

Chemical Chronicle **NEWSLETTER**

Volume 4, Issue 1 (July to December 2024)



Department of Chemical Engineering
College of Engineering and Technology
SRM Institute of Science and Technology
Kattankulathur - 603 203
Chengalpattu District, Tamil Nadu, India

Website: <https://www.srmist.edu.in/department/department-of-chemical-engineering/>

Instagram: https://instagram.com/srmchemical_official

LinkedIn: <https://www.linkedin.com/company/the-srm-chemical-club/about/>



| Contents | Page Number |
|--|--------------------|
| From the HoD's Desk | 1 |
| Editorial Desk | 2 |
| About the Department and its Vision & Mission | 3 |
| Paper Publications | 4 |
| Book Chapter Published | 11 |
| Patent Published | 11 |
| Industrial Consultancy Project Sanctioned | 11 |
| Awards & Achievements | 12 |
| Technical Expert Members | 14 |
| Reviewer in Journals/ Books/ Book Chapters | 15 |
| Technical Talks Delivered | 16 |
| Faculty Abroad Program | 17 |
| Oral/Poster Presentations | 18 |
| Events Participated by Faculty | 20 |
| Events Participated by Students | 23 |
| Online Course Completed | 27 |
| Rank Holders and Students Performance (2024 batch) | 27 |
| On Campus Placements | 28 |
| Admitted for Higher Studies (Batch 2020 - 2024) | 29 |
| Merit-Based Scholarships Awarded by SRMIST | 30 |
| Ph.D. Progress Details of Research Scholars | 31 |
| Collaboration with Foreign Universities | 32 |
| Annual Academic Audit 2023-2024 | 33 |
| Industrial Visit | 34 |
| Department Events Organized | 35 |
| Alumni Day-2024 | 55 |
| Creative Corner | 57 |
| Message from the Alumni | 61 |
| Thirukkural | 63 |

From the HoD's Desk



Dr. S. Vishali

Head of the Department, Chemical Engineering

Dear Readers,

Greetings!

*It is with immense pride and joy that I present this edition of the **Chemical Chronicle**, covering the highlights of the Department of Chemical Engineering at **SRM Institute of Science and Technology** for the period from **July to December 2024**. This newsletter marks the **first volume published since I took charge as the Head of the Department**, making it a special milestone for me and the department.*

*The past six months have been filled with academic milestones, impactful research publications, industry collaborations, and student excellence in both technical and extracurricular domains. I am delighted to share that our **B. Tech. Chemical Engineering program has received NBA accreditation for three years (July 2024 – June 2027)**, reaffirming our commitment to maintaining the highest educational standards. Our faculty members have also made significant contributions, with an impressive **94 % SCI publication** and research findings published in high-impact journals. The department has further strengthened its **industrial consultancy projects** and **collaborations with foreign universities**, opening new avenues for knowledge exchange and global engagement.*

*The accomplishments of our students in **placements, research, competitive events, and higher education admissions** speak volumes about their dedication and the quality of education imparted by our faculty. The department continues to focus on **innovative pedagogical methods, industry-aligned curriculum updates, and holistic development** to ensure that our graduates remain at the forefront of technological advancements.*

I extend my heartfelt gratitude to our faculty, students, alumni, and industry partners for their unwavering support and contributions toward making our department a hub of excellence. As we step into another promising phase, let us continue to strive for greater heights and make meaningful contributions to the field of Chemical Engineering.

E-mail: hod.chem.ktr.et@srmist.edu.in

Phone: 044 – 2741 7818

Editorial Desk

Dear Readers,

Greetings!

We are delighted to present **Volume 4, Issue 1** of the bi-annual Chemical Engineering Department Newsletter, **The Chemical Chronicle**, covering the period from **July to December 2024**. This edition highlights the remarkable achievements, events, and initiatives undertaken by our students, faculty, staff, and alumni. The past months have been filled with significant accomplishments, including publications, patents, projects, placements, outreach activities, and alumni engagements. Our students and faculty have excelled across both technical and non-technical events, underscoring the exceptional contributions they make in the fields of teaching and research, which make our department stand out. Notable highlights in this issue include the **NBA Accreditation for the B.Tech. Chemical Engineering program, for three years from July 1st 2024, valid until 30th June 2027**, and a 94 % SCI publication, with a highest impact factor of **13.3** by **Dr. S. Sam David** in the prestigious **Chemical Engineering Journal**. Additionally, **Dr. S. Anandhakumar** has been recognized as **one of the Top 2% Scientists** by Stanford University/Elsevier for 2024. A heartfelt thanks to all the students who dedicated their time and effort to make this edition possible. We hope this newsletter serves as both an informative and inspiring read. Enjoy!

Warm regards,

Team Newsletter.

"Precision, patience, and persistence create perfection."



Dr. E. Poonguzhali

Assistant Professor, Chemical Engineering



Ms. Justine Staines Yellaka
II Year B. Tech.



R. John Richardson
II Year B. Tech.



About the Department

The Department of Chemical Engineering was started in the year 1995 offering B. Tech. degree programme in Chemical Engineering as one of the core departments of SRM Engineering College under the University of Madras. The department started offering a post-graduate programme, M. Tech. (Chemical Engineering) since 2002-2003. From the academic year 2003-2004, the department started functioning under SRM Institute of Science and Technology. The department now offers **B. Tech. (Chemical Engineering), M. Tech. (Chemical Engineering) and Ph.D. (part time and full time)** under SRM Institute of Science and Technology. So far, 26 batches of B. Tech. students and 21 batches of M. Tech. students have graduated from this department with meritorious performance. Presently, the department has 17 Ph.D. scholars working on various socially relevant projects. **The B. Tech. Chemical Engineering Program is accredited by the National Board of Accreditation (NBA) for three years, from July 1, 2024, to June 30, 2027.**

Vision of the Department

To utilize Chemical Engineering and Technology and ensure overall socio-economic growth, welfare, and progress of Indian society and the World-at-large by supporting Academia, Industries through Research and Development, Consultancy and graduating high-quality Chemical Engineers.

Mission of the Department

Mission Statement – 1

To facilitate high quality education, well-grounded in the fundamental and applied areas of engineering necessary for learners to contribute effectively to chemical and allied industries.

Mission Statement - 2

To educate, prepare, inspire and mentor learners with the technical and professional skill-set necessary to excel as professionals, grow in their careers and contribute to chemical engineering science and technology.

Mission Statement – 3

To inculcate social-responsibility in learners and train them to contribute effectively to science and society.

Paper Publications

The **faculty members** along with their **students** have published **16 papers** in refereed journals, **1 book chapter** and **1 patent** during the period, July to December 2024. The Department of Chemical Engineering congratulates its faculty members and students for their tremendous efforts towards contribution for publication in peer reviewed journals/books and for publishing patents.

| Paper Publications | July to December 2024 |
|---|-----------------------|
| Number of Publications | 16 |
| Number of Corresponding Author Publications | 12 (75 %) |
| Number of First Author Publications | 14 (88 %) |
| Number of Science Citation Indexed (SCI) Publications | 15 (94 %) |
| Highest Impact Factor | 13.3 |
| Average Impact Factor | 5.243 |
| Number of Q1 Publications | 9 (56 %) |
| Number of Q2 Publications | 3 (19 %) |
| Number of International Collaborative Publications | 2 (13 %) |
| Number of National Collaborative Publications | 7 (44 %) |



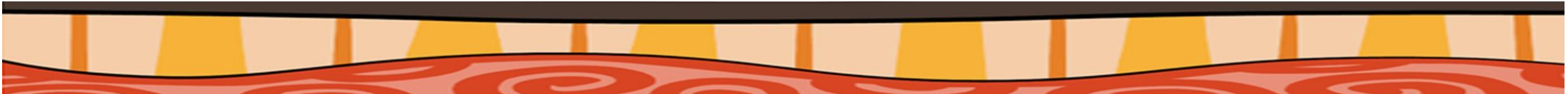
Dr. S. Sam David - Publication with highest IF:13.3

*Hearty Congratulations, **Dr. Sam David!** Your publication in the **prestigious Chemical Engineering Journal** with an **outstanding impact factor of 13.3** is indeed a remarkable achievement. You have truly made us proud and elevated our department's reputation, setting a standard that others will look up to.*

| S. No. | Authors | Title of the Paper | Name of the Journal | Month and Year of Publication | Volume number, Issue number, Page numbers, ISSN Number | DOI | Indexing, Impact Factor, Quartile |
|--------|--|---|---|-------------------------------|--|---|--|
| 1. | R R Parthasarathi, Rohith Ram Shanmugam, S. Sam David* | Review on the role of Density-Based separation in PCBs recycling | Chemical Engineering Journal | 27-07-2024 | 496, 2024,154339. ISSN 1385-8947 | https://doi.org/10.1016/j.cej.2024.154339 | SCI IF: 13.3 Q1 |
| 2. | V. Ganesh, G. Sudha, B. Chitra*, S. Vanisuvathsala, K. Vidhyavarshini | Role of nanocoolant in optimizing Heat transfer | International Research Journal on Advanced Engineering and Management | 07-07-2024 | 02 (07 July 2024) 2470-2473, e ISSN: 2584-2854 | https://doi.org/10.47392/IRJAEM.2024.0355 | Google Scholar |
| 3. | Meenu Mariam Jacob, P. Muthamilselvi*, Akhina Roshin, Ashish Kapoor | Adsorptive removal of oxytetracycline hydrochloride using bagasse-based biochar powder and beads | Chemosphere | 03-08-2024 | Volume 363, 2024, 143016 ISSN 0045-6535 | https://doi.org/10.1016/j.chemosphere.2024.143016 | SCI IF: 8.1 Q1 |
| 4. | E. Kavitha*, K. M. Yuvaraj, Ashish Kapoor | Chitosan-blended membranes for heavy metal removal from aqueous systems: A review of synthesis, separation mechanism, and performance | International Journal of Biological Macromolecules | 23-08-2024 | Volume 279, Part 2, 134996 ISSN: 0141-8130 | https://doi.org/10.1016/j.ijbiomac.2024.134996 | SCI IF: 7.7 Q1 |

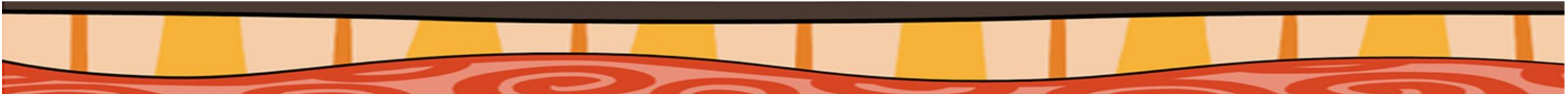
| S. No. | Authors | Title of the Paper | Name of the Journal | Month and Year of Publication | Volume number, Issue number, Page numbers, ISSN Number | DOI | Indexing, Impact Factor, Quartile |
|--------|---|---|--|-------------------------------|--|---|-----------------------------------|
| 5. | Sharmiladevi Ramamoorthy, Prasanth Prasanen, Sangamithra Nehru, S. Anandhakumar* | Incorporation of CuS nanorods in polyelectrolyte multilayer microcapsules improved cancer cell cytotoxicity and signal intensity in ultrasound imaging | International Journal of Pharmaceutics | 24-08-2024 | Volume 664, 2024, 124638. ISSN 0378-5173 | https://doi.org/10.1016/j.ijpharm.2024.124638 | SCI IF: 5.3 Q1 |
| 6. | Vasanthi Mani, S. Kiruthika, R. Jeyalakshmi* | Optimization and modeling of process parameters for nutrient recovery from sewage wastewater | Water Science and Technology | 05-09-2024 | 90(6), 1744-1758 ISSN: 0273-1223 | https://doi.org/10.2166/wst.2024.301 | SCI IF -2.5 Q1 |
| 7. | S. Anandhakumar*, Nishakavya Saravanan, Hyoryong Lee, Chandran Murugan, Seungun Yang, Sukho Park* | MoS ₂ -Based Earth-like Self-Rotating and Magnetically Navigated Nanorobots for Magnetic Resonance Imaging, Cancer Cell Imaging, and Therapy | Materials Today Chemistry | 10-09-2024 | 41, 2024, 102297 ISSN: 2468-5194 | https://doi.org/10.1016/j.mtchem.2024.102297 | SCI IF:6.7 Q1 |

| S. No. | Authors | Title of the Paper | Name of the Journal | Month and Year of Publication | Volume number, Issue number, Page numbers, ISSN Number | DOI | Indexing, Impact Factor, Quartile |
|--------|--|---|--|-------------------------------|--|---|--|
| 8. | Takumi Nagasaka, G. Keerthiga*, Kartikeya Shukla | Green synthesis of Cu-based metal organic framework for electrochemical CO ₂ conversion into formic acid | Materials Today Communications | 12-09-2024 | 41, 110419, ISSN: 2352-4928 | https://doi.org/10.1016/j.mtcomm.2024.110419 | SCI IF: 3.7 Q2 |
| 9. | Meenu Mariam Jacob, P. Muthamilselvi *, Ashish Kapoor S. Prabhakar | Adsorptive membrane separation for eco-friendly decontamination of chlorpyrifos via biochar-impregnated cellulose acetate mixed matrix membrane | Environmental Science and Pollution Research | 13-09-2024 | 31, (44) 56314–56331 ISSN: 0944-1344 | https://doi.org/10.1007/s11356-024-34912-4 | SCI SNIP: 1.141 |
| 10. | T Sindhu, A T, Ravichandran, A Robert Xavier, K. Sofiya, M Kumaresavanji, | Impact of Gd doping on structural and magnetic characteristics of SrFeO ₃ perovskite nanomaterial | Journal of Physics: Condensed Matter | 27-09-2024 | 36 (2024) 505809 ISSN: 0953-898 | https://doi.org/10.1088/1361-648X/ad7b94 | SCI IF: 2.3 Q1 |



| S. No. | Authors | Title of the Paper | Name of the Journal | Month and Year of Publication | Volume number, Issue number, Page numbers, ISSN Number | DOI | Indexing, Impact Factor, Quartile |
|--------|--|---|----------------------------------|-------------------------------|--|---|---|
| 11. | Suriya Umapathy, Hareesh Balaji Rajamanivannan, S. Vishali, S. Sam David* | Towards Sustainable Homes: Exploring Point-of-Use Treatment for Laundry Water Recycling | Water, Air, & Soil Pollution | 30-09-2024 | 235,712, (2024) ISSN-0049-6979 | https://doi.org/10.1007/s11270-024-07543-1 | SCI IF: 3.8 Q2 |
| 12. | G. Keerthiga*, Akash Balakrishnan | Solar light-induced photocatalytic degradation of 2,4-dichlorophenoxyacetic acid using chitosan/g-C ₃ N ₄ beads | Desalination and Water Treatment | 09-10-2024 | 320 (2024) 100825 ISSN - 1944-3986 | https://doi.org/10.1016/j.dwt.2024.100825 | SCI IF: 1.0 Q3 |
| 13. | Hussain Albattah Alhusni, R. Thilakavathi, K. Suresh* | Assessment of Thermal Resistance of Hot Water in Pasteurization | ACS Omega | 14-11-2024 | 9 (47), 47274-47283 ISSN: 2470 - 1343 | https://doi.org/10.1021/acsomega.4c08394 | SCI IF: 3.7 Q2 |

| S. No. | Authors | Title of the Paper | Name of the Journal | Month and Year of Publication | Volume number, Issue number, Page numbers, ISSN Number | DOI | Indexing, Impact Factor, Quartile |
|--------|---|--|--|-------------------------------|--|---|--|
| 14. | K. Selvam, Kalpesh Sundarmurthy, K. Suresh, Saravanan Sundaram, K. Sofiya, Esakki Muthu Sankaran*, Shine Kadaikunnan, Jamal M. Khaled | The impact of additives and dope composition on hollow fiber ultrafiltration membrane for pure water permeability | International journal of research in physical chemistry and chemical physics | 26-11-2024 | ISSN: 0942-9352 | https://doi.org/10.1515/zpch-2024-0939 | SCI IF: 3.0 Q3 |
| 15. | V. Ganesh, Pushpavanam Subramaniam, M. P. Rajesh* | Computational and experimental studies on the thermal performance of synthesized composite nanofluid in rectangular microchannel heat sink | Results in Engineering | 12-12-2024 | 25 (2025), 103687. ISSN 2590-1230, | https://doi.org/10.1016/j.rineng.2024.103687 | ESCI IF: 6.0 Q1 |



| S. No. | Authors | Title of the Paper | Name of the Journal | Month and Year of Publication | Volume number, Issue number, Page numbers, ISSN Number | DOI | Indexing, Impact Factor, Quartile |
|--------|---|---|--------------------------------------|-------------------------------|--|---|---|
| 16. | K. Anbalagan* , I. Becky Miriyam | Comparative study on the assessment of modified Saccharum officinarum waste adsorbent for enhanced removal of phthalate esters in batch and breakthrough curve modeling studies | Journal of Water Process Engineering | 12-12-2024 | 69 (2025) 106764, ISSN: 2214 - 7144 | https://doi.org/10.1016/j.jwpe.2024.106764 | SCI IF: 6.3 Q1 |

Book Chapter Published

| S. No. | Authors | Chapter Number and Title | Title of the book | Date of Publication, Edition, Page Numbers, ISBN | Name of the Publisher | DOI |
|--------|---|--|--|--|-----------------------|---|
| 1. | Ramanujam Kanchana, P. Muthamilselvi * , Ashish Kapoor, P. Baskara Sethupathi | Part III: Coatings for Industrial and Environmental Applications Chapter No: 15 Coatings in the Automobile Application | Functional Coatings for Biomedical, Energy, and Environmental Applications | 04-10-2024, First Edition, 343-361, ISBN:9781394263141 | Wiley | https://doi.org/10.1002/9781394263172.ch15 |

Patent Published

| S. No. | Inventors | Title of the Patent | Date of Publication | Patenting Agency, Application Number |
|--------|---|---|---------------------|---|
| 1. | B. Muthukumaran, K. Mahalakshmi, P. Ilakkiya, S. Kiruthika , V. Selavarani, M. Priya, D. Gopi Prasath | All-Solid -State Sodium- Ion Coin -Cell Battery | 04-10-2024 | Intellectual Property – India 202441071507 |

Industrial Consultancy Project Sanctioned

| S. No. | Investigators | Title of the Project | Funding Agency | Sanctioned Amount in INR | Granted Date | Duration of the Project |
|--------|---|--|--|--------------------------|--------------|-------------------------|
| 1. | Dr. Phani Teja Bankupalli (PI - EEE) Dr. S. Kiruthika (Co PI) Prof. R. Sridhar (Co PI - EEE) | Services for Conceptualization, Mathematical Modeling, and Validation of Integrated Electrolyzer and Fuel Cell Systems | Sharda Motors Industries Limited - Chennai | 10 Lakhs | 19-07-2024 | 6 months |

Awards & Achievements

Heartfelt congratulations to **Dr. S. Anandhakumar** for being recognized as one of the **Top 2% Scientists by Stanford University/Elsevier for 2024**.



This remarkable achievement is a testament to your dedication, hard work, and outstanding contributions to your field. Your success is an inspiration to all, and we are confident that your continued research and innovations will have an even greater impact in the years to come. Wishing you continued success in all your future endeavours. Once again, congratulations on this prestigious recognition!

| S. No. | Name of the Student/ Research Scholar & Faculty | Title of the Presentation | Event | Awarding Agency | Date | Award |
|--------|--|--|---|--|------------|---|
| 1. | Rubasri P RA2211007010040 Amalaya M RA2211007010047 Meenakumari V RA2211007010048 III Year B. Tech. & Dr. S. Vishali | Demo of Product Making Using Waste Materials | Wealth Out of Waste (WOW 24) | Department of Mechanical Engineering in association with UHV, CET, SRMIST, KTR | 20-09-2024 | II Prize |
| 2. | Takumi Nagasaka RA2213008011001 Research Scholar & Dr. G. Keerthiga | Green Synthesis of Copper MOF for Electrochemical Reduction of CO ₂ | International Conference on Frontiers in Electrochemistry: Innovations in Supercapacitors and Batteries | B.S. Abdur Rahman Crescent Institute of Science and Technology, Vandalur, TN | 21-09-2024 | Best Presentation (Gold Medal) |
| 3. | Rubasri P RA2211007010040 III Year B. Tech. | | NSS Day Award Program | NSS Cell, CET, SRMIST, KTR | 24-09-2024 | Best Volunteer Award |
| 4. | Revathi P RA2311007010012 II Year B. Tech. | | Skill Intern | Startup India /Ministry of Education | 01-10-2024 | Campus Ambassador Award for entire |

| | | | | | | |
|----|--|--|---|---|------------|------------------------------------|
| | | | | | | September Month |
| 5. | Shuaib Hameedh MD RA2211007010027 III Year B. Tech. | | Charternite Celebrations of Lions Club | Lions Club of Chennai Pattinam | 12-10-2024 | Certificate of Appreciation |
| 6. | A. A. Aswin Kumar RA2311007010014 II Year B. Tech. | | All India Inter SAI fencing Championship | Sports Authority of India/Khelo India/ Ministry of Health affairs and Sports | 26-10-2024 | III Prize |
| 7. | Shemaiah Sam RA2312012010004 II Year M. Tech. & Dr. E. Poonguzhali | Poster Presentation - Synergistic and Intensified Process for the Removal of Heavy Metals from Aqueous Effluents | 3 rd International Conference on Higher Education Institutes Challenges & Solutions for Sustainable Development Goals 2024 (ICS DG 2024) - SDG 06 (Clean water and Sanitation) | Centre for Research in Environment, Sustainability Advocacy and Climate Change (REACH), Directorate of Research, SRMIST, KTR in association with National institute of Ocean Technology Ministry of Earth Sciences, Chennai | 05-12-2024 | I Prize |

Technical Expert Members

| S. No. | Faculty | Position Held | Place | Date |
|--------|-----------------------------|--|---|--------------------------------|
| 1. | Dr. K. Tamilarasan | Doctoral Committee Member | St. Joseph's College of Engineering, Chennai | 16-08-2024 (Online mode) |
| 2. | Dr. K. Suresh | Board of Studies Member | St. Peter's College of Engineering and Technology Avadi, Chennai | 29-10-2024 |
| 3. | Dr. K. Suresh | Board of Studies Member | Arunai Engineering College, Department of Chemical Engineering, Tiruvannamalai | 22-11-2024 |
| 4. | Dr. P. Muthamilselvi | External member for the Ph. D Candidate | Manipal Academy of Higher Education (MAHE) | 22-11-2024 |
| 5. | Dr. K. Anbalagan | Online Evaluation Member | Dr. M.G.R. Educational and Research Institute, Chennai | 03-12-2024 |
| 6. | Dr. K. Anbalagan | External Examiner for Practical Examination | Saveetha Engineering College, Chennai | 05-12-2024 |
| 7. | Dr. K. Anbalagan | QP scrutiny Member | Anna University, Chennai | 11-12-2024 |
| 8. | Dr. S. Sam David | Board of Studies Member – Subject Expert | Rajalakshmi Engineering College, Thandalam, Chennai | 16-12-2024 |
| 9. | Dr. G. Keerthiga | Evaluator for SRM SDG Hackathan 2024 at the 3 rd International Conference on Higher Education Institutes Challenges & Solutions for Sustainable Development Goals 2024 (ICSDG 2024) | Centre for Research in Environment, Sustainability Advocacy and Climate Change (REACH), Directorate of Research, SRMIST, KTR in association with DSBS, SCO, SRMIST, KTR | 12-11-2024 |
| 10. | Dr. S. Vishali | Co-Convener for 3 rd International Conference on Higher Education Institutes | Centre for Research in Environment, Sustainability Advocacy and Climate Change | 03-12-2024 to 05-12-2024 |

| | | | | |
|-----|-----------------------|--|---|------------|
| | | Challenges & Solutions for Sustainable Development Goals 2024 (ICSDG 2024) - SDG 06 (Clean water and Sanitation) | (REACH), Directorate of Research, SRMIST, KTR in association with National institute of Ocean Technology | |
| 11. | Dr. S. Vishali | Guest of honor for Valedictory Function | South West zone & all India Inter University Swimming & Diving (M&W) Tournament (2024-2025) organized by the Directorate of Sports, SRMIST, KTR | 23-12-2024 |

Reviewer in Journals/ Books/ Book Chapters

| S. No. | Faculty | Journals/ Book Chapters | Period |
|--------|---------------------------|--|-------------------------|
| 1. | Dr. E. Kavitha | Environmental Science and Pollution Research | August 2024 |
| 2. | Dr. E. Kavitha | Book Chapter "Wastewater Treatment by Adsorption Process on Mineral activated Carbon: Modeling and Prediction using an Intelligent Artificial Approach" of the Book entitled "Current Approaches in Engineering Research and Technology" | 30-09-2024 |
| 3. | Dr. K. Suresh | Chemical Engineering and Technology/ Wiley | 01-10-2024 |
| 4. | Dr. K. Sofiya | BP international | 15-10-2024 |
| 5. | Dr. K. Tamilarasan | ACS Journals | 21-10-2024 |
| 6. | Dr. E. Kavitha | Water Research, Desalination and Water Treatment | 01-11-2024 & 01-12-2024 |
| 7. | Dr. K. Suresh | Environmental Quality Management/Wiley | 09-11-2024 |
| 8. | Dr. K. Deepa | Environmental Technology Reviews | 22-11-2024 |
| 9. | Dr. S. Sam David | Journal of Electrostatics | 01-12-2024 |
| 10. | Dr. K. Tamilarasan | Springer Nature | 31-12-2024 |

Technical Talks Delivered

| S. No. | Name of the Faculty | Event | Organized by | Talk Category and Title | Date(s) |
|--------|---------------------------|---|---|---|------------|
| 1. | Dr. K. Suresh | Academic Guest Lecture | St. Peter's College of Engineering and Technology | Guest Lecture on Macroscopic Modeling of Process Engineering: A Conceptual Approach | 30-09-2024 |
| 2. | Dr. E. Poonguzhali | One week Online Short-Term Course (STC) on Recent Advancements in Wastewater Treatment Techniques (RAWTT-2024) | Department of Chemical Engineering, NIT Srinagar, J&K | Invited Talk on Application of Membrane Processes for Wastewater Treatment | 24-10-2024 |
| 3. | Dr. K. Suresh | Two Days Workshop on Applications of Simulation Software Tools in Chemical Engineering | St. Peter's College of Engineering and Technology, Avadi, Chennai, Tamil Nadu- 600 054 | Guest Lecture on versatile software package for Process Modeling and Design | 14-11-2024 |
| 4. | Dr. S. Vishali | 3 rd International Conference on Higher Education Institutes Challenges & Solutions for Sustainable Development Goals 2024 (ICS DG 2024) - SDG 06 (Clean water and Sanitation) | Centre for Research in Environment, Sustainability Advocacy and Climate CHange (REACH), Directorate of Research, SRMIST, KTR in association with National institute of Ocean Technology | Technical Talk on From Drains to Gains : The Game-Changing Impact of Grey Water Treatment & Recycling | 04-12-2024 |
| 5. | Dr. S. Sam David | Continuing Education & Community Service (CECS) Committee in MIE Section | Mechanical & Industrial Engineering, College of Engineering & Technology, UTAS-Muscat | Technical Talk on Process Modelling and Simulation using ASPEN PLUS | 05-12-2024 |

Faculty Abroad Program: A Global Research Initiative

Dr. S. Sam David, Assistant Professor from the **Department of Chemical Engineering at SRM Institute of Science and Technology**, has successfully participated in the **Faculty Abroad Program (FAP)** at the **University of Illinois Chicago (UIC), USA** from **July 5, 2024, to December 31, 2024**, hosted by the **Materials and Systems Engineering Lab** under the mentorship of **Dr. Meenesh R. Singh**. This program provided a transformative platform for academic and research excellence.



During his tenure at UIC, Dr. Sam David was actively engaged in research focused on **carbon management and sustainable technologies**. His work encompassed **CO₂ capture, electro-reduction to valuable chemicals, and hydrogen fuel storage and transport systems**. Additionally, he contributed to the design and fabrication of **3D-printed reactors for bubble column CO₂ capture** and conducted **CO₂ release experiments** to optimize carbon sequestration strategies.

His participation in the **climate engineering and control coursework** at UIC further enriched his knowledge in **geoengineering and CO₂ mitigation techniques**, enhancing his expertise in addressing global environmental challenges. Furthermore, he spearheaded the development of a **paper-based urea sensor**, an innovative tool with potential applications in **agriculture and healthcare**.

This international collaboration has significantly enhanced Dr. Sam David's research capabilities and opened new avenues for **future interdisciplinary projects**. His experience and expertise will undoubtedly contribute to the advancement of research and academic excellence within SRMIST. We extend our heartfelt congratulations to **Dr. S. Sam David** for this remarkable achievement and look forward to the impactful contributions that will stem from his participation in the **Faculty Abroad Program**.

Oral/Poster Presentations

| S. No. | Student & Faculty | Title of the Paper/Poster Presented | Event | Organized by | Date |
|--------|---|---|---|---|--------------------------|
| 1. | Dinesh S RA2312012010005 II Year M. Tech. & Dr. P. Muthamilselvi | Taming the dust: Minimizing brake particulate matter emission | National Level Workshop | B.S. Abdur Rahman Crescent Institute of Science and Technology | 22-08-2024 |
| 2. | Dr. Gopirajan P V CINTEL, SCO, CET, SRMIST, KTR Dr. P. Muthamilselvi | Smart Optimization of the Activated Sludge Process Using Machine Learning: A Step towards Sustainable Wastewater Treatment | National Conference on Artificial Intelligence and Machine Learning for Smart Waste Management | Sri Sairam Engineering College | 14-09-2024 |
| 3. | Chetna Gurunath Patil RA2211007010031 III Year B.Tech. & Dr. P. Muthamilselvi | Artificial Intelligence in Smart Waste Management | | | |
| 4. | Dr. S. Padmini, Dr. Pandian A Y. Sai Siddartha, R. Viswa Sudhan CINTEL, SCO, CET, SRMIST, KTR Dr. P. Muthamilselvi | Track BIN | | | |
| 5. | | Seg BIN | | | |
| 6. | Dr. S. Sam David | Innovative Pilot-Scale Reactors in Environmental Chemical Engineering | AICHE Annual Meeting 2024 | AICHE, San Diego Convention Center, Hilton San Diego Bayfront | 27-10-2024 to 31-10-2024 |

| | | | | | |
|-----|---|---|---|--|--------------------------|
| 7. | Parthasarathi R.R RA2313008011001 Research Scholar & Dr. S. Sam David | Maximizing non-metal purity in PCB recycling through gas-solid fluidized bed techniques | 14 th International Conference on Sustainable Waste Management and Circular Economy & IPLA Global Forum 2024 | GITAM (Deemed to be University), Vishakhapatnam Andhra Pradesh | 28-11-2024 to 01-12-2024 |
| 8. | Dr. V. Ganesh | Green synthesis of silver nanoparticles embedded on <i>Cocos Nucifera</i> coir for supercapacitors | | | |
| 9. | Antony Sebastian RA2312012010003 II Year M. Tech. & Dr. E. Kavitha | Separation of heavy metals from e-waste by complexation ultrafiltration (Poster Presentation) | 4 th International Conference on Bioprocess for Sustainable Environment and Energy (ICBSEE) – 2024 | National Institute of Technology Rourkela | 29-11-2024 to 01-12-2024 |
| 10. | Venkateswara Reddy RA2312012010002 II Year M. Tech. & Dr. K. Deepa | Metal organic frameworks as photocatalysis for degrading emerging contaminants in water (Poster Presentation) | | | |
| 11. | Udita Gulia RA2113010011030 Research Scholar & Dr. M. P. Rajesh | Protic Ionic Liquid Mediated Lipid Extraction from Wet Algal Biomass | International Conference on Green Energy Innovations for Sustainable Development (ICSDG 2024) SDG 7 – Affordable and Clean Energy | Department of Electrical and Electronics Engineering, Department of Mechanical Engineering, CET, SRMIST, KTR | 03-12-2024 to 05-12-2024 |

Events Participated by Faculty

| S. No. | Name | Event Name | Event Title | Organize | Date |
|--------|--|--------------------------------------|--|--|--------------------------|
| 1. | Dr. P. Muthamilselvi | Workshop | Insight on patent for computer process | Department of Networking and Communications, CET, SRMIST, KTR | 31-07-2024 |
| 2. | Dr. M. Magesh Kumar | Faculty Development Program | Recent advances in energy research for sustainable development | Department of Mechanical Engineering, CET, SRMIST, KTR | 05-08-2024 to 10-08-2024 |
| 3. | Dr. M. Magesh Kumar Dr G. Keerthiga | Workshop | Hands on training to use Design Expert Software for effective optimization of experiments | Department of Chemical Engineering, SRMIST and CQM, University of Madeira, Portugal | 02-09-2024 to 06-09-2024 |
| 4. | Dr. K. Sofiya | Faculty Development Program | Microsoft Power BI Data Analyst Associate | ICT Academy with SRMIST, KTR | 09-09-2024 to 13-09-2024 |
| 5. | Dr. P. Muthamilselvi | Workshop | Sustainable Approach on Automotive Brake Friction Materials for Electric Mobility | Centre of Automotive Materials, Department of Automobile Engineering, CET, SRMIST, KTR | 13-09-2024 & 14-09-2024 |
| 6. | Dr. E. Poonguzhali Dr. S. Kiruthika Dr. S. Vishali Dr. P. Muthamilselvi | 5 - Days Faculty Development Program | Harnessing Green IT: Transforming Tomorrow's Challenges to Innovation | Department of Computing Technologies, SCO, CET, SRMIST, KTR | 27-09-2024 to 03-10-2024 |
| 7. | Dr. K. Sofiya | Online Faculty Development Program | Emerging Technologies and Innovations: Pioneering Environmental Sustainability (ETIPES-2024) | K. K. Wagh Institute of Engineering and Research | 30-09-2024 to 04-10-2024 |
| 8. | Dr. S. Vishali | 5 Days Programme | Universal Human Values II | Value Education Cell, CET, SRMIST, KTR | 01-10-2024 to 05-10-2024 |

| | | | | | |
|-----|---|---|---|--|--------------------------|
| 9. | Dr. E. Poonguzhali Dr. S. Kiruthika Dr. K. Deepa Dr. G. Keerthiga Dr. E. Kavitha Dr. M. Magesh Kumar Dr. K. Anbalagan Dr. P. Muthamilselvi | Six Days Skill Training Program | Solar Thermal and Photovoltaic Systems | Department of Mechanical Engineering, CET, SRMIST, KTR in association with Solar Energy Society of India | 07-10-2024 to 12-10-2024 |
| 10. | Dr. K. Sofiya | Online Faculty Development Program | Process Optimization | UPL University of Sustainable Technology, Vataria, Ankleshwar | 14-10-2024 to 18-10-2024 |
| 11. | Dr. K. Anbalagan Dr. M. Magesh Kumar Dr. K. Suresh | One day National Seminar | "World Standards Day Celebrations" | Bureau of Indian Standards (BIS), Ministry of Consumer affairs, Food and Public Distribution, Govt of India, Chennai | 14-10-2024 |
| 12. | Dr. K. Deepa | 3 Days Faculty Development Programme | Data Science for Non-CSE | Department of Data Science and Business Systems, School of Computing, CET, SRMIST, KTR | 16-10-2024 to 18-10-2024 |
| 13. | Dr. P. Muthamilselvi | FDP | Research Opportunities in Semiconductor Materials and Devices | Department of ECE, CET, SRMIST, KTR | 18-10-2024 to 23-10-2024 |
| 14. | Dr. K. Selvam | One Week Online Short-Term Course (STC) | Recent Advancements in Wastewater Treatment Techniques (RAWTT-2024) | Department of Chemical Engineering, NIT Srinagar, Jammu & Kashmir | 21-10-2024 to 25-10-2024 |
| 15. | Dr. K. Deepa Dr. K. Anbalagan | Workshop | SAP Design Thinking Session | Academic Interface Program, Directorate of Career Centre SRMIST | 13-11-2024 |
| 16. | Dr. K. Sofiya | Refreshers Course | Refreshers course on MOOC'S and E-Content Development-online | UGC Malaviya Mission Teacher Training Centre, Hyderabad | 18-11-2024 to 30-11-2024 |

| | | | | | |
|-----|---|--------------------------|--|---|--------------------------|
| 17. | Dr. P. Muthamilselvi | International Conference | Human Values in Higher Education (ICHVHE) | UHV Foundation, Delhi | 22-11-2024 to 24-11-2024 |
| 18. | Dr. E. Poonguzhali Dr. K. Tamilarasan Dr. S. Vishali Dr. K. Selvam Dr. S. Kiruthika Dr. K. Sofiya Dr. P. Muthamilselvi Dr. K. Deepa Dr. G. Keerthiga Ms. D.P. Sarrumathi Ms. B. Anitha Ms. P. Lavenya Ms. C. Eswari Mr. J. Selva Muniasamy Mr. D. Ramesh Kumar | Workshop | One Day Workshop on Eye Yoga Under SDG 3 - 'Good Health and Well-being' | Department of Chemical Engineering College of Engineering and Technology SRM Institute of Science and Technology Kattankulathur - 603 203, Chengalpattu District, Tamil Nadu, India | 02-12-2024 |
| 19. | Dr. P. Muthamilselvi | International Conference | 3rd International Conference on Higher Education Institutes Challenges & Solutions for Sustainable Development Goals 2024 (ICSDG 2024) - SDG 06 (Clean water and Sanitation) | Centre for Research in Environment, Sustainability Advocacy and Climate Change (REACH), Directorate of Research, SRMIST, KTR in association with National Institute of Ocean Technology Ministry of Earth Sciences, Chennai | 03-12-2024 to 05-12-2024 |
| 20. | Dr. K. Tamilarasan | FDP | Python for Chemical Engineers | Department of Chemical Engineering, Gayatri Vidya Parishad College of Engineering, Visakhapatnam, Andhra Pradesh | 09-12-2024 to 14-12-2024 |

| | | | | | |
|-----|---------------------|----------------------------------|--|-----------------|------------|
| 21. | Dr. K. Deepa | Virtual Domain Specific training | Virtual Labs as part of "PALS VLAB - 2024-2025 initiative" with NITK, Surathkal. | NITK, Surathkal | 10-12-2024 |
|-----|---------------------|----------------------------------|--|-----------------|------------|

Events Participated by Students

| S. No. | Name | Event Name | Event Title | Organizer | Date |
|--------|---|--|---|---|--------------------------|
| 1. | Venkateswara Reddy RA2312012010002 Antony Sebastian RA2312012010003 | Workshop | Hands-on Training to use Design Expert Software for Effective Optimization of Experiments | Department of Chemical Engineering, SRMIST and CQM, University of Madeira, Portugal | 02-09-2024 to 06-09-2024 |
| 2. | Anika Anil RA2311007010023 Jasmine Kaur Ahluwalia RA2311007010025 II Year B. Tech. | | | | |
| 3. | Monica A RA2113008011001 Hussain Albattah Alhusni RA2113008011002 Takumi Nagasaka RA2213008011001 Parthasarathi R R RA2313008011001 Ponmani V RA2313008011002 Sredha J Nair RA2413008011002 Sruthi J Nair RA2413008011003 Research Scholar | | | | |
| 4. | Aaditya Sarin RA2111007010004 IV Year B. Tech. | | | | |
| 5. | Chaiti Harin Buch RA2211007010028 III Year B. Tech. | Online Summer Internship Programme (OSIP-2024) | Zero Discharge Liquid Management | Indian Institute of Chemical Engineers, Jadavpur University Campus, Kolkata | 20-07-2024 to 08-09-2024 |
| 6. | Saanz Wanjari RA2211007010001 III Year B. Tech. | | Petroleum Refinery Engineering | | |

| | | | | | |
|----|--|---|--|--|------------|
| 7. | Sathya K RA2211007010054 Shrilekha V RA2211007010056 III Year B. Tech. | Workshop | Holistic Wellness for a Balanced Lifestyle | NSS in association with Student Counselling Cell, Department of Mechanical Engineering, CET, KTR, SRMIST | 12-09-2024 |
| 8. | Savitha G A RA2211007010037 Navasri N RA2211007010038 Janani D RA2211007010039 Rubasri P RA2211007010040 Amalaya M RA2211007010047 Meenakumari V RA2211007010048 Valarmathi P RA2211007010050 Subicha M RA2211007010051 Monisha S RA2211007010055 III Year B. Tech. | Outreach Program on Water Quality Measurement | Volunteered in Exploring Water Quality Testing: Hands on Testing and Measurement | Department of Chemical Engineering, CET, SRMIST, KTR at Panchayat Union Middle School, Kalivanthapattu Village | 12-09-2024 |
| 9. | Savitha G A RA2211007010037 Janani D RA2211007010039 Rubasri P RA2211007010040 Amalaya M RA2211007010047 Valarmathi P RA2211007010050 Subitcha M RA2211007010051 Sathya K RA2211007010054 Monisha S RA2211007010055 Shrilekha V RA2211007010056 III Year B. Tech. | One day Workshop | Thermal Management in Electronics-Industrial Practices | Center of Excellence for Electronic Cooling, SRMIST, KTR | 13-09-2024 |

| | | | | | |
|-----|--|---|---|--|-------------------------------|
| 10. | Adithya S S RA2211007010020 III Year B. Tech. | Smart Agro Storage Hackathon for Engineers Day | ElectraStor Pioneers | The Institution of Engineers, Kattankulathur Local Centre, Department of Mechanical Engineering, CET, SRMIST, KTR | 17-09-2024 |
| 11. | Revathi Paramasivan P RA2311007010012 II Year B. Tech. & Dr. K. Sofiya | Tamil Competition | Kaanave Vanthan | CET, SRM IST, KTR | 20-09-2024 |
| 12. | Ranjith. R RA2111007010021 Aaditya Sarin RA2111007010004 IV Year B.Tech. | | Higher Studies Opportunities at Purdue University | IIT Madras, Anna University, CET, SRMIST, KTR | 07-10-2024 |
| 13. | Priyanka J RA2412012010001 Midhun M M RA2412012010002 Dony Dimel S RA2412012010000) Sivabalan B S RA2412012010004 Aditya Santhosh RA2412012010005 Karan RA2412012010006 Megha Rajesh RA2412012010007 Aditya Rajan RA2412012010008 Dhanush Mani T RA2412012010010 I Year M.Tech. | Two-Day Hands-on Training | Mastering Computational Fluid Dynamics: A Hands-on Workshop | Department of Chemical Engineering, CET, SRMIST, KTR | 25-10-2024 & 26-10-2024 |
| 14. | Venkateswara Reddy RA2312012010002 II Year M.Tech. | | | | |
| 15. | Philip Paul RA2311007010003 Augustine Jordan K RA2311007010005 Sivanandabarathi RA2311007010009 John Richardson R RA2311007010021 II Year B.Tech. | | | | |

| | | | | | |
|-----|---|--------------------------|---|--|--------------------------|
| 16. | <p>Ms. Sredha J Nair RA2413008011002 Full Time Research Scholar</p> <p>Ms. Sruthi J Nair RA2413008011003 Full Time Research Scholar</p> <p>Ms. Ponmani V RA2313008011002 Full Time Research Scholar</p> <p>Ms. Udita Gulia RA2113010011030 Full Time Research Scholar</p> <p>Ms. A. Monica RA2113008011001 Full Time Research Scholar</p> <p>Ms. M.B. Abinaya RA2113010011020 Full Time Research Scholar</p> <p>Mr. Takumi Nagasaka RA2213008011001 Full Time Research Scholar</p> | Workshop | One Day Workshop on Eye Yoga Under SDG 3 - 'Good Health and Well-being' | Department of Chemical Engineering, CET, SRMIST, KTR | 02-12-2024 |
| 17. | <p>Harichandana C RA2411007010034 I Year B. Tech.</p> | Techknow | Sunlight-Tracking Solar Panel with LDR Support | Department of Physics and Technology, CET, SRMIST, KTR | 02-12-2024 to 06-12-2024 |
| 18. | <p>Sivabalan B S RA2412012010004 I Year M. Tech.</p> | International Conference | International Conference on Green Energy Innovations for Sustainable Development, SDG 7 – Affordable and Clean Energy | Department of Electrical and Electronics Engineering, Department of Mechanical Engineering, CET, SRMIST, KTR | 03-12-2024 to 05-12-2024 |

| | | | | | |
|-----|--|-----|-------------------------------------|--|--------------------------------|
| 19. | Shemaiah Sam RA2312012010004 II Year M. Tech. | FDP | PYTHON for CHEMICAL ENGINEERS | Department of Chemical Engineering, Gayatri Vidya Parishad, College of Engineering, Visakhapatnam, Andhra Pradesh | 09-12-2024 to 14-12-2024 |
|-----|--|-----|-------------------------------------|--|--------------------------------|

Online Course Completed

| S. No. | Faculty | Course Title | Course Platform | Duration |
|--------|-----------------------------|-------------------------------|-----------------|------------------------------------|
| 1. | Dr. P. Muthamilselvi | Industrial Safety Engineering | NPTEL-Swayam | 12 Weeks (July to October 2024) |

Rank Holders and Students Performance (2024 batch)



Irene Chandrashekhar Parkar
(RA2011007010006)
CGPA-9.37
B.Tech.- I Rank
Gold Medal



Sughanandhan K
(RA2011007010021)
CGPA-9.28
B.Tech.- II Rank
Silver Medal



Arvind Kumar R
(RA2212012010001)
CGPA-8.69
M. Tech.- I Rank
Gold Medal

| Summary of Results | B. Tech. (2020 – 2024 batch) | M. Tech. (2022-2024 batch) |
|---|---------------------------------|-------------------------------|
| Total number of students | 56 | 12 |
| Number of students graduated in 2024 | 53 | 12 |
| Number of students graduated in first class | 18 | 12 |
| Number of students graduated in Distinction | 31 | 11 |

On Campus Placements - July to December, 2024
(B. Tech. Batch 2021 - 2025)



Aaditya Sarin
RA2111007010004
Graduate Engineer Trainee
Reliance Industries Limited
8 LPA



Palak Kachhawah
RA2111007010008
Graduate Engineer Trainee
AMAZON
29.5 LPA



Ayush Suresh
RA2111007010023
Graduate Engineer Trainee
ABG
7.5 LPA



Kapil M
RA2111007010041
Graduate Engineer Trainee
Corizo Edutech Pvt. Ltd.
6.5 LPA



Jessica Arthy M
RA2111007010011
Graduate Engineer Trainee
Planet Spark
6.5 LPA &
Graduate Engineer Trainee
My Captain
5 LPA



D Sam Daniel
RA2111007010015
Graduate Engineer Trainee
PCBL
6 LPA



Praveena M
RA2111007010013
Graduate Engineer Trainee
PCBL
6 LPA



Parthasarathy A
(RA19110710002)
(B. Tech. Batch 2019 - 2023)
Graduate Apprentice Trainee
(GAT)- R&D,
Newell Brands (formerly
Reynolds), Chennai
8 LPA

Admitted for Higher Studies (Batch 2020 - 2024)



Irene Chandrashekhar Parkar

RA2011007010006
M.Sc. in Advanced Chemical
Engineering,
Imperial College London
South Kensington, London



Anuragh R

RA2011007010011
M.Sc. in Advanced
Chemical Engineering,
University of Manchester
Manchester, UK



Suraj Choudhary C

RA2011007010046
M. Tech. in Chemical
Engineering,
Indian Institute of
Technology
Kanpur



Dony Dimel S

RA2011007010050
M. Tech. in Chemical
Engineering,
SRM Institute of Science and
Technology
Tamil Nadu



Dhanushmani T

RA2011007010052
M. Tech. in Chemical
Engineering,
SRM Institute of Science
and Technology
Tamil Nadu



Aditya Rajan

RA2011007010042
M. Tech. in Chemical
Engineering,
SRM Institute of Science
and Technology
Tamil Nadu

Merit-Based Scholarships Awarded by SRMIST

Year of Study/
Merit Position

IV Year B. Tech.

III Year B. Tech.

II Year B. Tech.



Annapoorni V
RA2111007010039
CGPA - 9.37



Adithya S S
RA2211007010020
CGPA-9.62
Rs. 62,500



Augustine Jordan K
RA2311007010005
CGPA-9.88



D Sam Daniel
RA2111007010015
CGPA – 9.33
Rs. 58,750



Varshika S.
RA2211007010025
CGPA-9.33
Rs. 58,750



Jasmine Kaur Ahluwalia
RA2311007010025
CGPA- 9.74
Rs. 58,750



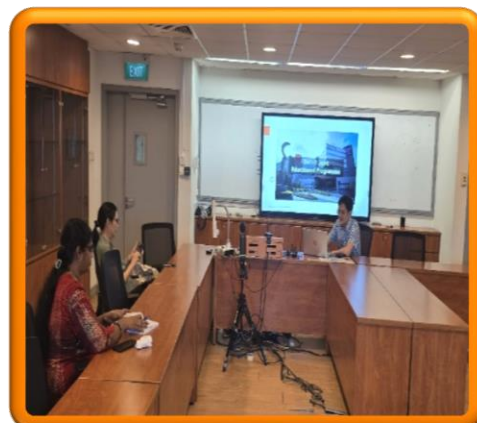
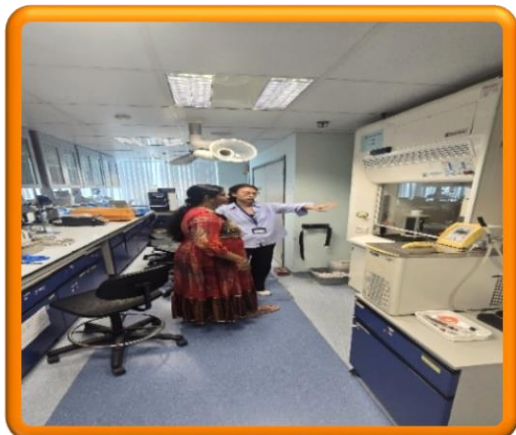
Archana Narayanan
RA2211007010036
CGPA-9.33
Rs. 58,750

Ph. D. Progress Details of Research Scholars

| S. No. | Name | Supervisor | Title/ Area of Research | Progress | Date |
|--------|---|--|--|--------------------------------------|------------|
| 1. | Ms. Sredha J Nair RA2413008011002 | Dr. G. Keerthiga | Electro and Photocatalysis | First DC Meeting | 19-08-2024 |
| 2. | Mr. Rohith Kumar RA1813014011009 (Physics and Nanotechnology) | Dr. K. Suresh (Co – Supervisor) | Design, Synthesis, Stability Aspects, and Study of Thermoplastics Polyurethanes as Encapsulants for Perovskite Solar Cells | Oral Viva Voce | 01-10-2024 |
| 3. | Ms. Meenu Mariam Jacob RC2113008011003 | Dr. P. Muthamilselvi | Decontamination of Chlorpyrifos for Providing Safe Water | Pre-Ph.D. Presentation | 28-10-2024 |
| 4. | Ms. D. Alice Jasmine RA2113010011035 (Biotechnology) | Dr. K. Tamilarasan | Biomass Upcycling | Pre-Ph.D. Presentation | 30-10-2024 |
| 5. | Ms. Sharmiladevi R RA1933002011033 (Physics and Nanotechnology) | Dr. S. Anandhakumar | Biomaterials | Oral Viva Voce | 06-11-2024 |
| 6. | Ms. Sangamithra N RA2033012011001 (Physics and Nanotechnology) | Dr. S. Anandhakumar | Biomaterials | Pre-Ph.D. Presentation | 08-11-2024 |
| 7. | Ms. D. Alice Jasmine RA2113010011035 (Biotechnology) | Dr. K. Tamilarasan | Biomass Upcycling | Synopsis Meeting/Synopsis Submission | 21-11-2024 |
| 8. | Sangamithra N RA2033012011001 (Physics and Nanotechnology) | Dr. S. Anandhakumar | Biomaterials | Synopsis Meeting | 03-12-2024 |
| 9. | Mr. V. Ganesh PA1813008012001 Part Time- Internal Research Scholar | Dr. M. P. Rajesh | Heat Transfer and Nanofluids | Pre-Ph.D. Presentation | 27-12-2024 |
| 10. | Mr. V. Ganesh PA1813008012001 Part Time- Internal Research Scholar | Dr. M. P. Rajesh | Heat Transfer and Nanofluids | Synopsis Meeting | 31-12-2024 |

Collaboration with Foreign Universities

Dr. S. Vishali visited National University of Singapore (NUS) on 29-11-2024 for discussing about research collaboration and student exchange program (3+1+1 program)



Dr. S. Vishali attended a meeting with delegates from National Cheng Kung University, Taiwan to discuss and enhance opportunities on research and academic collaboration on 05-12-2024.



Annual Academic Audit 2023-2024

Date: 27-09-2024

Faculty Co-ordinator

Dr. E. Kavitha, Assistant Professor, Chemical Engineering

Members: Faculty Members, Chemical Engineering

Description of the Event/Objective:

The Annual Academic Audit was conducted to assess the overall academic quality, curriculum implementation, faculty performance, student outcomes, and institutional processes. The audit aimed to evaluate the academic standards, identify strengths and weaknesses, and recommend areas for improvement to ensure the institution meets the required educational benchmarks.

External Expert Member: Dr. R. Vinu, Professor, Department of Chemical Engineering, IIT Madras

Observer: Dr. Minu R I, Professor, Department of Computing Technologies, SRMIST, KTR

Dr. Vinu appreciated the Core placements in the department. He suggested the faculty to facilitate as mentors/advisors in startups by the students so that both the students and the institute are benefitted. He appreciated that Reliance Industries Limited (RIL) have been regular recruiters at the Department of Chemical Engineering, SRMIST. He also mentioned that this is due to the quality of students passing out and also the performance of our alumni at RIL. He appreciated the Department Newsletter, 'Chemical Chronicle' and suggested to circulate the Newsletter in social media and the hard copies can be sent to other colleges for a better reach. He suggested to utilize the alumni strength in a better way possible.



Industrial Visit

Faculties Accompanied the Students

Dr. K. Anbalagan, Assistant Professor, Chemical Engineering

Ms. D.P. Sarrumathi

No. of Students: 33 (III Year)

Date 01-10-2024 to 06-10-2024

Industries Visited:

1. Goa Carbon Limited
2. Syntegon Technology India Private Limited, Goa

An industrial visit to Goa for third-year B.Tech. Chemical Engineering students was organized by the department. The visit scheduled for October 1st-6th, 2024 with a total of 33 students accompanied by two faculty members. Goa Carbon Limited is a public limited company and is in the business of manufacture and marketing of Calcined Petroleum Coke. The company has three calcination plants with a total capacity of 3,08,000 TPA. The Goa plant is located in southern Goa, 40 kms away from the Mormugao port and has an annual capacity of 1,00,000 TPA. It has a well-equipped laboratory and quality control systems and procedures. The plant is ISO 9001:2015 and 14001:2015 certified by Bureau Veritas. The Goa plant has the largest mechanical sieving and screening facilities for petcoke in India.

Syntegon Technology India Private Ltd, is strategic partner for processing and packaging solutions in the pharmaceutical and food industries. With seamless processes, innovative technologies and sustainable solutions, they provide platform for seamless processes in production operation. By providing sustainable solutions, they support in switching to alternative packaging and resource-conserving production processes.

Industrial visits provide our students with valuable insight into the operations and processes, which will greatly enhance their academic understanding. Engaging with real-world applications of theoretical knowledge is invaluable, and this experience will undoubtedly shape their perspective and continue to explore the intersection of engineering and environmental sustainability.



Students at, Goa Railway Station



Students during the Visit to Goa Carbon Limited



Students during the Visit to Goa Carbon Limited



Students during the Visit to Syntegon Technology India Private Limited

Department Events Organized

[1] **Alumni Interaction-** Scope for Chemical Engineers in Banking and Investment Sectors

Date: 05-07-2024

Program Chair

Dr. A. Rathinam, Director, Alumni Affairs

Dr. K. Suresh, Associate Professor and Head in-charge, Chemical Engineering

Alumni Coordinators

Dr. M. P. Rajesh, Professor, Chemical Engineering

Dr. G. Keerthiga, Assistant Professor, Chemical Engineering

Event Coordinator

Dr. M. Magesh Kumar, Assistant Professor, Chemical Engineering

Alumnus

Mr. Kiran Samudrala [B. Tech. Chemical Engineering (Batch 1996 – 2000)] **Vice President, Fidelity Investments, North Carolina, USA**

About the event

Mr. Kiran Samudrala explained the job opportunities for engineers in investments, finance and banking sectors. He also explained the importance of acquiring management degree programs, soft skill knowledge and software tools for engineers.



[2] **Alumni Talk-** Quantity Over Quality: The Power of Consistent Effort and Learning Through Experience

Date: 29-08-2024

Program Chair

Dr. A. Rathinam, Director, Alumni Affairs

Dr. K. Suresh, Associate Professor and Head in-charge, Chemical Engineering

Alumni Coordinators

Dr. M. P. Rajesh, Professor, Chemical Engineering

Dr. G. Keerthiga, Assistant Professor, Chemical Engineering

Alumnus

Ashwin Krishna [B. Tech. Chemical Engineering (Batch 2019 – 2023)] Graduate Process Development Engineer, VA Tech Wabag Ltd., Chennai

About the event

Ashwin Krishna emphasized the importance of looking for new opportunities in research and internships stating that it is good to make connections throughout the college journey whether it be with faculty, his peers or the companies that he interned for and is planning to go to Germany to strengthen his portfolio. Ashwin Krishna is an example of someone who is willing to try anything to improve and is a great inspiration that the students can look up to.



Department of Chemical Engineering
&
Directorate of Alumni Affairs

Alumni Talk



Ashwin Krishna
B.Tech. Chemical Engineering
Batch of 2019-2023

Graduate Process
Development Engineer
VA Tech Wabag Ltd., Chennai

Title: Quantity over Quality: The Power of Consistent Effort and Learning Through Experience

Schedule: ESB 406, SRM IST - KTR @ 9 AM on
29/08/2024

Conveners: Dr. A. Rathinam, Director, Alumni Affairs
Dr. K. Suresh, HOD I/C, Chemical Engineering
Dr. M. P. Rajesh, Alumni Coordinator
Dr. G. Keerthiga, Alumni Coordinator





[3] Alumni Talk- Engineering Programs in SRM as Catalyst for Entrepreneurship

Date: 12-09-2024

Program Chair

Dr. A. Rathinam, Director, Alumni Affairs

Dr. S. Vishali, Associate Professor & Head of the Department, Chemical Engineering

Alumni Coordinators

Dr. M. P. Rajesh, Professor, Chemical Engineering

Dr. G. Keerthiga, Assistant Professor, Chemical Engineering


Alumnus


Dr. Anirudh Ranganathan [B. Tech. Chemical Engineering (Batch 2003 – 2007)], Co-founder, Sekkei Bio Private Ltd., Chennai

About the event

Dr. Anirudh Ranganathan's talk emphasized the importance of building a strong foundation during the academic years, which will be crucial for the future success. He encouraged students to join various clubs on campus, emphasizing the role of extracurricular activities in personal development. He also encouraged to immerse fully in college life by attending events at and making the most of every opportunity. He also advised us to actively seek internships, as they provide practical experience and industry exposure. Furthermore, he recommended pursuing higher studies after completing undergraduate degree, especially for those

passionate about delving deeper into specialized fields. Anirudh Ranganathan was not only informative but also motivating, with actionable advice to make college experience both enjoyable and fruitful.

 **SRM INSTITUTE OF SCIENCE AND TECHNOLOGY**
COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CHEMICAL ENGINEERING
Kattankulathur - 603 203, Tamil Nadu, India




The Department of Chemical Engineering, SRMIST, Kattankulathur along with the Directorate of Alumni Affairs (DAA) invites you to attend an

ALUMNI TALK

on

ENGINEERING PROGRAMS IN SRM AS CATALYST FOR ENTREPRENEURSHIP


12.09.2024, Thursday 1.00 PM to 2.00 PM



Dr. ANIRUDH RANGANATHAN
Ph.D (Stockholm University)
Batch of 2003-2007
Co-Founder, Sekkei Bio Private Limited

Venue
AU 205, Seminar Hall, I floor, Dept of Automobile Engineering, Main campus, SRMIST

| CONVENORS | ALUMNI COORDINATORS |
|---|---|
| Dr. A. RATHINAM Director, Alumni Affairs, SRMIST | Dr. M. P. RAJESH Professor, Department of Chemical Engineering, SRMIST |
| Dr. S. VISHALI HOD, Chemical Engineering, SRMIST | Dr. G. KEERTHIGA Assistant Professor, Department of Chemical Engineering, SRMIST |





[4] Alumni Talk- Prospects for Chemical Engineers in Oil and Gas Industry

Date: 20-09-2024

Program Chair

Dr. A. Rathinam, Director, Alumni Affairs

Dr. S. Vishali, Associate Professor & Head of the Department, Chemical Engineering

Alumni Coordinators

Dr. M. P. Rajesh, Professor, Chemical Engineering

Dr. G. Keerthiga, Assistant Professor, Chemical Engineering

Alumnus

R Srinivas [M. Tech. Chemical Engineering (Batch 2021 – 2023)], Senior Process Engineer, Wood PLC, Chennai

About the event

R Srinivas detailed his experiences in SRM as a student trying to stand out from his peers by making new connections in industry and with experts in academia who specialized in computational techniques. He also emphasized the scope of computational chemical engineering in the oil and gas field by deeply explaining the various skillsets that graduates need in this market. He also gave a quick look into his role as a field engineer in his upcoming project and described a day in his life as an engineer working by solving problems using simulations. His passion for advanced techniques in problem solving has led him to land in his current role.



Department of Chemical Engineering
SRM IST, Kattankulathur, Tamil Nadu 603203
&
Directorate of Alumni Affairs, SRM IST

Organize
An Alumni Talk



**Prospects for Chemical Engineers in
Oil and Gas Industry**

Alumnus: R. Srinivas
(M.Tech. Chemical Engineering, 2021-2023)
Process Engineer, Wood India Engineering
and Projects Ltd., Chennai

Schedule and Venue: 20/09/2024 (Friday)
in M11/B, Mechanical A Block, II Floor,
SRM IST (Main Campus) at 10 AM

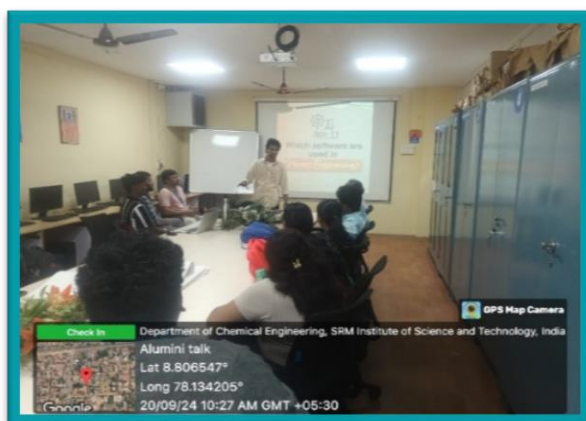
Dr. A. Rathinam
Director – Alumni Affairs

Dr. S. Vishali
HoD – Chemical Engineering

Dr. M. P. Rajesh
Professor – Chemical Engineering

Dr. G. Keerthiga
Asst. Prof. – Chemical Engineering





[5] Alumni Talk- SRM as the Catalyst for Career Innovation

Date: 09-11-2024

Program Chair

Dr. A. Rathinam, Director, Alumni Affairs

Dr. S. Vishali, Associate Professor & Head of the Department, Chemical Engineering

Alumni Coordinators

Dr. M. P. Rajesh, Professor, Chemical Engineering

Dr. G. Keerthiga, Assistant Professor, Chemical Engineering

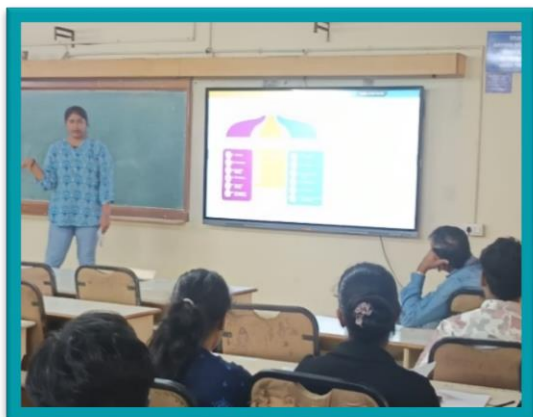
Alumna

S Dharshini [B. Tech. Chemical Engineering (Batch 2018 – 2022)], Associate-Catalyst Group, Bangalore

About the event

S Dharshini motivated the students to find interests during college. She spoke on career opportunities as a chemical engineer and backup options, if anything interesting. She requested students to perform courses on the online learning platforms to keep students updated. She motivated students to work on networking and to be with like-minded people. She said there is nothing wrong in questioning, where it brings out the creative and promotional skills among students. She requested students to prepare for GRE, TOEFL exams which will help to improve their analytical and thinking skills.





[6] **Guest Lecture-** Higher Studies Opportunities on Advancing Healthcare through AI in Pharmaceutical Sciences

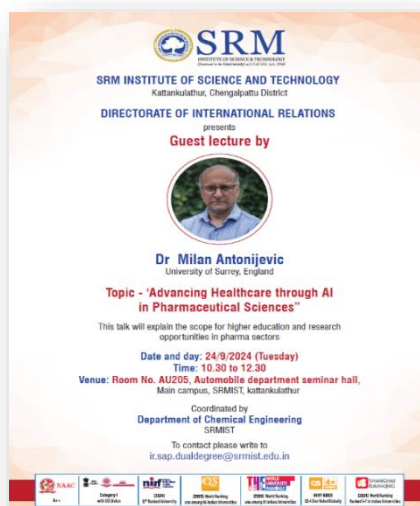
Date: 24-09-2024

Event Co-ordinator

Dr. M. Magesh Kumar, Assistant Professor, Chemical Engineering

About the Event

Dr. Milan Antonijevic explained the importance of quality control and physicochemical characterization in leading pharmaceutical companies across the globe. He also explained the higher education and job opportunities for chemical engineers in pharmaceutical sector. He also emphasized the importance of post graduate studies in pharmaceutical science with industrial practice at University of Surrey.





[7] **Workshop- Hands-on Training to Use Design Expert Software for Effective Optimization of Experiments** in association with Southern India Scientific Corporation, Chennai, India

Dates: 02-09-2024 to 06-09-2024

Convener(s)

Dr. S. Anandhakumar, Research Associate Professor, Chemical Engineering

Dr. K. Selvam, Assistant Professor, Chemical Engineering

Co-ordinator(s)

Dr. K. Anbalagan, Assistant Professor, Chemical Engineering

Dr. M. Magesh Kumar, Assistant Professor, Chemical Engineering

About the event

The primary objective of this workshop was to provide participants with a deep understanding of Design Expert Software tools and their practical application techniques. **Dr. Jaison Jeevanandam**, Introduced the software theoretically & effectively explained complex concepts in ensemble methods while explaining the Menu and tools available on the software page.

Hands-On Training To Use Design Expert Software For Effective Optimization of Experiments
2-6 September - 2024

Organized by Department of Chemical Engineering, SRMIST, Kattankulathur, 601203, India.

ABOUT THE INSTITUTION

SRM Institute of Science and Technology (SRMIST) is one of the top ranking universities in India with over 32,000 full time students and more than 3200 faculty across all the campuses - Kattankulathur, Bangalore, Valluvarpet Campus - all in and around Chennai, Tiruchirappalli (in TN), Madurai (in UP) & Sonapat (in Rajasthan) - both of which are located near Delhi NCR, Amravati (in AP), Gangak (in Sikkim) - offering a wide range of undergraduate, postgraduate and doctoral programs in the faculties - Engineering & Technology, Management, Medicine & Health Sciences, Science & Humanities Law and Agricultural Sciences. SRMIST holds an 'A++' grade accreditation from NAAC and has received five-star ratings from UGC rankings.

ABOUT THE WORKSHOP

Design of experiments (DoE) is defined as a set of procedures to investigate a relationship between variables. Randomized experiments, in which various parameters affect the results, lead to high of responses, chemicals, time, and accurate results. Thus, a careful design of experiments is highly recommended to plan our experiments.

Design expert is one of the most user-friendly (for those who are not experts in statistical software), offering ability to screen, characterize, and optimize experiments. Design expert is widely used in chemical engineering, chemical, material science, and pharmaceutical industries. This course will focus on the type of experiments, quality of data from experiments, concepts, types and procedures of statistical design, software for designing experiments, their advantages and limitations. In addition, the software interface will be explored entirely during the course with hands-on experience in the optimization of parameters using the software, along with a few examples.

ABOUT THE DEPARTMENT

The Department of Chemical Engineering was established in 1995 as a part of SRM Engineering College and started functioning under the Institute of Science and Technology (SRMIST) Chennai to be affiliated from the University of Madras. The Chemical Engineering department offers B.Tech. in Chemical Engineering, M.Tech. in Polymer Engineering, and Ph.D. in Chemical Engineering. The department is equipped with modern facilities for the students who wish to pursue their research. The department has extensive experience in research and development in the areas of chemical engineering, material science, and pharmaceutical industries. The department has a research-oriented approach to research. Truly, our emphasis is on research and development in the areas of chemical engineering, material science, and pharmaceutical industries. We have a number of research projects in progress. We work with industrial partners to solve their problems and develop useful products. Students who are interested in pursuing their higher studies in one of the most prestigious institutions in the world such as MIT, Stanford, University of Wisconsin, Columbia University, and the University of Texas.

Vision

SRM Chemical Engineering and Technology to ensure overall, sustainable growth, welfare and progress of India society and the world as a whole. By acquiring, developing, innovating, through, Research and Development, contributing to the growth and development of the country.

Mission

- To achieve high quality education, well equipped in the fundamental and applied areas of engineering, necessary for learners to contribute effectively to chemical and allied industries.
- To enhance, progress, research and master learners with the technical and professional skills, and necessary to meet the professional, growth in their career.
- To include social-responsibility in learners and train them to contribute effectively to nation and society.

CHIEF OFFICERS

Dr. S. Anandhakumar, Research Associate Professor, Chemical Engineering
 Dr. K. Selvam, Assistant Professor, Chemical Engineering
 Dr. K. Anbalagan, Assistant Professor, Chemical Engineering
 Dr. M. Magesh Kumar, Assistant Professor, Chemical Engineering

ADMINISTRATIVE ADVISORY COUNCIL

Dr. S. Anandhakumar, Research Associate Professor, Chemical Engineering
 Dr. K. Selvam, Assistant Professor, Chemical Engineering
 Dr. K. Anbalagan, Assistant Professor, Chemical Engineering
 Dr. M. Magesh Kumar, Assistant Professor, Chemical Engineering

COORDINATORS

Dr. S. Anandhakumar, Research Associate Professor, Chemical Engineering
 Dr. K. Selvam, Assistant Professor, Chemical Engineering
 Dr. K. Anbalagan, Assistant Professor, Chemical Engineering
 Dr. M. Magesh Kumar, Assistant Professor, Chemical Engineering

INSTRUCTORS PROFILE

Dr. Jaison Jeevanandam is a senior research scholar in the Department of Chemical Engineering, SRMIST, Kattankulathur. He has been working in the field of chemical engineering for over 10 years. He has a Ph.D. in Chemical Engineering from SRMIST, Kattankulathur. He has been working in the field of chemical engineering for over 10 years. He has a Ph.D. in Chemical Engineering from SRMIST, Kattankulathur. He has been working in the field of chemical engineering for over 10 years. He has a Ph.D. in Chemical Engineering from SRMIST, Kattankulathur.

REGISTRATION FEES (Ind. GST)

For Students and Parents: INR 1500
 For Scientists and Faculty: INR 1500

IMPORTANT DATES

Last date for registration: 20th Aug, 2024
 Please register using the link:
<https://www.srmist.ac.in/Events/Workshop%20Design%20Expert%20Software%20for%20Effective%20Optimization%20of%20Experiments>

ACCOUNT NAME: CHEMICAL ENGS SRMIST
ACC. NO.: 7113751581
BRANCH: CHEMICAL ENGINEERING
BRANCH CODE: 0001181
BRANCH ADDRESS: SRMIST, Kattankulathur
BRANCH PIN CODE: 601203
BRANCH BANK: Indian Bank
BRANCH IFSC CODE: INDB0001181
BRANCH MICR CODE: 6012030001181

FOR ANY QUERIES AND CONTACTS

WhatsApp Email: designexpert@srmist.ac.in
 Dr. Anandhakumar: 9840124129
 Dr. Selvam: 9840124129

REGISTRATION LINK

<https://www.srmist.ac.in/Events/Workshop%20Design%20Expert%20Software%20for%20Effective%20Optimization%20of%20Experiments>



Dr. S. Anandhakumar, Convenor Addressing Participants



Dr. Jaison Jeevanandam, Expert, Madira University, Portugal delivering Inagural Address



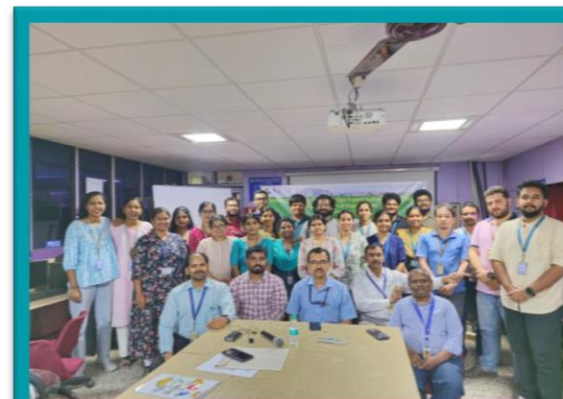
Active Participation in Pre-quiz event on each session



Dr. Jaison Jeevanandam, Expert, Interacting through quiz session



First Prize winner on Quiz competition



Group Photograph of the Event

[8] Outreach Program - Exploring Water Quality Testing: Hands on Testing and Measurement

Date: 12-09-2024

Event Co-ordinator(s)

Dr. M. P. Rajesh, Professor, Chemical Engineering

Dr. K. Sofiya, Assistant Professor, Chemical Engineering

About the event

The "Outreach Program - Exploring Water Quality Testing" is an engaging hands-on event aimed at educating participants on the essential aspects of water quality. During the event, participants actively engaged in water testing and measurement activities, using various tools and techniques to assess factors such as pH levels, turbidity, and the presence of harmful chemicals or contaminants. The program emphasized the importance of water quality for public health and environmental sustainability, providing participants with practical knowledge that can be applied in real-world settings. This interactive experience fosters a deeper understanding of how water quality affects ecosystems and communities, and empowers participants to become more proactive in environmental conservation efforts.

SRM Institute of Science and Technology
Outreach Programme
on
EXPLORING WATER QUALITY TESTING : HANDS-ON TESTING AND MEASUREMENT
Organised by
Department of Chemical Engineering
in association with
Faculty of Management
NSS UNIT - 13

About the Programme:
The outreach activity has been organised by the Department of Chemical Engineering for the past five years, the main aim of this program is to help the School Students' community, by conducting a workshop, Science Expos, and Events like Quiz, debates, etc., especially in Chemical Engineering Field. To extend the service to school children and inculcate knowledge in Chemical Engineering. This year, the workshop outreach program is centred on 'Exploring Water Quality: Hands-on Testing and Measurement', offering children an immersive experience in evaluating and monitoring water quality through practical, real-world applications.

Conveners
Dr. M.P. Rajesh
Professor
Department of Chemical Engineering, SRMIST

Dr. K. Sofiya
Assistant Professor
Department of Chemical Engineering, SRMIST

Advisor
Dr. T. Lakshmanan
Professor, SRMIST
NSS Programme Advisor

Dr. K. Maheswari
Assistant Professor & NSS Programme Officer,
Faculty of Management, NSS UNIT - 13, SRMIST

Mr. Anu Kumar
Principal, Panchayat Union Middle School,
Kattankulathur - 603 203

pH Measurement | Color Test | TDS (Total Dissolved Solids)
Conductivity Test | Turbidity Test | Hardness Test | Chloride Test

12 SEPT '24

Panchayat Union Middle School (PUMS)
Kalivanthapattu Village, Kattankulathur Block,
Chengalpattu District, Kattankulathur - 603 203.

NAAC A++
Category A++ (2023-24)

nirf (2024) 12th Ranked University

QS (2024) World Ranking among 60 Indian Universities

THE WORLD UNIVERSITY RANKINGS (2024) World Ranking among 10 Indian Universities

QS 4th Star Rated Quality

SHANGHAI RANKING (2024) World Ranking among 57 Indian Universities



[9] Orientation Programme for Freshers (I Year B. Tech. & M. Tech. Chemical Engineering)

Date: 12-09-2024

Event Co-ordinator(s)

Dr. E. Kavitha, Assistant Professor, Chemical Engineering

Dr. P. Muthamilselvi, Assistant Professor, Chemical Engineering

About the event

The event, organized by the Department of Chemical Engineering at SRM Institute of Science and Technology, is designed for the incoming B.Tech. and M.Tech. Chemical Engineering students. The purpose of the event is to familiarize the new students with the campus layout, including key facilities and resources such as libraries, laboratories, and recreational areas. The program also provided essential information about academic policies, grading systems, and expectations for coursework, helping students navigate the challenges of college academics. Additionally, the event highlighted various support services available, including academic advising, counselling, mental health resources, and tutoring, ensuring students have the tools they need to thrive both academically and personally.



[10] **Workshop- Two-Day Hands-on Training on Mastering Computational Fluid Dynamics: A Hands-on Workshop**

Date: 25-10-2024 to 26-10-2024

Convener(s)

Dr. S. Vishali, Associate Professor & Head of the Department, Chemical Engineering

Dr. E. Poonguzhali, Assistant Professor, Chemical Engineering

About the event

This workshop on Computational Fluid Dynamics (CFD) equipped students and researchers with essential knowledge and practical skills through hands-on sessions. Focused on using ANSYS software, it covered fluid flow problems and introduced participants to CFD theory, model development, and ANSYS capabilities, bridging the gap between theory and practical application. The resource person **Dr. Prasad C.** is currently a Post-Doctoral Researcher at IIT Madras and has more than about a decade of experience in teaching & research focused on experimental and computational studies pertaining to basic fluid dynamics, internal combustion engines, fuel spray, droplet impact, droplet evaporation, and autonomous underwater vehicles.

TARGET AUDIENCE
UG & PG Students, Faculty Members and Research Scholars

REGISTRATION DETAILS
Registration Fees: Free

REGISTRATION LINK:
<https://forms.gle/CfCLm9DuodeoG2Gx5>

INSTRUCTIONS

- Interested students, research scholars and academicians can register through link provided.
- Participants have to bring their laptop for training.
- Certificate will be provided to all registered and active participants.
- Attendance shall be recorded through feedback form submission after the training.

Contact Details
Dr. E. Poonguzhali
Assistant Professor
Department of Chemical Engineering
College of Engineering and Technology
SRM Institute of Science and Technology
Kattankulathur - 603 203
Chengalpattu District, Tamil Nadu, India
poonguze@srmist.edu.in
9629472133

CHIEF PATRONS

Shri. T. R. Paarivendhar
Chancellor, SRMIST

Shri. Ravi Pachamuthu
Pro-Chancellor (Administration), SRMIST

Shri. P. Sathyanarayanan
Pro-Chancellor (Academics), SRMIST

Dr. R. Shivakumar
Vice President, SRMIST

STEERING COMMITTEE

Prof. Dr. C. Muthamizhchelvan
Vice Chancellor, SRMIST

Prof. Dr. S. Ponnusamy
Registrar, SRMIST

Prof. Dr. B. Neppolian
Dean (Research), SRMIST

Prof. Dr. T. V. Gopal
Dean CET, SRMIST



Two Day Hands on Training on
Mastering Computational Fluid Dynamics
A Hands-on Workshop
25th & 26th October 2024

Conveners
Dr. S. Vishali, Associate Professor & Head
Dr. E. Poonguzhali, Assistant Professor
Chemical Engineering

CFD

Mach = 10
P₀ = 300 Pa
T₀ = 514 K
M₀₂ = 0.78
M₀₂ = 0.22

Flow

Organised by
Department of Chemical Engineering
College of Engineering and Technology
SRM Institute of Science and Technology
Kattankulathur - 603 203
Chengalpattu District, Tamil Nadu, India
<https://www.srmist.edu.in/departments/departments-of-chemical-engineering>

NAAC
A++

Category 1
with 129 Status

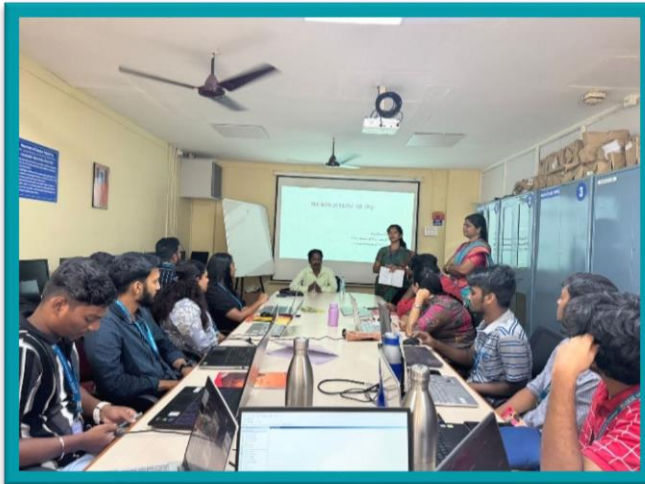
12th Ranked University
(2024)

one among 46 Indian Universities
(2025) World Ranking

THE WORLD UNIVERSITY RANKINGS
(2024) World Ranking
one among 51 Indian Universities

QS 4 Star
VERY GOOD
US 4 Star Rated Globally

SHANGHAI RANKING
(2024) World Ranking
Ranked 5-7 in Indian Universities



[11] Industry-Academia Guest Lecture Series

Date: 06-11-2024

Lecture - I: Recovery of Chemicals and Building Blocks from Diverse Plastic Wastes Through Hydrothermal Liquefaction

Professor R. Vinu, Department of Chemical Engineering, Indian Institute of Technology Madras

Lecture - II: Modelling and Simulation in Chemical and Environmental Engineering Problems
Dr. N. Selvaraju, Associate Professor, Department of Biosciences and Bioengineering, Indian Institute of Technology Guwahati

Event Co-ordinator(s)

Dr. S. Anandhakumar, Research Associate Professor, Chemical Engineering

Dr. K. Anbalagan, Assistant Professor, Chemical Engineering

Dr. M. Magesh Kumar, Assistant Professor, Chemical Engineering

Dr. K. Selvam, Assistant Professor, Chemical Engineering

About the event

The objective of this event is to enhance industry – institute interaction and to improve the visibility of department.

Outcome of the event

This event has shown the path for possible collaboration with industries and high learning institution to increase research potentials.



[12] **Workshop- One Day Workshop on Eye Yoga**

Date: 02-12-2024

Convener

Dr. S. Vishali, Associate Professor & Head, Chemical Engineering

Co-Convener(s)

Dr. K. Selvam, Assistant Professor, Chemical Engineering

Dr. K. Deepa, Assistant Professor, Chemical Engineering



About the event

Eye yoga, a practice involving exercises to improve eye health and relieve strain, contributes to holistic well-being and aligns with Sustainable Development Goal 3 (SDG 3): 'Good Health and Well-being'. It emphasizes on promoting health through preventive care and wellness. By integrating eye yoga into public health initiatives, governments and organizations can contribute to achieving SDG 3's vision of a healthier and more equitable world. Eye yoga integrates relaxation techniques and mindfulness, reducing stress and mental fatigue. By alleviating the physical strain caused by prolonged screen time, it enhances the overall quality of life. **Dr. Arul Saravanan** the founder of the APJ Yoga Foundation, holds a Ph.D. in Yogic Science and has formal education in Psychology, Yoga, and Acupuncture. He is also an expert in Varma and Thokkanam sciences. His expertise combines modern science with ancient yogic wisdom, and he has conducted workshops on stress management for leading corporations.

Objectives

- To provide awareness and education on eye care
- To gain hands-on experience on meditation designed to relax the eyes and mind



[13] Industry-Academia Guest Lecture Series – Casting Technique for the Manufacturing of Ophthalmic Lenses

Dr. Balachandar Settu, Sr. Manager R & D, Tarsons Products Limited, Kolkata, West Bengal, India

Date: 19-12-2024

Conveners

Dr. S. Anandhakumar, Research Associate Professor, Chemical Engineering

Dr. K. Selvam, Assistant Professor, Chemical Engineering

Co-ordinators

Dr. K. Anbalagan, Assistant Professor, Chemical Engineering

Dr. M. Magesh Kumar, Assistant Professor, Chemical Engineering

About the event

Dr. Balachandar Settu closely collaborates with the World Health Organization (WHO) team, providing technical expertise for the WHO's global eye care initiative, overseeing Vision eyecare products, and monitoring eye health trends globally. The purpose of this lecture is to highlight the significance of the coatings in enhancing lens durability, visibility, and overall performance in everyday use.



SRM
INSTITUTE OF SCIENCE AND TECHNOLOGY
(Chartered to be a University by U.O. No. 102, 2002)

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY
COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CHEMICAL ENGINEERING
Kattankulathur - 603 203, Tamil Nadu, India

**Invites you to attend an
Industry-Academia Guest Lecture Series**



Dr. BALACHANDAR SETTU
Sr. Manager R&D
Tarsons Products Limited
Kolkata, West Bengal, India

**CASTING TECHNIQUE FOR THE
MANUFACTURING OF OPHTHALMIC LENSES**

This talk will explain the scope for research opportunities on surface coatings such as scratch resistant, hydrophobic and anti-reflection coatings on ophthalmic lenses

Date: 19/12/2024
Time: 2.00 pm – 3.00 pm
Venue: Seminar Hall, Department of Automobile Engineering, Main Campus, SRM IST, Kattankulathur- 603 203

| CONVENERS | COORDINATORS |
|--|---|
| Dr. S. ANANDHAKUMAR Associate Professor | Dr. M. MAGESH KUMAR Assistant Professor |
| Dr. K. SELVAM Assistant Professor Dept. of Chemical Engineering, SRMIST | Dr. K. ANBALAGAN Assistant Professor Dept. of Chemical Engineering, SRMIST |
| To contact: Ph: +91 8838104529 +91 9865217653 | Email: anandhas@srmist.edu.in selvamk@srmist.edu.in |



NAAC
A++

Category 1
with 125 Status

12th Ranked University

QS World Ranking
one among 46 Indian Universities

THE World Ranking
one among 10 Indian Universities

CSIR
VERY GOOD

UPEA
Ranked 5-7 in Indian Universities



[14] Ayudha Pooja Celebration 2024

Date: 09-10-2024

Time: 2.30 PM

Venue: Conference Room, Chemical Engineering

Organizer

Dr. K. Sofiya, Assistant Professor, Chemical Engineering

Ayudha Pooja, is a part of the Navratri festival and is practiced with fervor and dedication. This event highlights the value of equipment, tools, and machinery and represents respect for one's career and means of subsistence. The team of faculty members from the Chemical Engineering Department took the initiative to plan and coordinate the Ayudha Pooja celebration. All machinery were cleaned and the department were decorated with flowers, rangoli, turmeric etc. Invitations were extended to all teaching and non-teaching staff, research scholars, and students to participate in this event. The gathering took place in the conference room of the department, where everyone came together with a shared sense of devotion to worship their workplace. This collective celebration infused an additional sense of joy and positivity among all attendees. The prasadam were distributed to all attendees.



Alumni Day-2024

Date: 21-12-2024

Organized: Directorate of Alumni Affairs, SRMIST, Kattankulathur

Program Chair

Dr. A. Rathinam, Director, Alumni Affairs

Dr. S. Vishali, Associate Professor & Head of the Department, Chemical Engineering

Alumni Coordinators

Dr. M. P. Rajesh, Professor, Chemical Engineering

Dr. G. Keerthiga, Assistant Professor, Chemical Engineering

Alumni Day Coordinator

Dr. K. Sofiya, Assistant Professor, Chemical Engineering

About the event

The SRMIST Alumni Day on 21-12-24 was a grand success, with over 60 registrations from Chemical Engineering alumni worldwide. 10 alumni attended in person, and the **Eminent Alumni Award** was presented to **Mr. Sheik Dawood Maricar H, General Manager, Jacobi Carbons India Private Limited, Coimbatore [B. Tech. Chemical Engineering (Batch 2002 – 2006)]**, while **Ms. G. Maanasa Founder SitesGo & NinjaReach, Singapore [B. Tech. Chemical Engineering (Batch 2014 – 2018)]**, received the **Young Achiever Award**. Alumni interacted with faculty on syllabus framing and placement topics. G. Maanasa suggested using social media to boost department visibility and admissions, encouraging students to create content. Alumni also committed to supporting internships and placements for current students.

List of alumni attended the event

| Name | Degree/ Batch |
|-----------------------------------|------------------------|
| Mr. Sheik Dawood Maricar H | B. Tech. (2002 – 2006) |
| Mr. R. Balamurugan | B. Tech. (2007 – 2011) |
| Ms. G. Maanasa | B. Tech. (2014 – 2018) |
| Ms. N. Shanmugapriya | B. Tech. (2015 – 2019) |
| Mr. Ankush Basu | B. Tech. (2015 – 2019) |
| Ms. Dharshini S | B. Tech. (2018 – 2022) |
| Dr. S. Vishali | Ph.D. (2015) |
| Dr. K. Anbalagan | Ph.D. (2016) |
| Dr. K. Sofiya | Ph.D. (2017) |
| Dr. K. Selvam | Ph.D. (2022) |



THE DEPARTMENT OF CHEMICAL ENGINEERING
SRM INSTITUTE OF SCIENCE AND TECHNOLOGY
 Kattankulathur - 603 203, Tamil Nadu, India

Along with the
DIRECTORATE OF ALUMNI AFFAIRS (DAA)
 Invites you to attend an



SRM ALUMNI - PROUD PAST AND BRIGHT FUTURE

(MODE OF THE TALK - OFFLINE)

| AGENDA | |
|-------------------|---|
| 2.00 PM - 2.15 PM | Visit to the MO Lab |
| 2.15 PM - 2.30 PM | Visit to the department |
| 2.30 PM - 3.00 PM | Lab visit |
| 3.00 PM - 3.15 PM | Interaction with faculty members |
| 3.15 PM - 3.30 PM | Suggestions and discussion on Curriculum upgradation and revision |
| 3.30 PM - 4.00 PM | Group Discussion on Bridging gap between academia and industry for placements and knowledge sharing |

Date: 21.12.2024 (Saturday)
 Time : 2.00 to 4.00 PM
 Venue: Department of Chemical Engineering, Mechanical Block A, Main Campus, SRMIST.

CONVENERS

Prof. A. RATHINAM
 Director, Alumni Affairs, SRMIST

Dr. S. VISHALI
 HOD, Chemical Engineering, SRMIST

ALUMNI COORDINATORS

Dr. M.P. RAJESH
 Professor, Department of Chemical Engineering, SRM IST

Dr. G. KEERTHIGA
 Assistant Professor, Department of Chemical Engineering, SRM IST

Dr. K. SOFIYA
 Assistant Professor, Department of Chemical Engineering, SRM IST



AACSB
ACCREDITED



ISO 9001:2015
CERTIFIED



NIRF
RANKING



QS
WORLD UNIVERSITY RANKINGS



THE
WORLD UNIVERSITY RANKINGS



CSIR-UGC
NET



AACSB
ACCREDITED



Creative Corner

A Triumph of Teamwork: Our Joyful Journey to NBA Accreditation



Dr. S. Vishali



Dr. S. Kiruthika

NBA Coordinators

What began as a dream a vision to achieve NBA accreditation and elevate our department's standing soon transformed into an exhilarating journey of challenges, collaboration, and ultimately, triumph.

The process started with excitement tinged with nervousness. We knew that NBA accreditation was not merely about meeting standards; it was about demonstrating our unwavering commitment to quality education. The pre-qualifier was submitted in April 2023, marking the beginning of an intense self-assessment phase. It was a moment of reflection identifying our strengths, acknowledging gaps, and committing ourselves to bridging them.

With renewed determination, our team dived into rigorous preparations. Challenges arose at every step outdated documentation, the alignment of Course Outcomes (COs) with Program Outcomes (POs), and ensuring that faculty members were well-versed in Outcome-Based Education (OBE). There were moments of doubt, and times when the workload felt overwhelming, but what kept us going was our unity and shared purpose.

To keep the process engaging, our preparatory meetings became dynamic brainstorming sessions filled with camaraderie and laughter. Late-night documentation marathons turned into bonding moments, and every milestone we achieved big or small brought us a collective sense of joy. Finally, on July 7, 2024, we submitted the Self-Assessment Report, a testament to our dedication.

As the NBA peer team visit approached, the intensity heightened. We meticulously fine-tuned our laboratories, refined our presentations, and conducted mock audits to ensure our students and faculty were well-prepared. Every detail mattered from aligning vision statements to perfecting documentation. Sleepless nights were fuelled by countless cups of coffee and an unwavering sense of purpose.

Then came the big day July 26, 2024, when the NBA peer team arrived. Excitement and nervous energy filled the air, but as we began presenting, everything fell into place. Our students shone in their interactions, our faculty displayed their dedication, and our collective efforts resonated in every aspect of the evaluation. The visiting team was not just impressed by our infrastructure and documentation but by the spirit of teamwork that defined our department.



Finally, on September 11, 2024, the long-awaited news arrived we had secured accreditation for three years! The joy was immeasurable. Cheers erupted, and all the exhaustion faded into exhilaration. It was a moment of immense pride, knowing that every challenge, every sleepless night, and every ounce of effort had been worth it. We celebrated not just as colleagues but as a family one that had grown stronger through this journey.

This achievement is not just a badge of honor; it is a stepping stone to even greater aspirations. With NBA accreditation as our foundation, we now set our sights on strengthening industry collaborations, fostering innovation, and continuously evolving our curriculum. This journey was a testament to our resilience, but more importantly, it reinforced a powerful truth: no challenge is insurmountable when faced with teamwork, passion, and joy. As we move forward, we carry not just an accreditation certificate but a wealth of memories, experiences, and a renewed belief in what we can accomplish together.

Nuclear Power: A way to tackle climate change



Ms. Justine Staines Yellaka (RA2311007010040), II Year B. Tech.

Nuclear power has long been considered a key solution to addressing climate change due to its ability to generate large amounts of electricity with zero carbon emissions during operation. Unlike fossil fuel-based power plants, nuclear reactors produce electricity by splitting atoms in a process known as nuclear fission, releasing immense energy without the greenhouse gas emissions that contribute to global warming. With the global push to reduce carbon footprints and transition to cleaner energy sources, nuclear power stands out as one of the few technologies capable of providing reliable, baseload power at the scale required for industrialized societies.

However, nuclear energy is not without its challenges. Safety concerns, especially following high-profile accidents like Chernobyl and Fukushima, have made the public wary of nuclear technology. Additionally, issues surrounding the disposal of radioactive waste and the potential for nuclear proliferation are persistent risks. Despite these concerns, modern advancements in reactor design, such as Small Modular Reactors (SMRs) and thorium reactors, promise to enhance safety, efficiency, and waste management, which could help mitigate some of the longstanding criticisms.

Ultimately, nuclear power can be a crucial part of a diversified strategy to combat climate change. It complements intermittent renewable energy sources like wind and solar, providing a stable energy supply when these renewables are not available. As part of a broader energy mix, with substantial investments in innovation and safety, nuclear power has the potential to play a significant role in achieving global decarbonization goals while ensuring energy security and supporting economic growth.

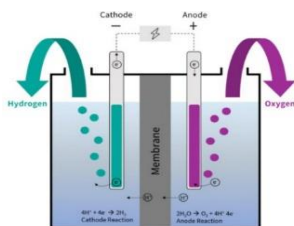
Selective methods of hydrogen production and their application in oil refineries



R. John Richardson (RA2311007010021), II Year B. Tech.

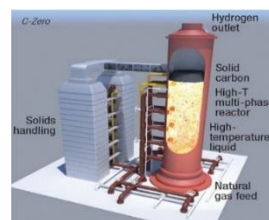
Hydrogen is a clean alternative energy resource and it is the most abundant chemical element, estimated to contribute 75 % of the mass of the universe. Hydrogen can be produced through conventional and unconventional processes from various resources such as natural gas, nuclear power, biogas, and renewable power like solar and wind. Hydrogen is mainly used in oil refineries to remove sulphur from natural gas and refined petroleum products such as diesel, petrol, kerosene, jet fuel, and fuel oils. The International Energy Agency (IEA) estimated that the global hydrogen production in 2018 amounted to 74 million tonnes and in the year 2023 hydrogen production reached 97 million tonnes of which less than 1% was low-emissions. Based on announced projects, low-emission hydrogen could reach 49 million tonnes per annum (MTPA) by 2030 (up from 38 MTPA in the Global Hydrogen Review 2023). There are two different promising hydrogen production technologies such as electrolysis and pyrolysis, which give high purity, low cost, and low-emission production. These methods have received special attention in oil refineries because they are easy to operate, have low maintenance, are less polluting than other large-scale methods, and can be made with zero emissions. Methane pyrolysis is less energy intensive than water electrolysis for producing hydrogen, and it's by product carbon black has many applications.

Electrolysis is the process of using electricity to split water into hydrogen and oxygen using electrolyzers. In this method, in an electrolytic solution (water), two electrodes are placed and connected to a power supply to conduct electrons through a separator (PEM). As a result, pure hydrogen and oxygen are produced in gaseous form at the anode and cathode, respectively.



Electrolytic hydrogen production

Methane pyrolysis involves the thermal decomposition of methane into its components, hydrogen and carbon. Methane pyrolysis is a potential process for transitioning to a sustainable hydrogen economy. It has a unique advantage over conventional steam methane reforming (SMR) and coal gasification processes because it produces CO₂-free hydrogen.



Methane pyrolysis technology

Message from the Alumni



Hello,

I am Abhay Sodawala, an alumnus from the Chemical Engineering batch of 2018. Reflecting on my time at SRMIST, from 2014 to 2018, I am filled with appreciation for how the Institution nurtured my academic and professional growth. The department of Chemical Engineering provided a vibrant and dynamic learning environment, combining cutting-edge research, practical hands-on experiences, and guidance from exceptional faculty members who were dedicated to helping me realize my potential. The hands-on experience in well-equipped laboratories was pivotal to my development, as it allowed me to apply the principles I learned in lectures to real-time challenges. This practical exposure significantly enhanced my understanding of chemical engineering and helped me develop both technical and conceptual expertise.

Abhay Sodawala

**B. Tech., MBA
Investment
Banking Analyst
– HSBC,
Bangalore
B. Tech.
(2014-2018)**

Internships were another key element that significantly impacted my time at SRMIST. I firmly believe that the internships I undertook during my academic years played a crucial role in honing my practical skills and understanding of the chemical engineering industry. These opportunities allowed me to engage with industry leaders, gain real-world insights, and develop a deeper appreciation for the practical challenges in the field. Moreover, SRMIST's strong industry connections and its dedicated placement cell were critical in opening up a wide array of career opportunities. The placement support provided by the university was unparalleled, as it helped me connect with top-tier companies in various sectors, including manufacturing, research, and development. Thanks to SRMIST's focus on both academic excellence and industry exposure, I was fortunate to secure a position with a leading company, which gave me the platform to further develop my career. To my juniors and current students, I encourage you to take full advantage of the vast resources and opportunities that SRMIST offers.



**Indurekha
Banerjee**
Process Engineer,
Oil and Gas
ILF Consulting
Engineers
Abu Dhabi,
United Arab
Emirates
B. Tech.
(2014-2018)

Hello there,

I am Indurekha Banerjee, and I graduated from the Department of Chemical Engineering in SRM Institute of Science and Technology, Kattankulathur in the year 2018. I had quite an invigorating experience here while pursuing my Bachelor's Degree in Chemical Engineering. With the continuous support of the proficient faculty members in the department, I was not only able to develop a strong foundation on chemical engineering but they also pushed us to take part in several cocurricular and extracurricular activities which helped us to grow in several other necessary domains which prepared us to face the corporate world today. Our faculty members always made sure that we can reach out to them without any reservations. They sometimes took care of us like our parents while we were staying far away from our homes and eyes of our own parents. This was the biggest comfort I had while my stay there that helped me to eventually grow independent and self-reliant.

The Department of Chemical Engineering provides state of the art amenities, starting from projector enabled classrooms to tech savvy laboratories, to the students to facilitate easy learning and help them carry their research work. The program, along with all the courses, was also very well framed with respect to its relevance in today's world of chemical engineering. The Department also prepares its students with necessary soft skills which helps aspiring candidates to sit for placements and crack numerous dream roles in many core multinational establishments right in the budding stage of their careers. I will forever be grateful to the Department of Chemical Engineering in SRM for shaping me into the chemical engineer that I have become today and help me carve a niche for myself in this field in today's competitive world.

திருக்குறள்

குறள் எண் – 637

பால் – பொருட்பால் (Porutpaal) – Wealth

இயல் – அமைச்சியல் (Amaichchiyal) – Ministers of State

அதிகாரம் – அமைச்சு (Amaichchu) - The Office of Minister of State

குறள்

செயற்கை அறிந்த கடைத்தும் உலகத்து

இயற்கை அறிந்து செயல்.

பொருள்

செயலாற்றல் பற்றிய நூலறிவைப் பெற்றிருந்தாலும், உலக நடைமுறைகளை உணர்ந்து பார்த்தே அதற்கேற்றவாறு அச்செயல்களை நிறைவேற்ற வேண்டும்.

English Couplet

Though knowing all that books can teach, 'tis truest tact
To follow common sense of men in act.

Couplet Explanation:

Though you are acquainted with the (theoretical) methods (of performing an act), understand the ways of the world and act accordingly.

Transliteration (Tamil to English):

Seyarkai Arindhak Kataiththum Ulakaththu Iyarkai Arindhu Seyal

