanian, Professor and Head, Department of Chemical Engineering, Dr. M. Laxmi Deepak Bhatlu, Assistant Professor (Sl.G), Faraday, Visiting Professor. Yoshimitsu Uemura, KPRIET



The Department of Chemical Engineering visited Faraday Ozone, Coimbatore on 15th November 2023. Faraday Ozone, a distinguished player in the industry, showcased their prowess in manufacturing Ozone Generators for air purification, water and wastewater treatment systems, electrical incinerators, and vending machines with a spectrum of accessories. The visit provided us with a firsthand look at their advanced technologies, including the groundbreaking Ozone Generators designed to revolutionize air quality and their water treatment systems addressing environmental sustainability.

Visit to Milky Mist Dairy Food Private Limited, Perundurai, Erode



Dr. E. Nakkeeran, Associate Professor and Industry Institute Partnership Cell Co-ordinator, Department of Chemical Engineering visited Milky Mist Dairy Food Private Limited, Perundurai, Erode on 5th December 2023. The visit aimed to strengthen our ties with the industry, fostering collaboration and providing our students with a real-world perspective on the latest advancements in the field of dairy food production.

Dr. E. Nakkeeran, Associate Professor, KPRIET with Mr. V. Gokulraj, Assistant Manager, HR, Milky Mist Dairy Food Private Limited, Perundurai, Erode

Teacher's Day Celebration

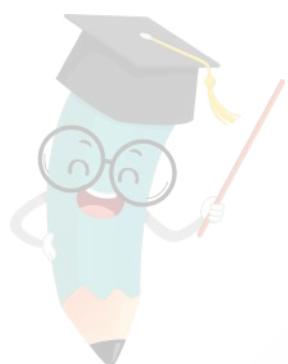
Events Department

In a heartfelt tribute to the educators, the students of the Department of Chemical Engineering came together to celebrate Teachers' Day on 5th September 2023 in Pallavi Hall. The event featured the esteemed presence of Prof. Y. Uemura as the chief guest, with a gathering that included students, dedicated faculty members, and non-teaching staff. Prof. S. Balasubramanian, Head of the department, delivered the presidential address. The students took the opportunity to express their gratitude and share their cherished experiences about the exceptional teachers who have guided and inspired them throughout their academic journey within the campus.



Dr. S. Balasubramanian,
Professor and Head,
Department of Chemical Engineering
addressing the gathering.

Students of Chemical Engineering
Department sharing their thanks note
and gratitude to faculty members of
Chemical Engineering Department



TEACHING IS A
WORK OF HEART

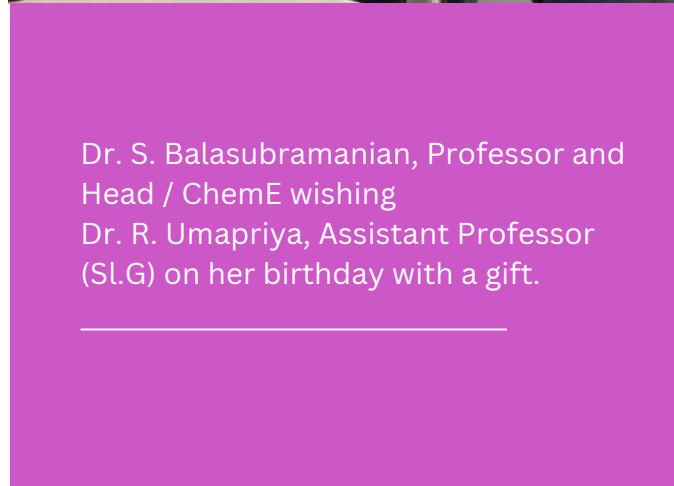
Celebrations

Events Department

Birthday



Dr. S. Balasubramanian, Professor and Head / ChemE wishing Dr. G. Surendran, Associate Professor, Department of Chemical Engineering on his birthday with a gift.



Dr. S. Balasubramanian, Professor and Head / ChemE wishing Er. Arunkumar, Assistant Professor (Sr.G), Department of Chemical Engineering on his birthday with a gift.



Celebrations

Events Department

Ayudha Pooja



Dr. S. Karunakaran, Associate Professor, Department of Chemical Engineering doing the pooja

The Department of Chemical Engineering celebrated Ayudha Pooja and Saraswathi Pooja on 20th October 2023. Ayudha Pooja, a day dedicated to honoring tools and instruments, was marked by the faculty and students adorning their workspaces with vibrant flowers and offering prayers for prosperity and success. Saraswathi Pooja, a tribute to the goddess of knowledge, saw the entire department immersed in a spiritually rich atmosphere, seeking blessings for wisdom and academic excellence. The occasion was filled with prayers, traditional rituals, and the collective spirit of unity.

The celebrations began with a special pooja conducted by a priest, where sacred mantras were chanted to invoke blessings. Students enthusiastically participated in decorating the premises and arranging offerings, creating a serene and joyful ambiance. The event also featured a cultural segment where traditional songs and hymns were performed, adding to the festive spirit. Faculty members shared inspiring messages on the importance of spirituality in personal and professional growth. The day concluded with the distribution of prasadam, symbolizing the divine blessings received, leaving everyone motivated and filled with gratitude.

Celebrations

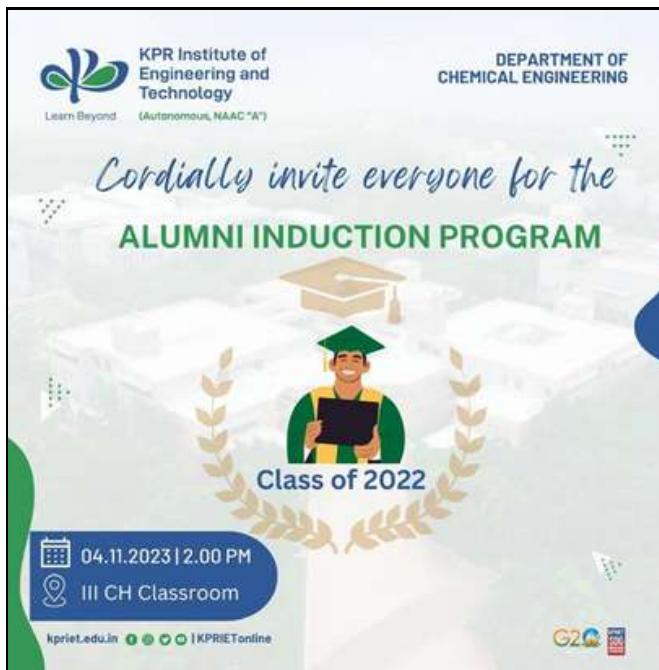
Events Department

Small Team Doing Big Things



Team Chemical Engineering celebrated the successful submission of NBA e-SAR.

Alumni Induction Programme



Schemcon Invitation

Events Department



Dr. A. S. Periyasamy Manikandan, Assistant Professor (Sl.G) from the Department of Chemical Engineering, Kongu Engineering College, Perundurai, Erode invited the Department of Chemical Engineering, KPRIET for our participation in SCHEMCON to be organized by them in the month of October. SCHEMCON is a premier conference in the field of chemical engineering, bringing together experts, researchers, and professionals from around the world to discuss the latest advancements, exchange insights, and collaborate on cutting-edge ideas. The event is a platform for sharing knowledge, showcasing innovative research, and fostering meaningful connections within the Chemical Engineering community.

KPRIET AIChE Student Chapter



A mega Idea Pitch competition was organized by the KPRIET AIChE Student Chapter, witnessing overwhelming participation from over 40+ teams and the enthusiastic involvement of more than 100 students representing 8+ institutions. This event soared to new heights of excellence, providing a vibrant platform for young minds to present their innovative ideas. The energy and creativity showcased by the participants were truly inspiring, setting a remarkable standard for future events. Distinguished judges from academia and industry evaluated the pitches, providing valuable feedback and insights to the participants.

Felicitation

Events
Department

Team KPRIET with our Visiting Professor Yoshimitsu Uemura



Our Respected Principal Dr. M. Ramasamy and Team Chemical Engineering sharing their wonderful experience with Prof. Uemura



Team KPRIET sharing a token of love to our visiting professor Yoshimitsu Uemura

The Department of Chemical Engineering extend our heartfelt gratitude and appreciation to Visiting Professor Yoshimitsu Uemura from Japan for his invaluable contributions during his visit to the Department of Chemical Engineering at KPRIET from August to November. Throughout his stay, Professor Uemura exhibited a commendable dedication to fostering academic growth and research excellence within our department. His interactions with our esteemed faculty members played a pivotal role in advancing ongoing research projects, providing consultancy and formulating proposals. The wealth of knowledge he shared greatly enriched the academic environment and enhanced the quality of our research endeavors. His interactions with our students have left an indelible mark, inspiring them to delve deeper into their studies and consider diverse perspectives. The collaborative spirit between Professor Uemura and Chemical Engineering department has been truly rewarding and we express our sincere appreciation for the positive energy and enthusiasm he brought to our academic community. As he returns to his home country, we extend our best wishes for his future endeavors and hope that our paths will cross again in the pursuit of knowledge and collaboration.

Technical Talks

Events Department

KPRIET Institute of Engineering and Technology
Autonomous (University Level College)
Avvaiyah Nediyur, Coimbatore

Department of Chemical Engineering
in association with
IICHE Student Chapter, KPRIET

Tech Talk on
Introduction to Chemical Engineering Skill Development

Resource Person

Er. Ravi Ramasamy
Director
Pragna Consultants Pvt. Ltd.
Chennai.

Date : 07/09/2023

Time : 10:00 AM to 11:00 AM

Venue : Dept Seminar Hall

Faculty Coordinators
Dr. G. Surendran Assoc. Prof., ChemE
Dr. S. Karunakaran Assoc. Prof., ChemE

A presentation slide titled "Tech Talk on Introduction to Chemical Engineering Skill Development" is displayed. It lists three industry associations involved: Chemical Industries Association (CIA) Chennai, Indian Chemical Council (ICC), and Manoil Industries Association (MIA) Chennai. The slide also mentions that the talk was held on 7th September 2023 at 10:00 AM in the seminar hall.



Dr. S. Balasubramanian, Professor and Head, Department of Chemical Engineering felicitating the chief guest Er. Ravi Ramasamy, Director, Pragna Consultants Pvt. Ltd, Chennai.

The Department of Chemical Engineering, in association with the IICHE Student Chapter, KPRIET, organized a Tech Talk on “Introduction to Chemical Engineering Skill Development” by Er. Ravi Ramasamy, Director, Pragna Consultants Pvt. Ltd., Chennai, on 7th September 2023. The event aimed to shed light on the intricacies of Chemical Engineering Skill Development, a pivotal aspect in today’s rapidly advancing technological landscape.

Er. Ravi Ramasamy, with his profound expertise and extensive experience, delved into the nuances of the field, providing invaluable insights to our students. He emphasized the importance of bridging the gap between theoretical knowledge and practical application through skill development. The session also highlighted emerging trends and tools essential for chemical engineers to stay relevant in the competitive industry. Students actively engaged in a lively Q&A session, gaining clarity on career opportunities and the significance of acquiring interdisciplinary skills. The talk served as a motivational platform, inspiring students to explore innovative pathways in their academic and professional journeys.

Technical Talks

Events Department

KPRIET Institute of Engineering and Technology
Learn Beyond (Autonomous, NAAC 'A'*)

DEPARTMENT OF CHEMICAL ENGINEERING ORGANISES A GUEST LECTURE ON

INTERNATIONAL EDUCATION OPPORTUNITIES FOR UNDERGRADUATE STUDENTS OF CHEMICAL ENGINEERING

3.00 TO 4.00 PM

25 September, 2023

Thanam Hall

Resource Person
Prof. Yoshimitsu Uemura
Visiting Professor
Department of Chemical Engineering
KPRIET, Coimbatore

Faculty Co-ordinators
Dr. M. Laxmi Deepak Bhatlu, AP (SI, G), ChemE
Dr. Nitu Kumar, AP (Sr.G), ChemE

Student Co-ordinators
Ms. V.S. Prashita, II ChemE
Ms. A.S. Shallini, II ChemE

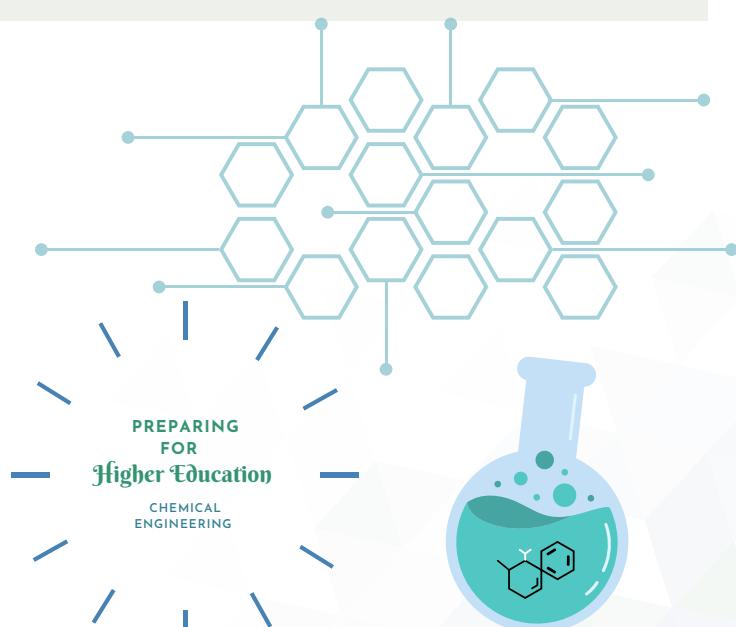
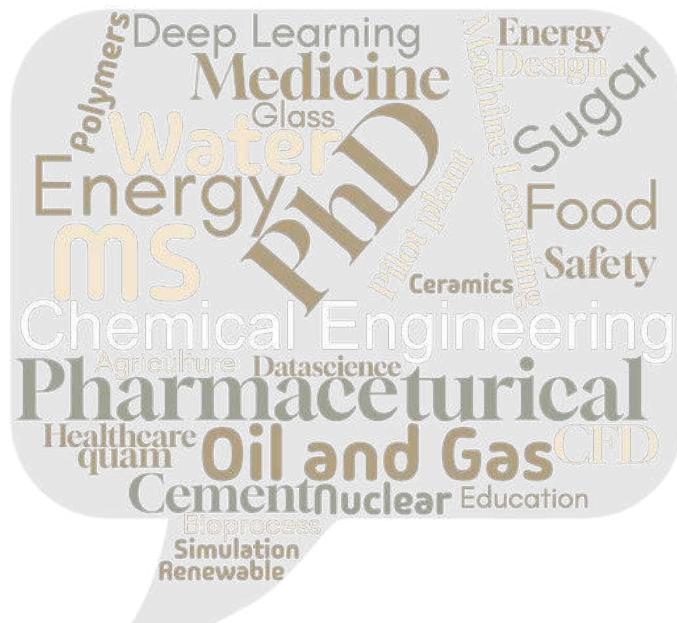
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Great Place To Work Certified

Opportunities for Undergraduate Students of Chemical Engineering
Prof. Yoshimitsu Uemura
25 Sep 2023

International Education Opportunities for Undergraduate Students of Chemical Engineering
Visiting Professor
25 Sep 2023

The Department of Chemical Engineering organized a guest lecture on “Optimization Techniques in Research” on 29th September 2023. The event was graced with the presence of Prof. Uemura Yoshimitsu, visiting professor at the department of chemical engineering as the resource person. Prof. Yoshimitsu's lecture was a masterclass in the art and science of optimization techniques, offering profound insights and practical knowledge. His expertise illuminated the various methodologies employed in optimizing research processes, fostering a deeper understanding among the attendees. The lecture not only showcased the theoretical foundations but also delved into real-world applications, illustrating how these techniques are shaping the landscape of modern research. The event was not only intellectually stimulating but also interactive, with attendees actively engaging in discussions and posing insightful questions. Prof. Yoshimitsu's wealth of knowledge, coupled with his engaging teaching style, made the complex topic accessible to all, leaving an indelible impact on everyone present.



Technical Talks

Events Department



KPR Institute of Engineering and Technology
Learn Beyond | Accredited by NAAC "A"

DEPARTMENT OF CHEMICAL ENGINEERING ORGANISES A GUEST LECTURE ON

OPTIMIZATION TECHNIQUES IN RESEARCH

Resource Person
Prof. Yoshimitsu Uemura
Visiting Professor
Department of Chemical Engineering
KPRIET, Coimbatore

3.00 TO 4.00 PM
29 September, 2023
GITAM Hall

Faculty Co-ordinators
Dr. Nitu Kumari, AP (Sr.G), ChemE
Dr. H. Laxmi Deepak Bhatu, AP (SL.G), ChemE

Student Co-ordinators
Ms. V.S. Prashita, II ChemE
Ms. A.S. Shalini, II ChemE

Great Place To Work Certified

Conceptual Design
Literature Survey
Apparatus Design
Grant Application
Apparatus Setup
Experimental Work
Data Processing
Analysis of Processed Data
Quick Publication
2nd Literature Survey
Final Publication

Originally, coming up with feasible ideas identifying previous work and applying them
Easy to operate and collect data
Applying good for financial and time management
Demarcating assembling one part
Swift, accurate and safe implementation
Carrying out everyday just after work
Quick analysis everyday and time saving
For demonstrating, collecting things for making one's motivation towards research
Surveying things for the final publication
Final full scale publication

The Department of Chemical Engineering organized a guest lecture on “Optimization Techniques in Research” on 29th September 2023. The event was graced with the presence of Prof. Uemura Yoschimitsu, visiting professor at the department of chemical engineering as the resource person. Prof. Yoschimitsu's lecture was a masterclass in the art and science of optimization techniques, offering profound insights and practical knowledge. His expertise illuminated the various methodologies employed in optimizing research processes, fostering a deeper understanding among the attendees. The lecture not only showcased the theoretical foundations but also delved into real-world applications, illustrating how these techniques are shaping the landscape of modern research. The event was not only intellectually stimulating but also interactive, with attendees actively engaging in discussions and posing insightful questions. Prof. Yoschimitsu's wealth of knowledge, coupled with his engaging teaching style, made the complex topic accessible to all, leaving an indelible impact on everyone present.



"Research is the art of transforming curiosity into innovation, where the molecular meets the macroscopic to solve the world's most pressing challenges."

Technical Talks

Events Department

KPRIET Institute of Engineering and Technology, **Department of Chemical Engineering**, **AIChE KPRIET Student Chapter**

DEPARTMENT OF CHEMICAL ENGINEERING, **IN ASSOCIATION WITH**, **American Institute of Chemical Engineers (AIChE)**

GUEST LECTURE ON

Multiscale Modeling of Charge Transport in Quantum Devices: A Route of Chemical Engineering

RESOURCE PERSON

Dr. K. NAVAMANI
ASSISTANT PROFESSOR (SL.G)
DEPARTMENT OF PHYSICS

04.10.2023
11:15 AM
GITAM HALL

FACULTY COORDINATORS
Dr. S. Balasubramanian, Prof. & Head / CH
Er.K.Murugesan, AP - Sr.G / CH

STUDENT COORDINATORS
Mr. M. Mohammed Fahim, II CH
Mr. S. Giri Prasath, II CH

kpriet.ac.in/ **KPRIETonline**



Mr. K. Murugesan, Assistant Professor (Sr.G) Honouring the resource person with a memento



The Department of Chemical Engineering in association with American Institute of Chemical Engineers (AIChE) Students Chapter, KPRIET organized a Guest Lecture on “Multiscale Modeling of Charge Transport in Quantum Devices: A Route of Chemical Engineering” on 4th October 2023. The resource person of the event Dr. K. Navamani, Assistant Professor (SL.G), Department of Physics, KPRIET captivated the audience with his expertise in the realm of quantum devices. Through his engaging talk, students were inspired, gaining valuable insights into the intricate world of charge transport. The event marked a significant milestone in fostering knowledge exchange and intellectual growth among the attendees, highlighting the interdisciplinary nature of chemical engineering. We extend our gratitude to Dr. Navamani for sharing his expertise.

Technical Talks

Events Department

KPR Institute of Engineering and Technology
Learn Beyond
(Autonomous, NAAC "A")

Great Place To Work Certified

GUEST LECTURE ON ADVANCED TOPICS IN CHEMICAL ENGINEERING

Date: 10.10.2023
Time: 03.00-4.00 pm
Venue: Thanam Hall

DEPARTMENT OF CHEMICAL ENGINEERING
Resource Person
Prof. Yoshimitsu Uemura
Visiting Professor
Department of Chemical Engineering
KPRIET, Coimbatore

Faculty Co-ordinator
Dr. Laxmi Deepak Bhatlu, AP (SI.G), ChemE
Dr. S. Balasubramanian, Prof. & Head ChemE

Student Coordinator
Mr. Jotheeswaran. B, II CH
Mr. Karthikeyan. S, II CH

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The Department of Chemical Engineering organized a guest lecture on “Advanced Topics in Chemical Engineering” given by Visiting Professor Dr. Yoshimitsu Uemura on 10th October 2023. Dr. Uemura's profound insights and expertise left the audience inspired and informed, shedding light on the latest advancements and innovations in chemical engineering. His engaging discourse not only expanded our knowledge but also sparked intriguing discussions among attendees. We extend our heartfelt gratitude to Dr. Uemura for sharing his wisdom, making the event a resounding success.

Guest Lecture on Outcome Based Education



The Department of Chemical Engineering organized a workshop on Outcome Based Education on 13th October 2023. The workshop on Outcome-Based Education (OBE) featuring Yoshimitsu Uemura as the resource person proved to be an enlightening experience for both faculty and students with his extensive expertise in educational strategies, effectively conveyed the principles and methodologies of OBE. The event succeeded in fostering a deeper understanding of outcome-driven approaches to teaching and learning. Participants gained valuable insights into aligning educational objectives with real-world competencies, enhancing curriculum design, and implementing assessment strategies that focus on measurable outcomes.

GATE Orientation Program

Events
Department

KPR Institute of Engineering and Technology (Autonomous, NAAC 'A'*)

Department of Chemical Engineering

Great Place To Work Certified 2014

"CAREER ADVANCEMENT CELL"
IN ASSOCIATION WITH
"DEPARTMENT OF CHEMICAL ENGINEERING"
ORGANISES AN ORIENTATION PROGRAM ON

"LET'S CRACK GATE"

RESOURCE PERSON



Dr. S. BALASUBRAMANIAN
Head of the Department
Department of Chemical Engineering

20.09.2023, WEDNESDAY

3:15 to 4:30PM

CH Seminar Hall, KPRIET

kpriet.edu.in/ KPRIETonline 

FACULTY COORDINATOR:
Mr. K. Marugesan
Assistant Professor (Sr.G)
Department of Chemical Engineering

STUDENT COORDINATORS:
R. Mughunthan - II CH
B. Jetheshwaran - II CH

G20 Atal Innovation Mission



The Department of Chemical Engineering in association with Career Advancement Cell of KPRIET organized an orientation program on "LET'S CRACK GATE" on 20th September 2023. Dr. S. Balasubramanian, Professor & Head, Department of Chemical Engineering was the resource person of the event. Dr. S. Balasubramanian, with his wealth of knowledge and experience, shared invaluable insights, strategies and tips on how to crack the GATE examination with confidence. His engaging presentation not only demystified the complexities of the GATE syllabus but also inspired our students to approach their preparations with a focused and determined mindset. Through this program, attendees gained a comprehensive understanding of the examination pattern, essential topics, and effective study techniques, empowering them to excel in this highly competitive exam. We express our sincere gratitude to Dr. S. Balasubramanian for his enlightening session, which undoubtedly ignited a passion for excellence among our students.



SCHEMCON Stage Set for Inaguration



Principal Dr. M. Ramasamy with Prof. G. D. Yadav



Dr. M. Ramasamy, Principal, KPRIET felicitated at SCHEMCON 2023



Dr. M. Ramasamy with guests at SCHEMCON 2023

The 19th Annual session of the Students Chemical Engineering Congress, SCHEMCON 2023, commenced at Kongu Engineering College on 22nd September. It was an honor to attend this prestigious event, where our respected Principal, Dr. M. Ramasamy, delivered an insightful keynote address.

The program featured esteemed guests such as Padmasri Prof. G.D. Yadav and Prof. Chidambaram, former Director of NIT Trichy and Head of Chemical Engineering at IIT Madras, who shared invaluable insights on advancements in the field.

Students from across the country showcased innovative research through oral and paper presentations, covering topics like green technologies and novel separation techniques. The event also included engaging workshops and discussions, fostering collaboration and learning. It was a truly inspiring day that highlighted the spirit of innovation in Chemical Engineering.

HoD Interaction with Students



Events Department

Dr. S. Balasubramanian, Professor and Head, Department of Chemical Engineering interacted with the students of III B.Tech. Chemical Engineering on 27th October, 2023. The session was organized with the primary objective of creating awareness among students about Outcome-Based Education (OBE) and how it plays a pivotal role in shaping their future. Dr. Balasubramanian, with his wealth of experience and expertise, provided valuable insights into the significance of Outcome-Based Education.

Highlight Institutional Mission and Vision



Students Achievements

Project Presentation



Ms. M. Archana, Ms. M. R. Mageswarii and Ms. A. S. Sushmitha of III B.Tech. Chemical Engineering participated in Technology Enablement Meet and Exhibition held on 21st March, 2023 and presented the project “Bio Effluent Treatment” guided by Dr. S. Karunakaran, Associate Professor and Mr. N. Arunkumar, Assistant Professor (Sr. Gr), Department of Chemical Engineering, KPRIET.

Conference Presentation



Ms. R. K. Rishika, Ms. M. Thilagarasi, Ms. B. Selvapriya, Ms. M. Sreya, Ms. M. Ramya and Ms. V. Indhumathi of II B.Tech. Chemical Engineering won first prize in 4th International Conference on “Future Prospects of BIOTECHNOLOGY AND BIOMEDICAL APPLICATIONS” ICFBB - 2023 held on 22nd & 23rd September 2023 organized by the Department of Biotechnology, Sri Shakthi Institute of Engineering and Technology, Coimbatore, Tamilnadu. Their innovative project was highly appreciated for its practical applications and sustainability focus. The team’s dedication and collaborative efforts showcased the excellence of our students on an international platform.

State Level Hackathon



Mr. S. Rohithkumar, Mr. N. Nandhagopal and Ms. M. R. Mageswarii of III B.Tech. Chemical Engineering won III prize in State level Hackathonorganized by Erode Sengunthar Engineering College, Erode and won prize worth Rs. 25,000 under the guidance of Dr. S. Karunakaran, Associate Professor, Department of Chemical Engineering, KPRIET.

Students Achievements

Student Ambassador for Academic Reforms in Transforming Higher Education in India (NEP Sarathy by UGC)



From Left to Right: Dr. P. Ravi Kumar, Head, Student Affairs, Dr. J. Suryakanth, Director Student Affairs & Alumni Relations, Respected Principal Dr. M. Ramasamy, Mr. R. Mugunthan II B.Tech. Chemical Engineering, Dr. S. Balasubramanian, Professor & Head, ChemE, Dr. M. Laxmi Deepak Bhatlu, Assistant Professor (Sl.G)/ChemE

The National Education Policy (NEP) 2020 is a crucial reform that aims to transform the education system in India, focusing on quality, equity, and access. The implementation of the NEP 2020 is led by the cohesiveness and synergy across various regulatory bodies, Union and State Governments, and Higher Educational Institutions (HEIs). To enhance students' participation and make them aware of the various reforms of the higher education system, the UGC is launching the "NEP SAARTHI" at campuses of HEIs. The initiative will bring together students as active participants in the implementation of the NEP 2020. The Department of Chemical Engineering is extremely happy to congratulate Mr. R. Mugunthan of II B.Tech. Chemical Engineering for being selected as Student Ambassador for Academic Reforms in Transforming Higher Education in India (NEP Sarathy by UGC).

Yukthi Innovation Challenge



Team Soul Hunters of II B.Tech. Chemical Engineering, under the guidance of Professor Dr. Karunakaran, was awarded for the best innovation in demonstration at the Yukthi Innovation stall during the IIC Regional Meet 2023 held at Nehru Institute of Technology, Coimbatore. Their creative approach and technical expertise were highly praised by the jury and attendees, making it a proud moment for the department.

Students Achievements

Project Competition



Mr. K. Pavneet Kumar, Mr. S. S. Hemanthkumar, Ms. M. Sreya, and Ms. G. Harsha Vardhini of II B.Tech. Chemical Engineering participated in the project competition organized by Nehru College of Engineering and Research Centre, Kerala, on the 20th and 21st of November 2023. The team showcased exceptional innovation and technical skills, securing the 1st position and a cash prize of Rs. 10,000/- for their project titled Medical Vending Machine. Their work was guided and mentored by Lt. Dr. A. K. Priya, who provided valuable insights and direction throughout the project. The Medical Vending Machine concept was highly appreciated by the jury for its practicality, creativity, and potential to address real-world challenges in the healthcare sector. This remarkable achievement highlights the team's dedication, collaborative efforts, and commitment to leveraging engineering solutions for societal benefits.



"Education is the most powerful weapon which you can use to change the world."
— Nelson Mandela

Sports

Football Tournament



KPRIET showcased exceptional football prowess at the Anna University Inter Zone Football Tournament 2023, emerging as proud runners-up at Adhiyaman College of Engineering, Hosur, on December 2nd and 3rd. The team displayed remarkable skill, teamwork, and determination throughout the tournament, earning accolades from both spectators and competitors. Their journey to the finals was marked by thrilling matches and standout performances.

Anna University Zone IX Champions



Standing from Left to Right: First Row:
Mr. S. Ezhilarasu of IV B.Tech. Chemical Engineering,
Mr. V. Jagadeeswaran of IV B.Tech. Chemical Engineering (Standing in the middle), Mr. S. Harish of III B.Tech. Chemical Engineering (Standing before the last). Second Row: Mr. T. Gokul of IV B.Tech. Chemical Engineering (at the last)

KPRIET Men's Kabaddi team secured third place in the Anna University Zone – IX Kabaddi tournament held at Suguna College of Engineering, Coimbatore, between 16th and 17th October 2023. We are extremely proud and happy to congratulate the students of the Chemical Engineering Department for their accomplishment.

Their dedication, discipline, and teamwork were evident in every match, showcasing their competitive spirit. This victory highlights the students' ability to excel not just academically but also in extracurricular activities. The achievement has brought pride and recognition to the department and institution alike. We look forward to witnessing more such remarkable feats in the future.

IEEE Achievement



IEEE

IEEE Women in AeroSTEM Experiential program is an initiative to empower the young women in Aeromodelling and STEM Fields. As the Chair of IEEE Mr. G. Kumaran, III B.Tech. Chemical Engineering and part of the organising committee of this program, Mr. G. Kumaran had the privilege to handle a session on basic presentation skills and basic softskills for the students of grade 7 to 9 of SES Matriculation Higher Secondary School, Coimbatore

NPTEL Achievement

KPR Institute of Engineering and Technology
(Autonomous, NAAC "A")

DEPARTMENT OF CHEMICAL ENGINEERING

Congratulations

NPTEL Achievements

Ms. R. Harshitha
III B.Tech. ChemE
Elite
Hydrogen Energy: Production, Storage, Transportation and Safety

Mr. S. Baalakumaran
III B.Tech. ChemE
Successfully Completed Thermal Processing of Foods

Mr. S. Baalakumaran
III B.Tech. ChemE
Successfully Completed Hydrogen Energy: Production, Storage, Transportation and Safety

G20
TECH 500

Ms. R. Harshitha, Mr. S. Baalakumaran, and Mr. R. Mouleeswaran of III B.Tech. Chemical Engineering have successfully completed NPTEL courses on Hydrogen Energy: Production, Storage, Transportation, and Safety and Thermal Processing of Foods. Their accomplishment reflects their dedication to expanding their knowledge beyond the classroom and exploring advanced concepts in emerging technologies and food processing. The course on Hydrogen Energy provided them with insights into sustainable energy solutions, while the Thermal Processing of Foods course equipped them with a deep understanding of food preservation techniques.



CONGRATULATIONS!



F/C Sandeepraaj P
III - EEE

GOLD MEDAL
Best Flying Cadet



F/C Eraja Srider T
III - CHEM

GOLD MEDAL
Aeromodelling - Control Line

Inter Air Squadron Competition (IASC) - 2023 (State Level)
Air Force Station, Tambaram, Chennai

kpriet.edu.in G /KPRIETonline

Congratulations to F/C Eraja Srider T of III B.Tech. Chemical Engineering for winning Gold Medal as Best Flying Cadet. This remarkable achievement showcases his exceptional skills in aeromodelling and his dedication to excelling in the field of aerospace. His performance in a highly competitive state-level event reflects his hard work, precision, and passion for aeronautical engineering. Eraja Srider's victory not only brings pride to the Department of Chemical Engineering but also inspires fellow students to pursue their interests and talents in diverse fields.



"Discipline and unity are the cornerstones of greatness; through service and commitment, we shape a better tomorrow."

- National Cadet Corps (NCC)

Schemcon 2023 Participation

S. No.	Student Name	Year	Guide
1	Ms. S. Sushmitha	III B.Tech. ChemE	Dr. S. Karunakaran
2	Ms. M. Pavithra	III B.Tech. ChemE	Dr. A. Sowmya
3	Ms. N. D. Jayavarshini	II B.Tech. ChemE	Dr. M. Laxmi Deepak Bhatlu
4	Ms. G. Harsha Vardhini	II B.Tech. ChemE	Dr. M. Laxmi Deepak Bhatlu
5	Mr. S. S. Suriya Prasanna	II B.Tech. ChemE	Dr. M. Laxmi Deepak Bhatlu
6	Mr. R. Bupesh Kumar	II B.Tech. ChemE	Dr. M. Laxmi Deepak Bhatlu
7	Mr. S. Teepal Soorya	IV B.Tech. ChemE	Er. L. Dharani



Faculty Achievements

TANSEED 5.0 Fund

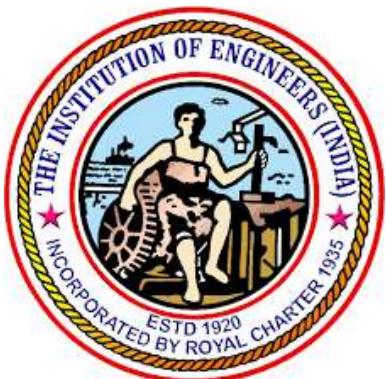
StartupTN has agreed to support “Mycoblooms Mushrromery”, a startup by Lt. Dr. A. K. Priya, Professor, Department of Chemical Engineering. “Mycoblooms Mushrromery” has been selected as a beneficiary of the TANSEED 5.0 scheme and agreed to support with an amount of Rs. 15,00,000.

Recognition



Lt. Dr. A. K. Priya,
Professor,
Department of Chemical Engineering
honored by Dr. R. Bhima Rao (Council
Member Chemical Engineering Division,
IEI Kolkata)

The Royal Charter Day is being observed by the Institution of Engineers (India) every year in the month of September. The IE(I), Coimbatore Local Centre celebrates the *“Royal Charter Day” in association with Department of Metallurgical Engineering, PSG College of Technology & The Indian Institute of Metals (IIM), Coimbatore Chapter with a technical lecture on “Rare Earth Minerals and Metals” on 12th September 2023 at PSG College of Technology, Coimbatore. Dr. R. Bhima Rao (Council Member Chemical Engineering Division, IEI Kolkata), chief guest for IEI Royal Charter Day Coimbatore Local Centre Honoured all the Executive Committee members of IEI Coimbatore local chapter in the event. Lt. Dr. A. K. Priya, Professor, Department of Chemical Engineering was honored during the event by Dr. R. Bhima Rao.



"Scientists investigate that which already is; engineers create that which has never been."
— Albert Einstein

Faculty Achievements

Top 2% Scientists



KPRIET Institute of
Engineering and
Technology
(Autonomous, NAAC "A")

**WORLD
RANK**

Hearty Congratulations



Dr. P. Manoj Kumar
Asst/Mechanical Engineering



Dr. D. Vigneswaran
Asst/Electronics and Communication Engineering



Dr. A. Karthick
Asst/Electrical and Electronics Engineering



Dr. K. Ravi Kumar
Professor/Mechanical Engineering



Dr. L. Rajeshkumar
Asst/Mechanical Engineering



Lt. Dr. A. K. Priya
Professor/Chemical Engineering

are recognised as

World's Top 2% Scientists (October 2023)
by

Stanford University, USA

KPRIETonline

Lt. Dr. A. K. Priya, Professor, Department of Chemical Engineering is recognized as World's Top 2% Scientists (October 2023) by Stanford University, USA. This prestigious accolade is a testament to Dr. Priya's exceptional contributions to the field of engineering. We extend our heartfelt congratulations to Dr. Priya for this remarkable accomplishment, which not only brings honor to our institution but also inspires us to strive for excellence in our pursuits. This recognition serves as a motivation for students and faculty alike to aim higher and make meaningful contributions to society.

Guest Speaker

The Institution of Engineers (India)
Salem Local Centre, Salem
Celebrations of

WORLD HABITAT DAY
Theme : Resilient urban economies. Cities as drivers of growth and recovery

Guest Speaker
Lt. Dr. A. K. PRIYA, M.E, Ph.D.,
PROFESSOR
DEPARTMENT OF CHEMICAL ENGINEERING
KPRIET INSTITUTE OF ENGINEERING AND TECHNOLOGY
COIMBATORE

WORLD STANDARDS DAY
Theme : Shared vision for a Better World: Incorporating SDG 3

Guest Speaker
Dr. K. GOMATHI, M.Sc., M.Phil., Ph.D.,
ASSISTANT PROFESSOR
DEPARTMENT OF HOME SCIENCE
SRI SARADA COLLEGE FOR WOMEN (AUTONOMOUS)
SALEM

On 25th October, 2023 (Wednesday) at 07.00 PM through Zoom
Zoom Meet ID : 820 9685 7239 / Password : IEISLC

You are cordially invited

Er. SR. Saravanan, FIE
Chairman, IEI-SLC &
IEI Council Member

Er. N. Senthil Kumar, FIE
Honorary Secretary
IEI-SLC, Salem

The Institution of Engineers (India) – Salem Local Centre celebrated WORLD HABITAT DAY 2023 on 20th October 2023 and WORLD STANDARDS DAY 2023 on 14th October 2023. As a part of the celebration, a virtual Technical Webinar was organized on 25th October 2023. Lt. Dr. A. K. Priya, Professor, Department of Chemical Engineering served as a Guest Speaker and delivered a wonderful talk. The session was interactive, with participants gaining valuable insights into the latest advancements in the field and their application in creating sustainable and resilient living environments.

We extend our heartfelt gratitude to Lt. Dr. A. K. Priya for her valuable contribution to our World Habitat Day and World Standards Day celebrations. We also thank all the participants who made the virtual Technical Webinar a resounding success.

Faculty Achievements

NPTEL Achievements



National Programme on Technology Enhanced Learning (NPTEL)

It is an initiative by the Indian Institutes of Technology (IITs) and the Indian Institute of Science (IISc) to provide quality education in engineering, science, and management through online courses and video lectures.

IEEE Executive Committee Member



Hearty congratulations to Lt. Dr. A. K. Priya, Professor, Department of Chemical Engineering, for being elected as the Executive Committee member of the Institution of Engineers (India), Coimbatore Local Centre, for the term 2023–2025. This prestigious role is a testament to her exemplary contributions to the field of Chemical Engineering and her dedication to the engineering community. Her expertise and leadership will undoubtedly bring valuable insights and advancements to the Institution.

NCC



Hearty Congratulations to Lt. Dr. A. K. Priya, Professor, Department of Chemical Engineering for getting commended by the Director General for her exemplary performance in NCC for the year and will be awarded during RDC 2024. The Department of Chemical Engineering takes immense pride in her success and wishes her continued excellence in all her endeavors.

Faculty Achievements

IEEE STEM

STEM EDUCATION FOR GIRLS

Resource Person
Dr. R. Umapriya
Assistant Professor (Sl.G.)
Department of Chemical Engineering
KPR Institute of Engineering and Technology

Technical Partner: IEXPLORERE Date: 08/10/2023 Outreach Partner: IEEE 50th Anniversary

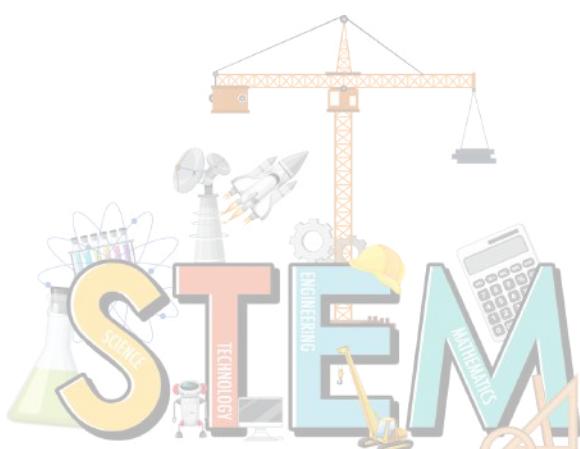
Dr. R. Umapriya, Assistant Professor (Sl.G.), Department of Chemical Engineering, served as a resource person for the IEEE STEM Education for Girls initiative. The program aimed to inspire and empower young girls to pursue careers in science, technology, engineering, and mathematics (STEM).

Dr. Umapriya delivered an engaging and insightful session, highlighting the significance of STEM education and its potential to shape a sustainable and innovative future. Through her expertise, she motivated participants by sharing real-world applications of STEM concepts and encouraged them to overcome challenges in their educational journeys.

The Department of Chemical Engineering congratulates Dr. Umapriya for her commendable contribution to this impactful initiative and for being a role model in promoting gender diversity in STEM fields.

"STEM education is not just about science, technology, engineering, and mathematics; it's about inspiring innovation and preparing the next generation of problem-solvers."

— Barack Obama



Faculty Development Program

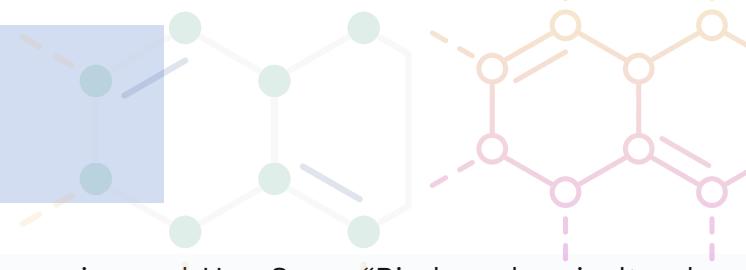
FDP

S.No.	Faculty Name	Title of FDP	Organizing Institute
1	Er. J. Rohan	Research Prospective on Sustainable Development for Industrial Revolution through Chemical Technology	JCT College of Engineering and Technology, Coimbatore
2	Er. L. Dharani	Research Prospective on Sustainable Development for Industrial Revolution through Chemical Technology	JCT College of Engineering and Technology, Coimbatore
3	Dr. R. Umapriya	Research Prospective on Sustainable Development for Industrial Revolution through Chemical Technology	JCT College of Engineering and Technology, Coimbatore
4	Mr. A. Pasupathi	Research Prospective on Sustainable Development for Industrial Revolution through Chemical Technology	JCT College of Engineering and Technology, Coimbatore
5	Er. L. Dharani	Sustainable Development in Chemical, Environmental and Life Science Applications	Coimbatore Institute of Technology, Coimbatore
6	Dr. R. Umapriya	Sustainable Development in Chemical, Environmental and Life Science Applications	Coimbatore Institute of Technology, Coimbatore

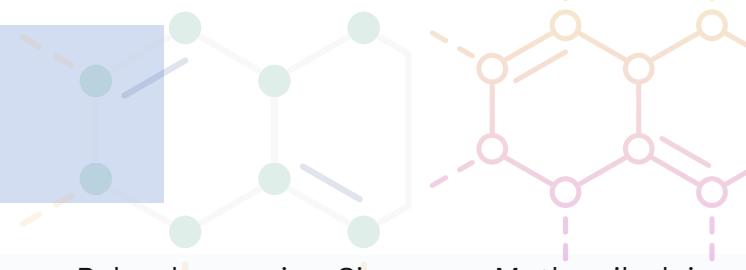
Book Chapter Publications

1. L. Dharani and Sasikala Chinnasamy. "Cyber-Physical Systems in Agriculture: Applications, Challenges, and Future Perspectives" Contemporary Developments in Agricultural Cyber-Physical Systems, IGI Global, August 2023.
2. N. Prabhu, M. Atchaya, R. Kiruthikadevi, A.V. Rithika, S. Jeevitha and S. Karunakaran. "Myconanotechnology in agricultural and veterinary sector". Fundamental Concepts, Mechanism and Industrial Applications Progress in Biochemistry and Biotechnology, Elsevier, August 2023.
3. R. Umapriya and L. Dharani. "Humanism Learning Theory". Engineering Minds: Navigating the Intersection of Pedagogy and Engineering Through Learning Theories. The Charulatha Publications, August 2023.
4. R. Umapriya and L. Dharani. "Situation Learning Theory". Engineering Minds: Navigating the Intersection of Pedagogy and Engineering Through Learning Theories. The Charulatha Publications, August 2023.
5. J. Rohan. "Learning Theories in Education: A Comprehensive Overview of Key Theoretical Perspectives". Engineering Minds: Navigating the Intersection of Pedagogy and Engineering Through Learning Theories. The Charulatha Publications, August 2023.
6. J. Rohan. "Constructivism learning theory". Engineering Minds: Navigating the Intersection of Pedagogy and Engineering Through Learning Theories. The Charulatha Publications, August 2023.
7. Savvas Giannis Mastropetros, Konstantina Tsigkou, Yannis Cladas, Arun Kumar Priya and Michael Kornaros. "Effect of Nitrogen, Salinity, and Light Intensity on the Biomass Composition of Nephroselmis sp.: Optimization of Lipids Accumulation (Including EPA)". Fatty Acids from Marine Organisms, MDPI, October 2023.
8. L. Dharani, R. Umapriya, J. Rohan, G. Surendran and P. Deepak. "Microbes and wastewater treatment". Clean Technologies Toward the Development of a Sustainable Environment and Future: Physicochemical, Biochemical, and Biotechnological approaches. IWA, December 2023.

Journal Publications

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1. A. K. Priya, Avinash Alagumalai, Balaji Devarajan and Hua Song. "Bio-based agricultural products: a sustainable alternative to agrochemicals for promoting a circular economy". RSC Sustainability, vol. 1, no. 4, July 2023, pp. 746 – 762.
 2. Sofiya Karunanithi, Ashish Kapoor, P. Senthil Kumar, Sivasamy Balasubramanian and Gayathri Rangasamy. "Solvent extraction of acetic acid from aqueous solutions: A review", Separation Science and Technology, vol. 58, no. 11, July 2023, pp. 1985 -2007.
 3. A. K. Priya, "Biosorption of heavy metal ions using Green Algae (Sargassum Wightii) – Equilibrium, Kinetics and Thermodynamic Studies", Iranian Journal of Chemistry and Chemical Engineering, July 2023
 4. V. Kalaiyarasi, Meenakshi, Sanjay Jain, Shagun Jain, Umapriya R, Sarala R and M. Siva Ramkumar. "Bio-Inspired Optimization Technique for Feature Selection to Enhance Accuracy of BC Detection". IEEE International Conference on Integrated Circuits and Communication Systems (ICICACS), July 2023.
 5. Nitu Kumari, M. Laxmi Deepak Bhatlu, V. Sudharsan, T. Muthu Kutty and Neethu Jayan. "Green synthesis and characterization of Zinc and Copper oxides nanocomposite using Phyllanthus emblica extracts and its antibacterial and antioxidant properties", Materials Today: Proceedings, July 2023.
 6. Abhay Chaturvedi, Rohan J, Murali Saktheeswaran, Samson Isaac J, Ambujam Kathan and G.G. Raja Sekhar. "Design of COVID19 Detection for Risk Identification using Deep Learning Approach". IEEE International Conference on Integrated Circuits and Communication Systems (ICICACS), July 2023.
 7. A. K. Priya, Balaji Devarajan, Avinash Alagumalai and Hua Song. "Artificial intelligence enabled carbon capture: A review". Science of The Total Environment, vol. 886, August 2023.
 8. Gomathi Ramalingam, A. K. Priya, Lalitha Gnanasekaran, Saravanan Rajendran and Tuan K.A. Hoang. "Biomass and waste derived silica, activated carbon and ammonia-based materials for energy-related applications – A review", Fuel, vol. 355, August 2023.
 9. Elumalai Ragulkumar, Pulsamy Sambath, Krishna Suresh, Sivasamy Balasubramanian and Ali J. Chamkha, "Soret-Dufour mass transfer effects on radiative chemically dissipative MHD plain convective water nanofluid (Al_2O_3 , Cu, Ag, & TiO_2) flow across a temperature-controlled upright cone surface with heat blow/suction", Numerical Heat Transfer, Part A: Applications, August 2023, pp. 1 – 19.
 10. A.K. Priya, M. Muruganandam, Muhammad Imran, Rana Gill, Minnam Reddy Vasudeva Reddy, Mohd Shkir, M.A. Sayed, T.H. AlAbdulaal, H. Algarni, Mohd Arif g, Niraj Kumar Jha, Satbir S. Sehgal, "A study on managing plastic waste to tackle the worldwide plastic contamination and environmental remediation", Chemosphere, vol. 341, August 2023.

Journal Publications

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11. Vijay Vaishampayan, Oinam Robita Chanu, Balasubramanian Sivasamy, Muthamilselvi Ponnuchamy, Varshini Karthik, Ambar Pendharkar, Lohith Srinivas Thotakura, Aryan Prabhu, Venkatesan Dhananjeyan and Ashish Kapoor. "Microfluidic paper-based device coupled with 3D printed imaging box for colorimetric detection in resource-limited settings", *HardwareX*, vol.15, September 2023.
 12. Yogeshwaran Venkatraman, A. K. Priya, Nadavala Siva Kumar, Ahmed I. Osman, Muruganandam Muthiah, Ahmed S. Al-Fatesh and Janardhan Reddy Koduru. "Exploring Modified Rice Straw Biochar as a Sustainable Solution for Simultaneous Cr (VI) and Pb (II) Removal from Wastewater: Characterization, Mechanism Insights, and Application Feasibility". *ACS Omega*, vol. 8, no. 41, September 2023.
 13. Tahani Awad Alahmadi, Sulaiman Ali Alharbi, Balasubramani Ravindran and Karunakaran Saravanan. "Evaluation of Antioxidant and Oxidative Stress Activity of Carthamus tinctorius L. Extract in Lung Cancer A549 Cells". *Indian Journal of Pharmaceutical Education and Research*, vol. 57, no. 4, September 2023, pp. 1112 – 1118.
 14. Aravind Samraj, Debabrata Barik, Laxmi Deepak Bhatlu, Sachindra Kumar Rout, Badreddine Ayadi, Ahmed Kadhim Hussein and Lioua Kolsi. "Effect of Diethyl Ether on the Performance and Emission Characteristics of a Diesel Engine Fueled with a Light Fraction of Waste Cooking Oil". *Processes*, vol. 11, no. 9, September 2023.
 15. Ahmed M. Elgarahy, A.K. Priya, Hamida Y. Mostafa, E.G. Zaki, S.M. Elsaheed, M. Muruganandam and Khalid Z. Elwakeel. "Toward a circular economy: Investigating the effectiveness of different plastic waste management strategies: A comprehensive review". *Journal of Environmental Chemical Engineering*, vol. 11, no. 5, October 2023.
 16. Karunakaran Saravanan, Abdullah A. Alarfaj, Abdurahman Hajinur Hirad, Balasubramani Ravindran and Shilpa Perumal Narasimhamoorthi. "Anti-bacterial and in silico analysis of biogenic fabrication of CuO nanoparticles employing Coleus amboinicus leaf extract". *Biomass conservation and Biorefinery*, October 2023.
 17. Subha C and Priya A. K. "Mustard (Brassica Nigra) Cake Powder Biochar/Nafion Composite as ORR Catalyst in Single Chambered Air Cathode MFC". *Iranian Journal of Chemistry and Chemical Engineering*, October 2023.
 18. Gokulan Ravindiran, Sivarethnamohan Rajamanickam, Muralikrishnan Ramalingam, Gasim Hayder, Balamurugan Karupaiya Sathaiah, Madhava Krishna Reddy Gaddam, Senthil Kumar Muniasamy and Priya Arunkumar. "Conversion of seaweed waste to biochar for the removal of heavy metal ions from aqueous solution: A sustainable method to address eutrophication problem in water bodies". *Environmental Research*, vol. 241, November 2023.

Journal Publications



19. Gokulan Ravindiran, Sivarethnamohan Rajamanickam, Karthick Kanagarathinam, Gasim Hayder, Gorti Janardhan, Priya Arunkumar, Sivakumar Arunachalam, Abeer A. AlObaid, Ismail Warad and Senthil Kumar Muniasam. "Impact of air pollutants on climate change and prediction of air quality index using machine learning models", Environmental Research, vol. 239, no. 1, December 2023.
20. Priya A. K, Muruganandam M, Sivarethnamohan Rajamanickam, Sujatha Sivarethnamohan, Madhava Krishna Reddy Gaddam, Priya Velusamy, Gomathi R, Gokulan Ravindiran, Thirumala Rao Gurugubelli and Senthil Kumar Muniasamy. "Impact of climate change and anthropogenic activities on aquatic ecosystem - A review". Environmental Research, vol. 238, no. 2, December 2023.



Patents

Patent Publications

S. No.	Faculty Name	Title of the Invention	Application No / Design No	Status
1	Dr. R. Umapriya	Automatic Prediction of Corona Virus Using Chest Xray and CT Scan	202311056734A	Published
2	Dr. R. Umapriya	Device for Detecting Diseased Leaves in Plant by Image Processing	390511-001	Grant Certification Received
3	Mr. N. Arunkumar	Ultrasonic Milk Analyser	390401-001	Grant Certification Received
4	Dr. R. Umapriya & Mr. J. Rohan	Medical Instrument For Monitoring Respiratory Disease	390717-001	Grant Certification Received
5	Lt. Dr. A. K. Priya	Smart Automated lot-based Dry Plant Content Analyser	202341055085	Published

Paintings



Art by
Mr. N. A. Raghul,
II B.Tech. Chemical Engineering



Art by
Mr. P. K. Prakash Raj,
IV B.Tech. Chemical Engineering

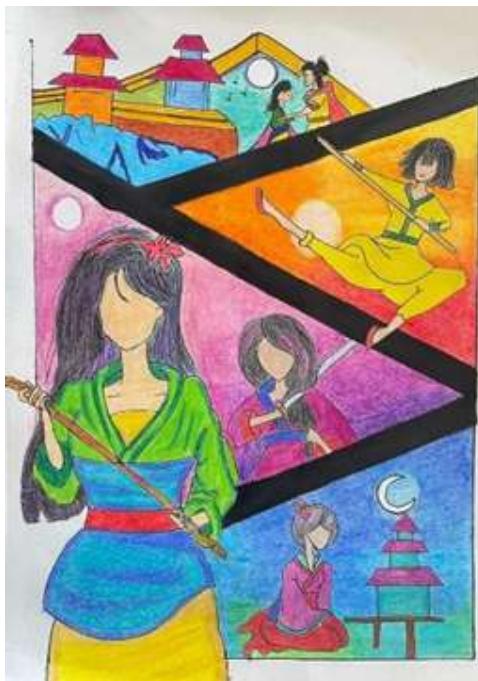


Art by
Mr. P. K. Prakash Raj,
IV B.Tech. Chemical Engineering



"Art washes away from the soul the dust of everyday life."
— Pablo Picasso

Paintings



Art by
Ms. G. Harsha Varshini,
II B.Tech. Chemical Engineering



Art by
Mr. P. K. Prakash Raj,
IV B.Tech. Chemical
Engineering



Art by
Mr. P. K. Prakash Raj,
IV B.Tech. Chemical
Engineering



Art by
Mr. P. K. Prakash Raj, IV B.Tech. Chemical Engineering



Student Experiences



KPRIET takes pride in its splendid green campus, offering a serene backdrop for learning. The diverse array of student clubs encourages active participation, with students undertaking various projects guided by our experienced staff. Motivation to engage in a multitude of events is a cornerstone of our approach. Coupled with outstanding labs, KPRIET is dedicated to delivering a world-class education, ensuring students receive a comprehensive and enriching academic experience.

At KPRIET, the Chemical Engineering Department delivers a robust educational experience, seamlessly integrating theoretical knowledge and practical applications. Our faculty, comprised of seasoned industry professionals, guides students through hands-on learning experiences in cutting-edge laboratories. Emphasizing research, internships, and mentorship, the curriculum is designed to prepare students for the complexities of their future careers. We foster the development of ethical, forward-thinking engineers poised to make significant contributions across diverse industries.



The Department of Chemical Engineering at KPRIET is a vibrant hub that blends theoretical knowledge with practical applications. Led by experienced faculty with diverse industry backgrounds, the curriculum emphasizes hands-on learning through well-equipped laboratories. It fosters a culture of research and innovation, integrating collaborative projects and industry exposure. The faculty serves as mentors, guiding students toward successful careers while upholding a commitment to excellence. Graduates consistently contribute significantly to the field, reflecting the department's dedication to shaping innovative and ethical chemical engineers.

"Our department is more than classrooms and labs; it's where engineering begins, friendships are forged, and dreams are turned into reality."

- Students, Chemical Engineering





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Technology**

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Avinashi Road, Arasur, Coimbatore.



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