SRM
INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)

Chemical Chronicle

NEWSLETTER
Volume 2, Issue 2 (January to June 2023)

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/
Facebook: https://www.facebook.com/profile.php?id=100083228537110
Instagram: https://instagram.com/srmchemicalofficial?igshid=ZDdkNTZiNTM=
LinkedIn: https://www.linkedin.com/company/the-srm-chemical-club/about/
Twitter:https://twitter.com/srm_chemclub

NAAC		nirf	QS	THE WORLD UNIVERSITY RANKINGS	ARIIA	SHANGHAI RANKING
A++	Category 1 with 12B Status	(2023) Ranked 18th University	(2023) World Ranking one among 41 Indian Universities	(2023) World Ranking one among 75 Indian Universities	(2021) Ranked 4th	(2023) World Ranking one among 14 Indian Universities

Contents	Page Number

Message from the Chairperson
School of Bioengineering

Dr. M. Vairamani
Chairperson, School of Bioengineering, CET, SRMIST

I congratulate the Department of Chemical Engineering, SRM Institute of Science and Technology for putting together the volume II - second issue of the newsletter, ***'Chemical Chronicle'****. This issue focuses on the various activities and accomplishments of the students and faculty of the Department of Chemical Engineering during the period from January to June 2023. A periodic consolidation of milestones achieved by the department helps motivate the team spirit and also indicates the areas of refinement and growth to be planned in future. Since both academia and research elucidate a need for traversing across departments to cultivate a multidisciplinary attitude, I am sure that this newsletter will pave way for many such collaborations.*

I congratulate the editorial team for coming up with another enticing issue of the Chemical Chronicle and hope to witness the continual growth of the department through this medium.

From the HoD's Desk

Dr. K. Suresh
Head of the Department, Chemical Engineering

*I am delighted to present the volume II - second issue of '**Chemical Chronicle',** the official newsletter of the Department of Chemical Engineering, College of Engineering and Technology, SRMIST. This newsletter brings to you the highlights of the department activities such as research contributions, awards/prizes won, conferences, workshops, technical talks organized, and the recent placement records of our students.*

I wholeheartedly thank the students, parents, alumni, research scholars, faculty, and the non-teaching staff of the Department, for being a part of this incredible journey and solicit your support in all our future endeavours to carry the department to a higher pedestal. I am thankful to the management for providing a conducive environment to synergise our strengths towards fulfilling the objectives of the department and the institute as a whole. I am sure this compilation consisting of our efforts will help to periodically review, retrospect and plan to improve our performance in a better manner.

E-mail: hod.chem@srmist.edu.in
Phone: 044 – 2741 7818

Editorial Desk

Dear Readers,

We are overwhelmed to present to you the second volume – issue – II of the Chemical Chronicle. This issue serves to showcase all the aspects of growth of the department observed over a period of six months from ***January to June 2023****. The students, faculty, and supporting staff have always put in their best efforts for the growth of the department and this period is no exception. We have retained the* ***average impact factor of 5.9 for the academic year 2022-2023*** *as well. In the placement season for final year B. Tech. (2019-2023), 30 students have bagged job offers with* ***11 students having more than one offer enabling them to choose core engineering jobs.***

Paper/poster presentations *by the students in various conferences as well as other events with the help of their mentors has tremendously increased to* ***74****,* ***winning many awards during the past six months.*** *About* ***40 awards*** *were conferred to faculty members and students of the department which is a remarkable increase.*

It is indeed a proud moment for our department when our faculty members received the state level award from the Minister for winning a Hackathon.

The creativity of the faculty members and students is portrayed in the ***Creative corner*** *section featuring articles contributed by them. Hope you have a wonderful time reading our newsletter!*

Dr. E. Poonguzhali
Assistant Professor, Chemical Engineering

Ms. B. Anitha,
Secretary to HoD
Data Collection

Kanishka G
IV Year B. Tech.
Student Contributor

Sheik Mohamed Wahith S
IV Year B. Tech.
Student Contributor

Ilansuriyan A
IV Year B. Tech.
Student Contributor

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, 25 batches of B. Tech. students and 20 batches of M. Tech. students have graduated from this department with meritorious performance. Presently, the department has 15+ Ph.D. scholars working on various socially relevant projects.

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 **30 papers** in refereed journals and **9 book chapters** during the period, January to June 2023. The Department of Chemical Engineering congratulates its faculty members and students for their tremendous efforts towards contribution for publication in peer reviewed journals/books.

Paper Publications	January to June 2023	Academic year 2022 - 2023
Number of Publications	30	43
Number of Corresponding Author Publications	18 (60 %)	27 (62.8 %)
Number of First Author Publications	16 (53.3 %)	23 (53.5 %)
Number of Science Citation Indexed (SCI) Publications	15 (50 %)	27 (62.8 %)
Highest Impact Factor	11.889	11.889
Average Impact Factor	5.638	5.911
Number of Q1 Publications	9 (30 %)	15 (34.9 %)
Number of Q2 Publications	4 (13.3 %)	7 (16.3 %)
Number of International Collaborative Publications	9 (30 %)	11 (25.6 %)
Per capita publication		2.2

Dr. K. Tamilarasan - Publication with highest IF: 11.889

[1] M. Venkatesh Prabhu, Shreyasi Ghosh, Aditi Tulshyan, Abbas Ansar Ahmed, S. Balasubramanian, **Ashish Kapoor, K. Selvam**, **Modeling and multi-objective optimization of parameters in fabrication and performance analysis of polyvinylidene fluoride spiral-wound membrane modules, Polymer Bulletin**. 80 (2023) 6221–6246. https://doi.org/10.1007/s00289-022-04361-5. **(SCI, IF: 2.843, Q2)**

[2] B. Krishna Srihari, **Ashish Kapoor, K. Suresh,** S. Balasubramanian, **Computational fluid dynamics studies on the flow of fluids through microchannel with intentional obstacles, AIP Conference Proceedings.** 2516 (2022) 170003. https://doi.org/10.1063/5.0108550. **(Scopus, SNIP: 0.262)**

[3] Brij Mohan Sharma, Martin Scheringer, **Paromita Chakraborty,** Girija K. Bharat, Eirik Hovland Steindal, Leonardo Trasande, Luca Nizzetto, **Unlocking India's Potential in Managing Endocrine-Disrupting Chemicals (EDCs): Importance, Challenges, and Opportunities, Exposure and Health.** (2022). https://doi.org/10.1007/s12403-022-00519-8. **(SCI, IF: 8.835, Q1)**

[4] **E. Kavitha*, R. B. Balayogesh, Abraham Roshan, A. S. Adwaid, Satapathy Mrityunjay, Studies on the adsorptive removal of cesium ions using Nigella sativa as an adsorbent and optimization with response surface modeling, Desalination and Water Treatment.** 285 (2023) 129–145. https://doi.org/10.5004/dwt.2023.29306. **(SCI, IF: 1.273)**

[5] **Hemang Sharma, Aditya Yadav,** Naveen Kumar Rajendran, Sudharsanam Abinandan, G. Baskar, **K. Tamilarasan*, Techno-economic process parameter studies for hydrogel composite production from corncob biomass and its application as fertilizer releasing agent, Chemical Papers.** (2023). https://doi.org/10.1007/s11696-023-02701-x. **(SCI, IF: 2.146, Q2)**

[6] A. Balakrishnan, **Meenu Mariam Jacob,** P. Senthil Kumar, Ashish Kapoor, **P. Muthamilselvi, S. Prabhakar,** M. Sillanpää, **Strategies for safe management of hospital wastewater during the COVID-19 pandemic, International Journal of Environmental Science and Technology.** (2023). https://doi.org/10.1007/s13762-023-04803-1. **(SCI, IF: 3.519, Q2)**

[7] **Mohamed Nayeem Nazeer Hussain, M. P. Rajesh,** R. Jeyalakshmi, **S. Kiruthika*, Nitrogen and phosphorus recovery as struvite from nutrient rich wastewater using electrochemical method: A review, AIP Conference Proceedings.** 2427 (2023). https://doi.org/10.1063/5.0124136. **(Scopus, SNIP: 0.262)**

[8] **S. Samsnavith, A. Varun, N. Gowtham, R. Balamurugan, S. Sam David*, Experimental investigation of bio-emulsion stability and extraction efficiency in liquid-liquid dispersion column, AIP Conference Proceedings.** 2427 (2023). https://doi.org/10.1063/5.0101711. **(Scopus, SNIP: 0.262)**

[9] **E. Poonguzhali*, Fathima Aadilah Mohamed Ali, Ashish Kapoor, S. Prabhakar, Assessment of solvent extraction for the recovery of phenol from wastewater, AIP Conference Proceedings.** 2427 (2023). https://doi.org/10.1063/5.0101071. **(Scopus, SNIP: 0.262)**

[10] **E. Poonguzhali*, Mukund Dalmia, K. Sofiya, Ashish Kapoor, S. Prabhakar, Separation of phenol through solvent extraction from aqueous solutions, AIP Conference Proceedings.** 2427 (2023). https://doi.org/10.1063/5.0101070. **(Scopus, SNIP: 0.262)**

[11] **Annapoorani Valliappan, Harshinee Prakash, Shirashti Jain, E. Kavitha, M. P. Rajesh, K. Tamilarasan*, Process optimizing of Zn (II) ion removal from aqueous solutions by black cumin seeds (Nigella sativa) using response surface methodology, AIP Conference Proceedings.** 2427 (2023). https://doi.org/10.1063/5.0101290. **(Scopus, SNIP: 0.262)**

[12] **Mihul Gabhane, Arunachaleshwar K, Ashish Kapoor, K. Deepa*, Paper-based microfluidic device coupled with foldscope for the detection of As3+ions using gold nanoparticles, AIP Conference Proceedings.** 2427 (2023). https://doi.org/10.1063/5.0100849. **(Scopus, SNIP: 0.262)**

[13] **G. Keerthiga*, K. Avinash, Rishav Saha, Akash Balakrishnan, Ikshit Jain, Photocatalytic degradation of nitro phenol: A continuous study in a TiO_2 film coated photo reactor, AIP Conference Proceedings.** 2427 (2023). https://doi.org/10.1063/5.0101199. **(Scopus, SNIP: 0.262)**

[14] **K. Suresh,** S. Balasubramanian, **K. Sofiya*, Impact on the effect of acetic acid in its aqueous forms on environments and its separations methods, AIP Conference Proceedings.** 2427 (2023). https://doi.org/10.1063/5.0101145. **(Scopus, SNIP: 0.262)**

[15] Yogashree Bharath, **G. Keerthiga*. Mycoremediation of garbage contaminated municipal soil and garage contaminated oil soil using Pleurotus Ostreatus - A comparative study, AIP Conference Proceedings.** 2427 (2023). https://doi.org/10.1063/5.0101197. **(Scopus, SNIP: 0.262)**

[16] **Asky T. Fungur, E. Poonguzhali,** Babuji Pullepu, **S. Prabakar, S. Kiruthika*, Comparative assessment of managing dye effluents through centralized and decentralized plant, AIP Conference Proceedings.** 2427 (2023). https://doi.org/10.1063/5.0101451. **(Scopus, SNIP: 0.262)**

[17] **Barath Kumar G, Aishwarya Modak, Rashi Mishra, K. Sofiya*, Identification of essential oil compounds in Rosa damascene, N yctanthes arbor-tristis and Jasminum by steam distillation method, AIP Conference Proceedings.** 2427 (2023). https://doi.org/10.1063/5.0124102. **(Scopus, SNIP: 0.262)**

[18] **Gaurav Kumar Porichha,** M. Venkatesh Prabhu, **Ashish Kapoor,** S. Balasubramanian, **Lipid extraction from freshwater and marine microalgae using confined impinging jet mixer, AIP Conference Proceedings.** 2427 (2023). https://doi.org/10.1063/5.0100927. **(Scopus, SNIP: 0.262)**

[19] Gayathri Aarimuthu, **S. Kiruthika,** V. Selvarani, B. Muthukumaran, Mohammed F. Albeshr, Abdulwahed Fahad Alrefaei, Woong Kim, **Enhanced membraneless fuel cells by electrooxidation of ethylene glycol with a nanostructured cobalt metal catalyst, Environmental Research**. 233 (2023) 115601. https://doi.org/10.1016/J.ENVRES.2023.115601. **(SCI, IF: 8.3, Q1)**

[20] Alice Jasmine**, R. Muruganantham, T. Kavin,** S. Abinandan, V. Vaidyanathan, **K. Tamilarasan*, Microwave-assisted alkali pre-treatment medium for fractionation of rice straw and catalytic conversion to value-added 5-hydroxymethyl furfural and lignin production, International Journal of Biological Macromolecules**. 236 (2023) 123999. https://doi.org/10.1016/J.IJBIOMAC.2023.123999. **(SCI, IF: 8.025, Q1)**

[21] B. Sangeetha, S. M. Priya, R. Pravin, **K. Tamilarasan,** G. Baskar, **Process optimization and technoeconomic assessment of biodiesel production by one-pot transesterification of Ricinus communis seed oil, Bioresource Technology.** 376 (2023) 128880. https://doi.org/10.1016/J.BIORTECH.2023.128880. **(SCI, IF: 11.889, Q1)**

[22] Janani Karuppaiyan, R. Jeyalakshmi, **S. Kiruthika,** Mohammad Ahmad Wadaan, Muhammad Farooq Khan, Woog Kim, **A study on the role of surface functional groups of metakaolin in the removal of methylene blue: Characterization, kinetics, modeling and RSM optimization, Environmental Research.** 226 (2023) 115604. https://doi.org/10.1016/J.ENVRES.2023.115604. **(SCI, IF: 8.431, Q1)**

[23] **E. Kavitha*, Gopika Ajit, Review and assessment of the separation and recovery of tzinc from the aqueous stream, Desalination and Water Treatment.** 291 (2023) 131–143. https://doi.org/10.5004/dwt.2023.29487. **(SCI, IF: 1.273)**

[24] **G. Keerthiga,** Ashish Kapoor, P. Senthil Kumar, **Anagha Sunil,** Gayathri Rangasamy, **MXenes and MXene-Based Materials for Removal and Detection of Water Contaminants: A Review, Industrial and Engineering Chemistry Research.** 62 (2023) 6559–6583. https://doi.org/10.1021/acs.iecr.3c00595. **(SCI, IF: 4.326, Q1)**

[25] Vinodhini V. M., Atul John Abraham, Gouri Lakshmy Radhakrishnan, **Ashish Kapoor,** Varshini Karthik, **Coagulopathy and Covid-19: A quantitative review on the influence of coronavirus on the human blood coagulation parameters, AIP Conference Proceedings.** 2603 (2023) 50001. https://doi.org/10.1063/5.0126276. **(Scopus, SNIP: 0.262)**

[26] **E. Poonguzhali*, Ashish Kapoor, S. Prabhakar, Membrane assisted process intensification and optimization for removal and recovery of phenol from industrial effluents, Separation and Purification Technology.** 319 (2023) 124026. https://doi.org/10.1016/j.seppur.2023.124026. **(SCI, IF: 9.136, Q1)**

[27] Sharmiladevi Ramamoorthy, Sakshi Bajhal, **S. Anandhakumar*, The role of surface modification in improving the effectiveness of CuS nanorods for cancer ablation therapy and antibacterial applications, Surfaces and Interfaces.** 39 (2023) 103001. https://doi.org/10.1016/J.SURFIN.2023.103001. **(SCI, IF: 6.137, Q1)**

[28] N. Shanmuga Priya, J. B. Mathangi, **G. Keerthiga,** M. Helen Kalavathy, **Morphological and electrochemical properties of Citrullus lanatus-derived activated carbon for supercapacitor applications, Bulletin of Materials Science.** 46 (2023). https://doi.org/10.1007/s12034-023-02961-z. **(SCI, IF: 1.878)**

[29] Alice Jasmine David, Sudharsanam Abinandan, V. Vinoth Kumar, Chunbao Charles Xu, **K. Tamilarasan*, A critical review on current status and environmental sustainability of pre-treatment methods for bioethanol production from lignocellulose feedstocks, 3 Biotech.** 13 (2023) 1–14. https://doi.org/10.1007/s13205-023-03657-1. **(SCI, IF: 2.8, Q2)**

[30] M. Subbiah, A. Ansalin Gnana Sowndarya, **S. Anandhakumar,** S. Venkatachalam, N. Saravanan, S. Pitchaimuthu, N. Srinivasan, **Tailoring hierarchical BiVO4 sub-micron particles for enhanced cyclability in asymmetric supercapacitor, Journal of Energy Storage.** 71 (2023) 108137. https://doi.org/10.1016/j.est.2023.108137. **(SCI, IF: 9.4, Q1)**

Book Chapters Published

[1] Harsha Rao, **G. Keerthiga*, Chapter 13. Green foams and their potential applications,** Green Sustainable Process for Chemical and Environmental Engineering and Science. *Green Composites: Preparation, Properties, and Allied Applications.*01-07-2022, pp. 261-271, 978-0-323-99643-3, **Elsevier,** https://doi.org/10.1016/B978-0-323-99643-3.00020-6

[2] **K. Deepa, Ashish Kapoor, S. Prabhakar, Chapter 5. Applying Noncarbon-Based Nanomaterials to Detect Environmental Contaminants,** Nanotechnology For Environmental Pollution Decontamination. *Tools, Methods, and Approaches for Detection and Remediation.*1st Edition, pp. 135-153, 30-11-2022, 9781003279563, **Apple Academic Press,** https://doi.org/10.1201/9781003279563

[3] **Abinaya Stalinraja, G. Keerthiga, Chapter 4. Metal support interaction for electrochemical valorization of CO_2,** Green Sustainable Process for Chemical and Environmental Engineering and Science. *Carbon Dioxide Capture and Utilization.* pp. 69-84, 7-01-2023, 978-0-323-99429-3, **Elsevier,** https://doi.org/10.1016/B978-0-323-99429-3.00006-0

[4] Vijay Vaishampayan, Mukesh Kumar, **P. Muthamilselvi**, Ashish Kapoor, **Chapter 16. Adsorbents for carbon capture,** Green Sustainable Process for Chemical and Environmental Engineering and Science. *Carbon Dioxide Capture and Utilization.* pp. 337-344, 27-01-2023, 978-0-323-99429-3, **Elsevier,** https://doi.org/10.1016/B978-0-323-99429-3.00026-6

[5] **S. Anandhakumar, Chapter 2. Photosynthesized nanomaterials—NextGen material for biomedical applications,** Emerging Photosynthesized Nanomaterials for Biomedical Applications. *Micro and Nano Technologies.* pp. 31-64 , 7-02-2023, 978-0-12-824373-2, **Elsevier,** https://doi.org/10.1016/B978-0-12-824373-2.00005-2

[6] **S. Anandhakumar, Chapter 9. Phytosynthesized nanoparticles for orthopedic applications,** Emerging Photosynthesized Nanomaterials for Biomedical Applications. *Micro and Nano Technologies.* pp. 217-236, 27-02-2023, 978-0-12-824373-2, **Elsevier,** https://doi.org/10.1016/B978-0-12-824373-2.00007-6

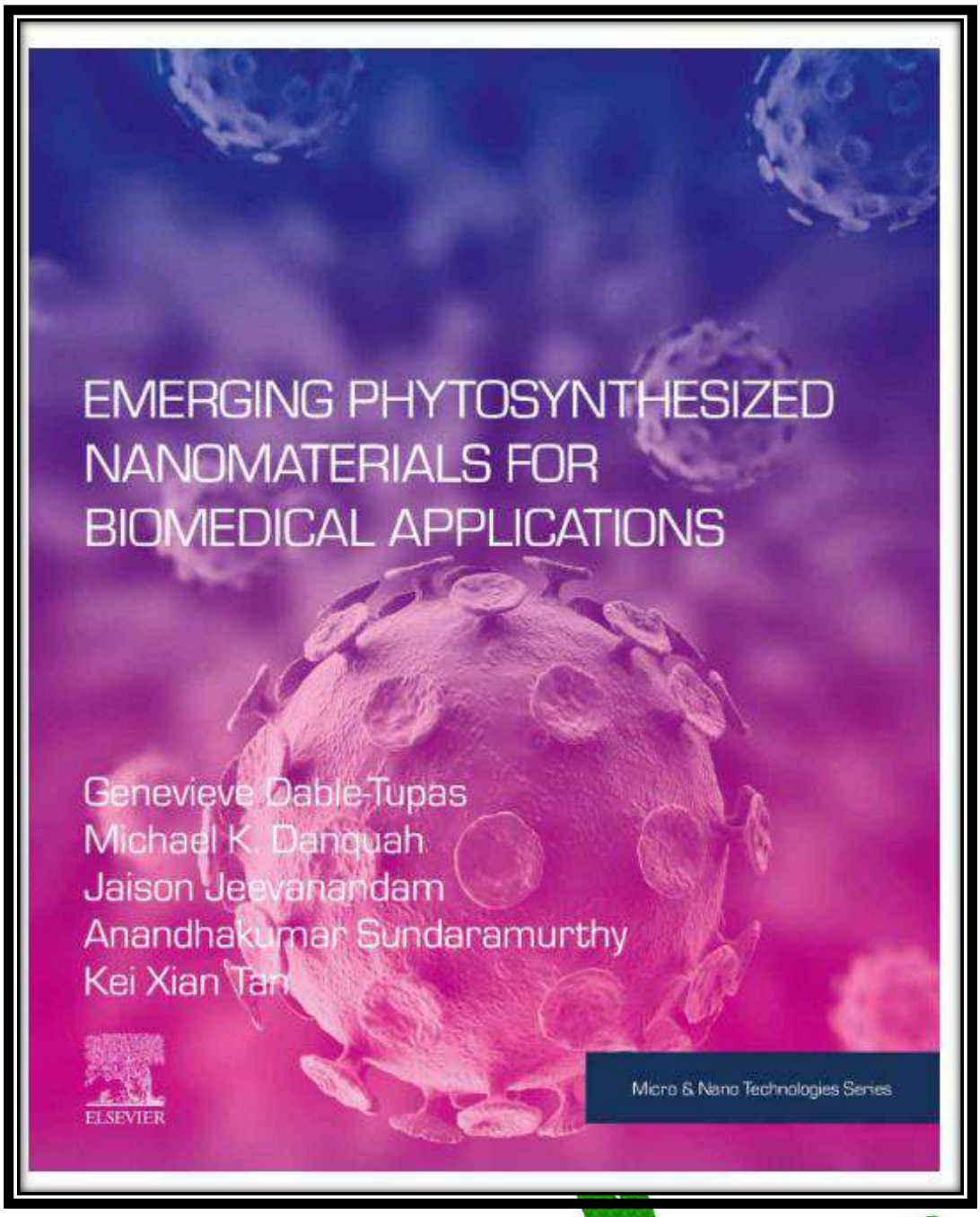
[7] **P. Muthamilselvi,** S. Balasubramanian, Ashish Kapoor, **S. Prabhakar, 7. Natural materials as adsorbents for water purification,** Green Sustainable Process for Chemical and Environmental Engineering and Science. *Natural Materials Based Green Composites 1: Plant Fibers.* pp. 123-144, 12-05-2023, 978-0-323-95167-8, **Elsevier,** https://doi.org/10.1016/B978-0-323-95167-8.00001-6

[8] **S. Kiruthika, S. Vishali, Chapter 3. Industrial Application of Essential Oils,** Essential Oils: Extraction Methods and Applications. pp. 49-67, 28-06-2023 , 9781119829355, **Wiley Scrivener Publishing LLC,** https://doi.org/10.1002/9781119829614.ch3

[9] **S. Vishali, E. Kavitha,** S. Selvalakshmi, **Chapter 41. Therapeutic Role of Essential Oils,** Essential Oils: Extraction Methods and Applications. pp. 953-976, 28-06-2023, 9781119829355, **Wiley Scrivener Publishing LLC,** https://doi.org/10.1002/9781119829614.ch41

Book Editor

Dr. S. Anandhakumar* is one of the **editors** of the Book titled **Emerging Photosynthesized Nanomaterials for Biomedical Applications. Micro & Nano Technologies Series. Elsevier.** https://doi.org/10.1016/C2020-0-00662-6



Projects Sanctioned

[1] Dr. V. Vinoth Kumar, **Dr. E. Poonguzhali,** received **Rs. 1, 10,000** for the project titled **"An integrated technology for the removal of microorganism in pharmaceutical industry water samples"** from **AquaPlus Technologies, Salem, Tamil Nadu**, on 20-02-2023 for 6 Months.

[2] **Ms. G. Kanishka & Team, Dr. G. Keerthiga,** received **Rs. 50,000,** for the project titled "**Development of low-cost portable salt water lamp using electrochemical-microfluidic approach",** from **SIIEC, SRMIST, on** 13-04-2023 for 1 Year.

[3] Dr. R. A. Nazeer, Dr. V. Vinoth Kumar, Dr. P. Panneerselvam, **Dr. P. Muthamilselvi,** received **Rs. 7,30,000,** for the project titled **"An integrated technology for the efficient removal of biologically active endotoxin from aqueous solution",** from **AquaPlus Technologies, Salem, Tamil Nadu,** on 28-04-2023 for 1 Year & 4 months

Awards /Achievements - Faculty

[1] **Dr. S. Vishali** has been honoured with the **SRM Phoenix Project Award** on the occasion of **World Environment Day 2023,** organized by the Centre for Research in Environment Sustainability Advocacy and Climate Change (REACH) and the Directorate of Research (DRVE) SRMIST, Kattankulathur on 05-06-2023.

[2] **Dr. S. Vishali** received the **SRM Green Ambassador Award** on the occasion of **World Environment Day 2023,** organized by the Centre for Research in Environment Sustainability Advocacy and Climate Change (REACH) and the Directorate of Research (DRVE) SRMIST, Kattankulathur on 05-06-2023.

[3] **Dr. S. Vishali & Dr. S. Sam David** have emerged as the **Third Prize winners of the State Level Enviro-Solvers Hackathon for their solution on Grey Water Treatment Subunit in Washing Machines: A Hybrid Approach Towards Water Management** under the theme Water Saved organized by the **Tamil Nadu Pollution Control Board** on 06-06-2023.

[4] **Dr. S. Anandhakumar** has been granted with the **SERB International Research Experience (SIRE) Fellowship** for collaborative research in **Daegu Gyungbuk Institute of Science and Technology (DGIST), South Korea** for the period of 6 months by the Science and Engineering Research Board on 17-06-2023.

[5] **Dr. S. Kiruthika & Dr. E. Poonguzhali** received the **Education Excellence Award** 2023 from Padma Shri Mylswamy Annadurai (Moon Man of India) collaborated by **Alagappa University** at the inauguration of Heta College of Technology on 29-06-2023.

[6] The following faculty and staff members from the Department of Chemical Engineering received the **Certificate of Appreciation to acknowledge 10+ years of continuous service rendered towards the growth of our institution** on the occasion of the **International Women's Day** Celebrations on 10-03-2023.

Dr. S. Vishali
Dr. S. Kiruthika
Dr. K. Sofiya
Dr. E. Kavitha
Dr. E. Poonguzhali
Dr. P. Muthamilselvi
Dr. D. Nanditha
Ms. D. P. Sarrumathi
Ms. B. Anitha

[7]. The following faculty members from the Department of Chemical Engineering was presented with the **Certificate of Honor for receiving State/National/International level awards/recognitions/funded projects** organized by SRMIST on 21-03-2023.

Dr. M. P. Rajesh
Dr. S. Anandhakumar
Dr. K. Tamilarasan
Dr. S. Vishali
Dr. S. Kiruthika
Dr. P. Muthamilselvi
Dr. G. Keerthiga
Dr. Paromita Chakraborty
Dr. A. Sowmya

Dr. S. Vishali & Dr. S. Sam David receiving **the award and Rupees One Lakh Cash Prize** from The **Hon'ble Minister for Environment and Climate Change, Government of Tamil Nadu, Thiru. Siva. V. Meyyanathan** and **Ms. Supriya Sahu I.A.S.**, Additional Chief Secretary Environment and Climate Change, Government of Tamil Nadu **for winning the Third Prize in the State-level Enviro Solvers Hackathon organized by the Tamil Nadu Pollution Control Board on 06-06-2023**.

Our Founder Chancellor Dr. T. R. Paarivendhar M. P., Congratulating the award winners

SRM

Certificate of Appreciation

This is to certify that

Dr. S. Vishali

Department of Chemical Engineering, SRMIST

has been awarded the "SRM Phoenix Project Award"

on 5th June, 2023

WORLD ENVIRONMENT DAY 2023

Beat Plastic Pollution

with Sustainable Solution

Organized By

Centre for Research in Environment, Sustainability Advocacy and Climate CHange (REACH)

Directorate of Research (DRVE)

SRM Institute of Science and Technology, Kattankulathur - 603203.

Prof. Paromita Chakraborty
Convenor
Head, REACH, SRMIST

Prof. B. Neppolian
Dean, Research
SRMIST

Dr. S. Ponnusamy
Registrar
SRMIST

SRM

INSTITUTE OF SCIENCE & TECHNOLOGY

World Environment Day 2023

Beat Plastic Pollution

with Sustainable Solution

5th June 2023

SRM Green Ambassador Award

Dr. S. VISHALI
Associate Professor
Chemical Engineering, CET
SRMIST-KTR

Organized By

Center for Research in Environment,
Sustainability Advocacy and
Climate Change (REACH),
SRM Institute of Science and Technology,
Kattankulathur - 603203

Faculty members appreciated with Certificate of Honor for receiving State/National/International level awards/recognitions/funded projects.

Dr. S. Kiruthika & Dr. E. Poonguzhali receiving the Education Excellence Award 2023 from Padma Shri Mylswamy Annadurai (Moon Man of India)

Awards /Achievements – Students

[1] **M. B. Abhinaya** (RA2113010011020) **Research Scholar** along with **Dr. K. Tamilarasan bagged the First Prize for the paper presentation titled, LDH modified bismuth based heterostructure composites with improved charge carrier separation for photodegradation of organic pollutant** in the **Research Day, organized by SRMIST, KTR** on 28-02-2023.

[2] **Meenu Mariam Jacob** (RC2113008011003) **Research Scholar**, **Dr. P. Muthamilselvi & Dr. S. Prabhakar bagged the Second Prize for the paper presentation titled, Removal of pesticide chlorpyrifos using sugarcane bagasse-based biochar alginate beads in continuous fixed bed studies**in the **Research Day, organized by SRMIST, KTR** on 28-02-2023.

[3] **Meenu Mariam Jacob** (RC2113008011003) **Research Scholar**, **Dr. P. Muthamilselvi & Dr. S. Prabhakar bagged the First Prize for the poster presentation titled, Process modelling for the decontamination of chlorpyrifos** in the **Dr. Paarivendhar Research Colloquium (DPRC - 2023), organized by Directorate of Research & School of Bioengineering, SRMIST, KTR** on 29-03-2023 to 31-03-2023.

[4] The team comprising of **Sarthak Asthana** (RA1911007010008), **Shemaiah Sam** (RA1911007010024) **of final year B. Tech.** along with **Dr. E. Poonguzhali** bagged the **Best Paper Award (First Prize) for the paper presentation** titled, **Removal of nickel from wastewater by hybrid process** in the **National Conference on Technological Innovations in Chemical Engineering Towards Sustainability - TIChS23, organized by Sri Venkateswara College of Engineering, Sriperumbudur** during 05-04-2023 and 06-04-2023.

[5] **Takumi Nagasaka** (RA2213008011001) **Research Scholar** along with **Dr. G. Keerthiga** bagged the **Third Prize for the paper presentation** titled, **Green synthesis of Cu and Zn MOF for electrochemical reduction of CO_2** in the **National Conference on Technological Innovations in Chemical Engineering Towards Sustainability - TIChS23, organized by Sri**

Venkateswara College of Engineering, Sriperumbudur during 05-04-2023 and 06-04-2023.

[6] **V. Kaviya** (RA1911007010065), of **final year B. Tech.** along with **Dr. S. Kiruthika** bagged the **Third Prize for the paper presentation** titled, **Utilization of alkali extracted geopolymers based on waste copper slag** in the **National Conference on Technological Innovations in Chemical Engineering Towards Sustainability - TIChS23, organized by Sri Venkateswara College of Engineering, Sriperumbudur** during 05-04-2023 and 06-04-2023.

[7] **K. Balaguru** (RA1911007010070), of **final year B. Tech.** along with **Dr. S. Vishali** bagged the **First Prize for the poster presentation on Waste Management, in the World Environment Day 2023** organized by the **Center for Research in Environment Sustainability Advocacy and Climate Change (REACH) and the Directorate of Research (DRVE),** SRMIST, Kattankulathur on 05-06-2023.

[8] **Rishi Praneash K B** (RA2212012010012), **Muthu Venkatesh A** (RA2212012010011) of **first year M. Tech.** bagged the **Second Prize for the paper presentation** titled, **Sustainable Trends in Energy and Environmental Resources**, in the **National Conference on STEER 2023 - Chem-Xplore, organized by the Department of Chemical Engineering, SSN College of Engineering,** during 16-03-2023 and 17-03-2023.

[9] **Abinaya Stalinraja** (RA2013008011001), **Research Scholar** along with **Dr. G. Keerthiga** bagged the **outstanding oral presentation award along with a Cash Prize for the paper presentation titled, Electrochemical reduction of CO_2** in the **International Conference on Electrochemistry in industry, health and environment, organized BARC – Indian Society of Electro Analytical Chemistry** during 7-11, Feb 2023.

[10] **Jegadheeswari T** (RA1911007010076), **Ayyappan S** (RA1911007010061) of **final year B. Tech.** along with **Dr. S. Sam David** bagged the **First Prize for their**

prototype presentation titled, **Experimental Investigation of Inverse Fluidized Photo-Catalytic Reactor for Methylene Blue Degradation** in the **Chem Project Expo - 2023, organized by the Department of Chemical Engineering, CET, SRMIST, KTR** during 04-05-2023 and 05-05-2023.

[11] **Deepa D** (RA1911007010007), **S. I. Lavanya** (RA1911007010010) & **Sruthi Mahalakshmi M** (RA1911007010056) of **final year B. Tech.** along with **Dr. K. Tamilarasan** bagged the **Second Prize for their poster presentation** titled, **Fractionation of Lignin from Agro Biomass for Synthesis of Value-Added Products** in the **Chem Project Expo - 2023, organized by the Department of Chemical Engineering, CET, SRMIST, KTR** during 04-05-2023 and 05-05-2023.

[12] **Raakesh B R** (RA1911007010063), **Balamurugan** (RA1911007010068) & **Vishwa K** (RA1911007010071) of **final year B. Tech.** along with **Dr. D. Nanditha** bagged the **Third Prize for their poster presentation** titled, **Development of Blended Hydrophobic Membrane for Membrane Distillation and its Application** in the **Chem Project Expo - 2023, organized by the Department of Chemical Engineering, CET, SRMIST, KTR** during 04-05-2023 and 05-05-2023.

[13] **Rahul Adithya** (RA2112012010002) of **final year M. Tech.** along with **Dr. G. Keerthiga** bagged the **First Prize for their poster presentation** titled, **Development of Blended Hydrophobic Membrane for Membrane Distillation and its Application** in the **Chem Project Expo - 2023, organized by the Department of Chemical Engineering, CET, SRMIST, KTR** during 04-05-2023 and 05-05-2023.

[14] **Meenu Mariam Jacob** (RC2113008011003) **Research Scholar** & **Dr. P. Muthamilselvi** received the certificate of appreciation for being selected as **one of the finalists of the State Level Enviro-Solvers Hackathon for presenting their ideas on the theme Water Saved at the finale organized by the Tamil Nadu Pollution Control Board** on 31-05-2023.

Sarthak Asthana, Shemaiah Sam receiving the best paper award (I prize) for paper presentation

Prize winners

First Prize in Chem Project Expo – 2023 – UG

Second Prize in Chem Project Expo – 2023 – UG

Third Prize in Chem Project Expo – 2023 – UG

\

First Prize in Chem Project Expo - 2023- PG

Congratulations to all the faculty members and the students, special mention to Dr. S. Vishali and Dr. S. Sam David for receiving the state award. We are so impressed with the contribution you have made to our department & extremely happy for your success. The strength of your achievement is rooted in the depth of your passion!

Technical Expert Members

[1] **Dr. D. Nanditha** has been nominated as a **member of the selection committee for engagement of Project Associates-II** held at Training & Development Complex of CSIR-SERC, Chennai on 18-01-2023.

[2] **Dr. K. Tamilarasan** has been appointed as the **academic expert for Board of Studies (BOS) meeting** at the Department of Chemical Engineering, Hindustan College of Engineering and Technology, Coimbatore on 15-02-2023.

[3] **Dr. S. Vishali** has been appointed as the **District level award selection committee Panel member for the Tamil Nadu Green Champion Awards (TNGCA) 2023** held at The Collectorate Office of Chengalpattu on 13-05-2023.

Dr. S. Vishali with **Thiru A. R. Rahul Nadh, I. A. S.,** District Collector, Chengalpattu

Resource Persons

[1] **Dr. K. Sofiya & Dr. D. Nanditha**, received the **certificate of appreciation for working as the organising committee members** in the **International e-Symposium on Materials Development and Scale- up for Membrane Separation, Sensing, Energy and Biological Applications (MDS-MSEB)** organized by the Department of Chemical Engineering, CET, SRMIST, KTR, held during 24-01-2023 & 25-01-2023 in Virtual Mode.

[2] **Dr. E. Poonguzhali** contributed as the **Chair Person for the session 6** in the **International e-Symposium on Materials Development and Scale- up for Membrane Separation, Sensing, Energy and Biological Applications (MDS-MSEB)** organized by the Department of Chemical Engineering, CET, SRMIST, KTR, held on 25-01-2023.

[3] **Dr. E. Kavitha** received the **Certificate of Excellence for Reviewing** the article in the **Journal of Engineering Research & Reports** on 09-03-2023.

[4] **Dr. E. Poonguzhali** contributed as the **Panel Judge for the Poster and Exhibit Presentation in the event International Workshop on Action for Rivers on the occasion of "International Day of Actions for Rivers"** organized by the Centre for Research in Environment Sustainability Advocacy and Climate Change – REACH, SRMIST, Kattankulathur held on 14-03-2023.

[5] **Dr. S. Vishali** contributed as the **Panel Judge/Chairperson for the Poster Presentation in the event Dr. Paarivendhar Research Colloquium (DPRC)** organized by the Directorate of Research & School of Bioengineering, SRMIST, Kattankulathur on 29-03-2023.

[6] **Dr. S. Vishali** contributed as the **Panel Judge/Chairperson for the Poster Presentation in the event Re-think, Re- engineering and Re-cycle** organized by the SRMIST Hostels and College of Management, SRMIST, Kattankulathur on 06-04-2023.

[7] **Dr. E. Kavitha** received the **Certificate of Excellence for Reviewing** the article in the **Journal of Experimental Agriculture International** on 20-04-2023 & **Journal of Global Ecology and Environment** on 04-05-2023.

[8] **Dr. S. Vishali, Dr. K. Anbalagan, Dr. S. Kiruthika, Dr. G. Keerthiga, Dr. K. Tamilarasan, Dr. K. Deepa Dr. E. Kavitha and Dr. E. Poonguzhali** contributed as the **Panel Judges for Poster Presentation** in **Chem Project Expo - 2023**, organized by the Department of Chemical Engineering, College of Engineering and Technology, SRM Institute of Science and Technology, Kattankulathur held **on 04-05-2023 & 05-05-2023.**

Invited Talks Delivered

[1] **Dr. S. Vishali delivered a lecture on "Smart Waste Management" in the Faculty Development Programme on Sustainability in Environmental Remediation,** organized by the **Hindustan College of Engineering and Technology, Coimbatore held on 07-06-2023.**

Conference Presentation

S. No.	Student/ Scholar & Faculty	Title of the Paper Presented	Event	Organized by	Date
1.	**Rahul Adithya (RA2112012010002) II Year M. Tech.** & **Dr. G. Keerthiga**	Graphitic carbon nitride doped TiO_2 based membrane for photocatalytic degradation of 2, 4 dichlorophenoxy acetic acid	International Conference on Emerging Contaminants in Water and Environment (ECWE – 2023)	PSG Institute of Advanced Studies & Association of Global Ground Water Scientists (AGGS)	21-02-2023 & 22-02-2023
2.	**Nithish Sridar (RA2112012010001) II Year M.Tech.** & **Dr. E. Poonguzhali**	Value recovery using membrane solvent extraction process	Research Day	SRMIST, KTR	28-02-2023
3.	**Gopika (RA2112012010003) II Year M.Tech.** & **Dr. P. Muthamilselvi**	Adsorption of norfloxacin drug using bagasse-based biochar beads	Research Day	SRMIST, KTR	28-02-2023
4.	**Lokesh Kumaran M. (RA2112012010004) II Year M.Tech.,** **Dr. S. Kiruthika** & **Dr. M. P. Rajesh**	Preparation and characterization of biochar from mango kernel for adsorptive remediation of perchlorate from water	Research Day	SRMIST, KTR	28-02-2023
5.	**Becky Miriyam I (RC2113008011002) Research Scholar** & **Dr. K. Anbalagan**	Utilization of sugarcane bagasse derived carbon as an efficient adsorbent for the removal of phthalates from aqueous system	Research Day	SRMIST, KTR	28-02-2023
6.	**A. Monica (RA2113008011001) Research Scholar** & **Dr. K. Anbalagan**	Removal of Bisphenol A and Bisphenol S from aqueous solution using $ZnCI_2$ activated coir pith	Research Day	SRMIST, KTR	28-02-2023
7.	**Udita Gulia (RA2113010011030) Research Scholar** & **Dr. M. P. Rajesh**	Ionic liquids mediated cell lysis and carotenoid extraction from microalgae	Research Day	SRMIST, KTR	28-02-2023

S. No.	Student/ Scholar & Faculty	Title of the Paper Presented	Event	Organized by	Date
8.	**G. Kanishka, (RA1911007010003) III Year B. Tech. Dr. S. Kiruthika,** & **Dr. K. Selvam**	Usage of membrane in hydroponic system in transportation of green gold solution	Research Day	SRMIST, KTR	28-02-2023
9.	**D. Alice Jasmine RA2113010011035 Research Scholar** & **Dr. K. Tamilarasan**	Efficacy of microwave assisted hydroxyl free radical medium pre-treatment for sugarcane leaf biomass deconstruction	Research Day	SRMIST, KTR	28-02-2023
10.	**D. Deepa RA1911007010007 IV Year B. Tech.** & **Dr. K. Deepa**	An electromagnetic reactor for the degradation of dyes using magnetic nano catalyst	Research Day	SRMIST, KTR	28-02-2023
11.	**Shemaiah Sam (RA1911007010024) IV Year B. Tech.** & **Dr. E. Poonguzhali**	Solvent extraction of nickel from wastewater with neodecanoic acid using membrane contactors: Extraction efficiency and comparison	World Water Day Celebration	Pandit Deendayal Energy University (PDEU), Gandhinagar, Gujarat	22-03-2023
12.	**Arvind Kumar R (RA2212012010001) Anil Datta Veerubhotla (RA2212012010003) A Shahul Hameed (RA2212012010008) I Year M. Tech.**	Evaluating membrane behavior with anti-fouling PVA/PAA coating	National Conference on Emerging Trends in Energy, Environmental Sustainability, and Safety in Chemical and Allied Industries Chemsparx - 2023	Department of Chemical Engineering, Adhiyamaan College of Engineering, Hosur, Krishnagiri	24-03-2023 & 25-03-2023

S. No.	Student/ Scholar & Faculty	Title of the Paper Presented	Event	Organized by	Date
13.	**Sivabharathvaj P (RA2212012010002)** **Hariprasath T RA2212012010006** **Yuvaraj K M RA2212012010009** **Madhavan V RA2212012010010** **I Year M. Tech.**	Studies on the assessment of binary coagulation system on grey water treatment using Moringa olifera and poly aluminium chloride	National Conference on Emerging Trends in Energy, Environmental Sustainability, and Safety in Chemical and Allied Industries Chemsparx - 2023	Department of Chemical Engineering, Adhiyamaan College of Engineering, Hosur, Krishnagiri	24-03-2023 & 25-03-2023
14.	**Takumi Nagasaka (RA2213008011001)** **Research Scholar** & **Dr. G. Keerthiga**	Green synthesis of Cu based MOF for electrochemical reduction of CO_2	Dr. Paarivendhar Research Colloquium (DPRC - 2023)	Directorate of Research & School of Bioengineering, SRMIST, KTR	29-03-2023
15.	**D. Alice Jasmine RA2113010011035** **Research Scholar** & **Dr. K. Tamilarasan**	Effect of delignification efficiency of the microwave-assisted alkaline medium treatment of sugarcane leaf biomass	Dr. Paarivendhar Research Colloquium (DPRC - 2023)	Directorate of Research & School of Bioengineering, SRMIST, KTR	29-03-2023
16.	**M. B. Abinaya (RA2113010011020)** **Research Scholar** & **Dr. K. Tamilarasan**	Construction of BM/LDH heterojunction composites with improved charge separation and stability for enhanced photocatalytic tetracycline degradation	Dr. Paarivendhar Research Colloquium (DPRC - 2023)	Directorate of Research & School of Bioengineering, SRMIST, KTR	29-03-2023
17.	**B. Muthamizh (RA1833003011004)** **Research Scholar** & **Dr. M. P. Rajesh**	Study of nitrate removal on chitosan-based beads in comparison with INDION NSSR	Dr. Paarivendhar Research Colloquium (DPRC - 2023)	Directorate of Research & School of Bioengineering, SRMIST, KTR	29-03-2023

S. No.	Student/ Scholar & Faculty	Title of the Paper Presented	Event	Organized by	Date
18.	**Becky Miriyam I (RC2113008011002) Research Scholar & Dr. K. Anbalagan**	Efficient adsorption of phthalic acid esters from aqueous solution by activated carbon developed from sugarcane bagasse	Dr. Paarivendhar Research Colloquium (DPRC - 2023)	Directorate of Research & School of Bioengineering, SRMIST, KTR	29-03-2023
19.	**Hussain Albattah Al Husni (RA2113008011002) Research Scholar & Dr. K. Suresh**	Thermal processing of heterogeneous food products in a sealed container with headspace	Dr. Paarivendhar Research Colloquium (DPRC - 2023)	Directorate of Research & School of Bioengineering, SRMIST, KTR	29-03-2023
20.	**A. Monica (RA2113008011001) Research Scholar & Dr. K. Anbalagan**	Removal of endocrine-disrupting chemicals using modified agro-waste	Dr. Paarivendhar Research Colloquium (DPRC - 2023)	Directorate of Research & School of Bioengineering, SRMIST, KTR	29-03-2023
21.	**P. Ramesh (RC2113008011001) Research Scholar & Dr. K. Suresh**	Techno-economic analysis of dehydration of lean gas from carbon black production technology	Dr. Paarivendhar Research Colloquium (DPRC - 2023)	Directorate of Research & School of Bioengineering, SRMIST, KTR	29-03-2023
22.	**V. Ganesh (PA1813008012001) Research Scholar & Dr. M. P. Rajesh**	Evaluation of the heat transfer performance of nanofluids in microchannel heat sink	Dr. Paarivendhar Research Colloquium (DPRC - 2023)	Directorate of Research & School of Bioengineering, SRMIST, KTR	29-03-2023
23.	**Udita Gulia (RA2113010011030) Research Scholar & Dr. M. P. Rajesh**	Green solvent mediated microalgal cell disruption and biomolecules extraction	Dr. Paarivendhar Research Colloquium (DPRC - 2023)	Directorate of Research & School of Bioengineering, SRMIST, KTR	29-03-2023
24.	**Sredha J Nair (RA2212012010005) Irshana Shajahan (RA2212012010007) I Year M. Tech.**	Increasing the efficiency of dye sensitized solar cell	National Level Technical Symposium Chrysalis 2k23	Department of Electrical and Electronics Engineering, Vels Institute of Science Technology and Advanced Studies, Pallavaram, Chennai	29-03-2023

S. No.	Student/ Scholar & Faculty	Title of the Paper Presented	Event	Organized by	Date
25.	**Yagnik Khimani (RA1911007010016) Mayank Lakhotia (RA1911007010025) Ishaan Sanjay Davariya (RA1911007010032) IV Year B. Tech.** & **Dr. G. Keerthiga**	Analysis and treatment of rice mill waste water	National Conference on Technological Innovations in Chemical Engineering Towards Sustainability - TIChS23	Sri Venkateswara College of Engineering, Sriperumbudur	05-04-2023 & 06-04-2023
26.	**V. Kaviya (RA1911007010065) IV Year B. Tech.** & **Dr. S. Kiruthika**	Dye stuff for economical and sustainable development	National Conference on Technological Innovations in Chemical Engineering Towards Sustainability - TIChS23	Sri Venkateswara College of Engineering, Sriperumbudur	05-04-2023 & 06-04-2023
27.	**Sredha Nair (RA2212012010005) I Year M.Tech.** & **Dr. G. Keerthiga**	Cu supported TiC and TiN as electro catalyst for reduction of CO_2	National Conference on Technological Innovations in Chemical Engineering Towards Sustainability - TIChS23	Sri Venkateswara College of Engineering, Sriperumbudur	05-04-2023 & 06-04-2023
28.	**Takumi Nagasaka (RA2213008011001) Research Scholar** & **Dr. G. Keerthiga**	Green synthesis of Cu and Zn MOF using water-based solvent	National Conference on Technological Innovations in Chemical Engineering Towards Sustainability - TIChS23	Sri Venkateswara College of Engineering, Sriperumbudur	05-04-2023 & 06-04-2023
29.	**Nithish Sridar (RA2112012010001) II Year M.Tech.** & **Dr. E. Poonguzhali**	Membrane assisted solvent extraction process	National Conference on Technological Innovations in Chemical Engineering Towards Sustainability - TIChS23	Sri Venkateswara College of Engineering, Sriperumbudur	05-04-2023 & 06-04-2023

S. No.	Student/ Scholar & Faculty	Title of the Paper Presented	Event	Organized by	Date
30.	**Rahul Adithya C (RA2112012010002) II Year M.Tech.** & **Dr. G. Keerthiga**	TiO_2 composite catalyst for photocatalytic degradation of 2, 4-dichlorophenoxyacetic acid	National Conference on Technological Innovations in Chemical Engineering Towards Sustainability - TIChS23	Sri Venkateswara College of Engineering, Sriperumbudur	05-04-2023 & 06-04-2023
31.	**Lokesh Kumaran M. (RA2112012010004) II Year M.Tech.** & **Dr. M. P. Rajesh**	Studies on mango kernel biochar remediation	National Conference on Technological Innovations in Chemical Engineering Towards Sustainability - TIChS23	Sri Venkateswara College of Engineering, Sriperumbudur	05-04-2023 & 06-04-2023
32.	**Srinivas R (RA2112012010005) II Year M.Tech.** & **Dr. K. Suresh**	Coupling dynamic process simulation with hazard and operability analysis	National Conference on Technological Innovations in Chemical Engineering Towards Sustainability - TIChS23	Sri Venkateswara College of Engineering, Sriperumbudur	05-04-2023 & 06-04-2023
33.	**B. Sai Sudarshan (RA2112012010006) II Year M.Tech.** & **Dr. S. Vishali**	Combined treatment system for waste grey water	National Conference on Technological Innovations in Chemical Engineering Towards Sustainability - TIChS23	Sri Venkateswara College of Engineering, Sriperumbudur	05-04-2023 & 06-04-2023
34.	**Yagnik Khimani (RA1911007010016) Mayank Lakhotia (RA1911007010025) Ishaan Sanjay Davariya (RA1911007010032) IV Year B. Tech.** & **Dr. G. Keerthiga**	Rice mill wastewater Treatment	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023

S. No.	Student/ Scholar & Faculty	Title of the Paper Presented	Event	Organized by	Date
35.	**Kalaynth N (RA1911007010055) G. Badrinath Reddy (RA1911007010059) Sakthivel K (RA1911007010062) IV Year B. Tech.** & **Dr. M. P. Rajesh**	Design, fabrication and operation of a biomass briquetting machine	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
36.	**Karthik V. (RA1911007010012) IV Year B. Tech.** & **Dr. S. Anandhakumar**	Electrodeposition and characterization of aluminium doped Bi_2O_3 films: Potential metal-semiconductor interface in thin film transistor	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
37.	**Afeez Ahamed (RA1911007010009) Divyash Singh (RA1911007010035) A M Mohamed Abdul Wajith (RA1911007010054) IV Year B. Tech.** & **Dr. Paromita Chakraborty**	Measurement and modelling of persistent organic pollutants to characterize ambient air quality	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
38.	**Balaguru K (RA1911007010070) Vijayaraj G (RA1911007010078) IV Year B. Tech.** & **Dr. S. Vishali**	Extraction of natural dyes from floral refuse	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
39.	**Adesh (RA1911007010011) Yash Sharma (RA1911007010018) IV Year B. Tech.** & **Dr. M. Magesh Kumar**	Extraction of lactic acid using organic solvents	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023

S. No.	Student/ Scholar & Faculty	Title of the Paper Presented	Event	Organized by	Date
40.	**Selvaganabathi M (RA1911007010006) Yokeshwaran R (RA1911007010017) Jegan s (RA1911007010058) IV Year B. Tech.** & **Dr. K. Anbalagan**	Synthesis and study of chitosan properties for its various applications	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
41.	**Parthasarathy A (RA1911007010002) Rajeshwaran N (RA1911007010028) Rakshith M U (RA1911007010077) IV Year B. Tech.** & **Dr. K. Selvam**	Production of composite polymeric membrane	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
42.	**Kamalesh k (RA1911007010014) San Nigel S J (RA1911007010047) IV Year B. Tech.** & **Dr. K. Sofiya**	Effect of Rosa x *damascena* oil constituents by different hydro distillation materials	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
43.	**Achyuta K. (RA1911007010038) IV Year B. Tech.** & **Dr. Suresh Krishnan**	Techno-economic analysis of utilization of CO_2	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
44.	**Karthik R (RA1911007010034) IV Year B. Tech.** & **Dr. S. Sam David**	Flow- based energy harvesting in pipelines - Ansys modelling	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
45.	**Srivarsan R K (RA1911007010020) IV Year B. Tech.** & **Dr. S. Vishali**	Bioethanol from leather solid waste	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
46.	**Aswin Krishna (RA1911007010031) IV Year B. Tech.** & **Mr. V. Ganesh**	Developing a nanostructured biosensor for use in real-time monitoring of a specific analyte	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023

S. No.	Student/ Scholar & Faculty	Title of the Paper Presented	Event	Organized by	Date
47.	**Mohammad Rakib Chouhan (RA1911007010036) Suryam Juneja (RA1911007010074) Deep Katiyar (RA1911007010079) IV Year B. Tech.** & **Dr. M. Magesh Kumar**	Adsorption for pollutant removal	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
48.	**Meghana Hattarke (RA1911007010044) Sahana Sadhukhan (RA1911007010048) Patel Smit Vijaykumar (RA1911007010066) IV Year B. Tech.** & **Dr. K. Suresh**	Economics analysis in pipeline sizing and pump capacity calculation for process industries	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
49.	**Sarthak Asthana (RA1911007010008) Shemaiah Sam (RA1911007010024) IV Year B. Tech.** & **Dr. E. Poonguzhali**	Removal of nickel from wastewater and design	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
50.	**S Shriram (RA1911007010026) IV Year B. Tech.** & **Dr. P. Muthamilselvi**	Preparation and design characterization of brake pad	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
51.	**Vallabhaneni Kaushik (RA1911007010019) Sivaraam K (RA1911007010045) Bhuvanesh R (RA1911007010060) IV Year B. Tech.** & **Dr. E. Kavitha**	Synthesis of chitosan blended Polysulfone UF membrane and its applications in heavy metal removal	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023

S. No.	Student/ Scholar & Faculty	Title of the Paper Presented	Event	Organized by	Date
52.	**Lingeshwaran M (RA1911007010051)** **Niyaz Abdul Nisar (RA1911007010052)** **IV Year B. Tech.** & **Dr. K. Sofiya**	Separation of Rosa x damascena components using hydrophobic PVDF membrane	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
53.	**V. Kaviya (RA1911007010065)** **IV Year B. Tech.** & **Dr. S. Kiruthika**	Design of adsorption column for dye removal from aqueous solutions using geopolymeric adsorbents	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
54.	**Mohak Jain (RA1911007010001)** **IV Year B. Tech.** & **Dr. K. Deepa**	Extraction, isolation and analysis of essential oil from the plant species	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
55.	**Arkaprava Ray (RA1911007010029)** **IV Year B. Tech.** & **Dr. E. Poonguzhali**	Tailoring NF membrane surface by solvent activation method	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	04-05-2023
56.	**Nithish Sridar (RA2112012010001)** **II Year M.Tech.** & **Dr. E. Poonguzhali**	Separation of para nitro phenol from aqueous solution by membrane-assisted solvent extraction	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	05-05-2023
57.	**Lokesh Kumaran M. (RA2112012010004)** **II Year M.Tech.** & **Dr. M. P. Rajesh**	Studies on mango kernel biochar for the remediation of perchlorate contaminated water	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	05-05-2023
58.	**Srinivas R (RA2112012010005)** **II Year M.Tech.** & **Dr. K. Suresh**	Coupling steady state process simulation with hazard and operability analysis	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	05-05-2023
59.	**Gopika (RA2112012010003)** **II Year M.Tech.** & **Dr. P. Muthamilselvi**	Adsorption of tetracycline hydrochloride drug using bagasse-based biochar beads	Chem Project Expo 2023	Department of Chemical Engineering, CET, SRMIST, KTR	05-05-2023

Events participated by faculty

S. No.	Faculty	Title	Event	Organizer	Date
1.	**Dr. K. Tamilarasan**	IIT PALS Visit	Industrial Visit	L&T Rubber Processing Machinery (LTRPM), Vedal, Kanchipuram	22-02-2023
2.	**Dr. S. Sam David** **Dr. K. Selvam**	Inculcating Universal Human Values in Technical Education	Faculty Development Program	All India Council for Technical Education (AICTE) at SRMIST, Kattankulathur	17-03-2023 to 19-03-2023
3.	**Dr. K. Deepa/** **Dr. G Keerthiga**	Design Thinking Course	Training Program	School of Design Thinking, Intellect Design Arena Ltd., Siruseri	27-03-2023 to 29-03-2023
4.	**Dr. K. Deepa**	Chemical Kinetics and Reaction Engineering with MATLAB	Seminar	MathWorks	24-04-2023
5.	**Dr. K. Deepa** **Dr. E. Poonguzhali**	Secure Social Media Practices	Online Quiz	Stay Safe Online (SSO) Campaign under India's G20 Presidency, Ministry of Electronics and Information Technology (MeitY), Government of India	30-04-2023
6.	**Dr. S. Sam David**	Innovations in Signal Processing and Artificial Intelligence	Workshop	The Institution of Engineers (India) and Department of ECE, SRMIST, Kattankulathur	27-04-2023 to 28-04-2023
7.	**Dr. K. Anbalagan** **Dr. K. Selvam** **Dr. S. Kiruthika**	Train the Trainers	Counsellors Training	Counselling Cell, CET, SRMIST, Kattankulathur	24 Weeks
8.	**Dr. K. Sofiya**	Design Thinking Course	Training	School of Design Thinking, Intellect Design Arena Ltd., Siruseri	08-05-2023 to 10-05-2023

S. No.	Faculty	Title	Event	Organizer	Date
9.	**Dr. K. Deepa** **Dr. G. Keerthiga**	Design Thinking - Train the Trainers (TTT) Session	Training	School of Design Thinking, Intellect Design Arena, Siruseri and SIIEC, SRMIST	18-05-2023
10.	**Dr. K. Deepa**	Sustainable Biopolymers for Energy and Environmental Applications	Faculty Development Programme	Department of Chemical Engineering, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab	22-05-2023 to 26-05-2023
11.	**Dr. P. Muthamilselvi** **Dr. G. Keerthiga** **Dr. Sam David**	Data Science for Non CSE	Faculty Development Programme	Department of Data Science and Business Systems, School of Computing, SRMIST, Kattankulathur	22-05-2023 to 26-05-2023
12.	**Dr. K. Sofiya**	Teaching, Learning, Assessing in 2030	Faculty Development Program	Department of Physics, FET, SRMIST, Ramapuram	06-06-2023 to 23-06-2023

Dr. K. Deepa, Dr. G. Keerthiga & Dr. K. Sofiya during Design Thinking Training

Events Participated by Students

S. No.	Student/Scholar	Title	Event	Organizer	Date
1.	**Chaiti Harin Buch (RA2211007010028) I Year B. Tech.**	Molecular Biology and Biochemistry Techniques	Workshop	Ethical Edufabrica Pvt. Ltd. & Shaastra 2023, at IIT Madras	28-01-2023
2.	**Gowtham R (RA2211007010007) Chakritha Singh (RA2211007010012) Adithya S (RA2211007010020) I Year B. Tech.**	Youth Empowerment and Skills (YES!+) Program - The Art of Living	Skill Development Program	SRMIST, Kattankulathur	03-02-2023 to 05-02-2023
3.	**Ruban Kumar S (RA2011007010051) Varsha S (RA2011007010064) III Year B. Tech.**	MTS Tech Surge - "AI for the Oceans"	Workshop	Marine Technology Society (MTS) - India Section, ASCE SRM Student Chapter & Norinco India Pvt. Ltd.	04-02-2023
4.	**Srivarsan Rajagopal (RA1911007010020) IV Year B. Tech.**	Membrane-Based Technologies for Water Purification	Workshop	Indian Institute of Technology Madras	25-02-2023
5.	**Chaiti Harin Buch (RA2211007010028) I Year B. Tech.**	Fete de la Francophonie 2023	Concours De Chant - Singing	Department of Foreign Languages, Loyola College, Chennai	02-03-2023
6.	**Ruban Kumar S (RA2011007010051) III Year B. Tech.**	Design Thinking, Critical Thinking, and Innovation Design as applied in Product Development and Academic Projects	Workshop	Department of Mechanical Engineering, and supported by SIIEC of SRMIST, KTR	01-03-2023 to 03-03-2023

S. No.	Student/Scholar	Title	Event	Organizer	Date
7.	**Afeez Ahamed A (RA1911007010009) IV Year B. Tech.**	International Workshop on Action for Rivers on the occasion of "International Day of Actions for Rivers"	Workshop	Center for Research and Environment Sustainability Advocacy and Climate Change – REACH, SRMIST, Kattankulathur	14-03-2023
8.	**Chaiti Harin Buch (RA2211007010028) I Year B. Tech.**	Outreach Program on Innovations in Chemical Engineering	Outreach Program	Department of Chemical Engineering, SRMIST, KTR	27-03-2023
9.	**Sruthi J Nair (RA2212012010004) Sredha J Nair (RA2212012010005) I Year M. Tech.**	Earth Day 2023 Webinar	Webinar	Centre for Research in Environment, Sustainability Advocacy and Climate Change (REACH), SRM IST, KTR	22-04-2023
10.	**Abinanthan K (RA2211007010016) Gawtham Krishna P U (RA2211007010023) Varshika S (RA2211007010025) Prajith L (RA2211007010026) Md Shuaib Hameedh (RA2211007010027) Kushal Manojkumar Sarda (RA2211007010030) I Year B. Tech.**	Activity Based Learning Skills for the Basic Civil and Mechanical Workshop Laboratory	Activity-based learning skills	Department of Mechanical Engineering, SRMIST, KTR	25-04-2023
11.	**Takumi Nagasaka (RA2213008011001) Research Scholar**	Biosensors and Electroanalytical Techniques	Workshop	ECS IIT Madras Student Chapter	27-06-2023

Competitive Exams Participated by the students
(B. Tech., Batch 2019 - 2023)

S. No.	Register Number	Student Name	Competitive Exam Attended
1	RA1911007010037	Anagha Sunil	IELTS
2	RA1911007010018	Yash Sharma	GATE
3	RA1911007010038	Achyuta K	IELTS
4	RA1911007010044	Meghana Hattarke	GATE
5	RA1911007010058	Jegan S	GATE
6	RA1911007010032	Ishaan S Davariya	IELTS
7	RA1911007010042	Raghul S	IELTS
8	RA1911007010050	Shwetha Udayan	GATE
9	RA1911007010004	Haran Kishore R	IELTS
10	RA1911007010008	Sarthak Asthana	IELTS
11	RA1911007010069	Gaurav Bahura	IELTS
12	RA1911007010011	Adesh	IELTS
13	RA1911007010016	Yagnik Khimani	ILETS
14	RA1911007010035	Divyash Singh	GATE
15	RA1911007010009	Afeez Ahamed	GATE
16	RA1911007010022	Amrutha S	IELTS
17	RA1911007010061	Ayyappan S	GATE
18	RA1911007010013	Amaan Sait	IELTS
19	RA1911007010043	Ashwin V Nair	GATE
20	RA1911007010025	Mayank Lakhotia	IELTS
21	RA1911007010036	Mohammed Rakib Chouhan	GATE
22	RA1911007010063	Raakesh B R	GATE
23	RA1911007010020	Srivarsan R K	IELTS

Online Courses Completed

Dr. G. Keerthiga completed a Certification course on **Learn Social Psychology** from **Udemy** on 20-05-2023.

Value Added Courses

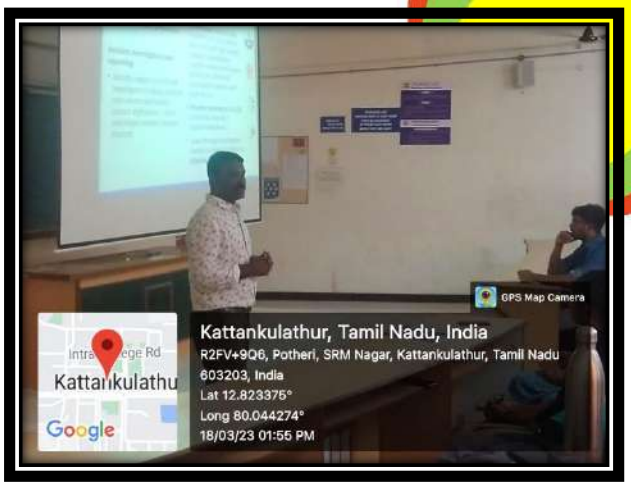
To strengthen the interaction with industries and to keep our students updated with the latest trends in Chemical Engineering, the department has taken steps to bring industry into the curriculum by conducting value-added courses (VAC) for the benefit of the students to enable them to acquire a more holistic perspective and thus have a better understanding of present-day industry challenges. It also facilitates the students to gain and develop innovative and creative skills through a wide array of course offerings. Notable experts from industries are engaged to offer VAC on current advancements in the industry.

Course Code & Title: 18CHV321T Industry-Oriented Knowledge Building
(30 hours program during Saturdays of February & March, 2023)
Course Coordinator: Dr. S. Vishali, Associate Professor, Chemical Engineering
Course offered by: Industry Experts from Chem Skill Development Centre (CSDC), Chennai
Course offered to: **III-year B. Tech. Chemical Engineering Students**
Chem Skill Development Centre provides Industry Oriented Knowledge Program to the students of Chemical Engineering which is designed to complement theoretical knowledge with industrial practices and impart additional knowledge and skills not part of academic curriculum. The sessions are conducted by faculty team with decades of experience in the chemical industry and includes practical training in a chemical plant.

Name of the Industry Experts
Mr. S. Stalin, Consultant
Mr. P. Thandapani, Technip
Mr. A. Mohan, formerly with Technip
Mr. N Ramadoss, Quality Business Systems
Mr. Chakravarthy Bharath, Technip
Mr. K. Rajan, Inherent Engineering
Mr. Venkatsubramanian, Consultant
Mr. Lakshmanan, Advanced Engineering Services
Mr. P. Manoharan,Consultant
Mr. N. Nachiappan, formerly with CPCL
Mr. Paul Pandian, Consultant
Mr. S. Mani, Cholamandal M.S.
Mr. N S Murthy, Monit Pro
Mr. Prakash Raman, Monit Pro
Mr. B S Mani, Senior HSE Specialist Chevron Oronite Pvt. Ltd.
Mr. S M Balaji, India Metal Works
Mr. C. Balasubramanian, Chevron

The following **30 III-year B. Tech. Chemical Engineering Students** were benefitted by this VAC.

S. No.	Register Number	Name
1	RA2011007010002	Atin Chattopadhyay
2	RA2011007010004	Saloni Bhattacharjee
3	RA2011007010005	Sheik Mohamed Wahith S
4	RA2011007010007	Gururangaramanujam B
5	RA2011007010008	Alen Augustin
6	RA2011007010009	Soundariya N
7	RA2011007010014	Mahima Verma
8	RA2011007010015	Hareesh Balaji R
9	RA2011007010016	Vishnu Ganesh J
10	RA2011007010018	Souvik Ghosh
11	RA2011007010020	Siddarth M
12	RA2011007010021	Sughanandhan K
13	RA2011007010025	Suriya U
14	RA2011007010026	Obaid Hassan
15	RA2011007010030	Rishabh Padh
16	RA2011007010033	Turumella Venkata Vighnesh
17	RA2011007010036	Khushal Dadhania
18	RA2011007010038	Tanisha Panigrahi
19	RA2011007010041	Gauri Awasthi
20	RA2011007010042	S. Prasanna
21	RA2011007010044	R. Reshma
22	RA2011007010045	Subiksha V
23	RA2011007010049	Hredhya Sudheer
24	RA2011007010051	Rubankumar S
25	RA2011007010054	Vishvaa T
26	RA2011007010055	Satheeshkumar R
27	RA2011007010057	Hareesh M
28	RA2011007010060	Sanjay Ram M
29	RA2011007010064	Varsha S
30	RA2011007010066	K Yogeshwar



Industry experts interacting with students

Ph.D. Progress Details of Research Scholars

S. No.	Research Scholar (Category)/	Supervisor	Area of Research	Research Progress	Date
1.	**Satyanarayana** (PA2113008013001) (Part Time - External)	**Dr. M. P. Rajesh**	Chemical and Environmental Engineering	Completed Comprehensive Viva examination	04-02-2023
2.	**Alice Jasmine D** (RA2113010011035) (Full Time)	**Dr. K. Tamilarasan**	Valorization of Biomass to bioproducts	Completed Comprehensive Viva examination	20-04-2023

On Campus Placements
January to June, 2023 (B. Tech. Batch 2019 - 2023)

Student	Placement Details
 Sahana Sadhukhan **RA1911007010048**	Nestle Technical Trainee 11 LPA TCS Trainee Engineer 3.6 LPA
 Lingeshwaran M **RA1911007010051**	IntrnForte OPC Pvt. Ltd. GET 3.25 to 5 LPA
 Divyash Singh **RA1911007010035**	L&T Technology Services Limited Engineering Trainee 4 LPA Accenture Trainee Engineer 4.5 LPA

Student	Placement Details
 V Kaviya **RA1911007010065**	Federal Bank Associate in Non-Officer Cadre for Branch Banking role 5.63 LPA
 Soumyadeep Mukherjee **RA1911007010039**	Leadsquared Sales Development Representative 6 LPA
 Sruthi Mahalakshmi M **RA1911007010056**	ProU Education GET 5 LPA
 Indrani Das **RA1911007010005**	Vedanta Ltd GET 7 – 7.5 LPA Cognizant Trainee Engineer 4 LPA

Student	Placement Details
 Arkaprava Ray **RA1911007010029**	Vedanta Ltd GET 7 – 7.5 LPA Tech Destiny Trainee Engineer 3.5 LPA
 Shwetha Udayan **RA1911007010050**	Vedanta Ltd GET 7 – 7.5 LPA Intellipaat Trainee Engineer 3.84 LPA
 DEEPA D **RA1911007010007**	Vedanta Ltd GET 7 – 7.5 LPA
 SURYAM JUNEJA **RA1911007010074**	Capgemini Software Engineer 4 – 4.25 LPA

Number of students registered for placements	50 (44 UG + 6 PG)
Total number of students placed (Academic Year 2022 - 2023)	29 UG + 1 PG
Number of students with more than one offer	11
Placement Percentage	60 %
Average Salary Package (INR)	6.5 LPA

Hearty Congratulations dear students!
Wishing you all the best and many more successes in your future endeavours!

Internships

Following III-year UG students received internships in **Reliance** with the **monthly stipend of Rs. 30000.**

Atin Chattopadhyay
RA2011007010002

Sanjay Ram M
RA2011007010060

Saloni Bhattacharjee
RA2011007010004

Semester Abroad Program

SRMIST offers students a chance to study abroad for one or more semesters at internationally recognised universities, giving them an opportunity to experience global education. Under the Semester Abroad Program (SAP) **Mr. Raghul Subbiah** (RA1911007010042) of IV-year B. Tech. Completed his 8th semester project (March – June 2023) titled Synthesis of nanomaterial for delivering drugs for treating cancer metastasis, at **Brigham Women's Hospital (BWH), Harvard Medical School (HMS), Boston, Massachusetts, United States.**

HARVARD MEDICAL SCHOOL

BWH BRIGHAM AND WOMEN'S HOSPITAL

Mr. Raghul Subbiah at Harvard Medical School, United States

Department Events Organized

[1] International e-Symposium on Materials Development and Scale- up for Membrane Separation, Sensing, Energy and Biological Applications (MDS-MSEB)

Dates: 24-01-2023 & 25-01-2023

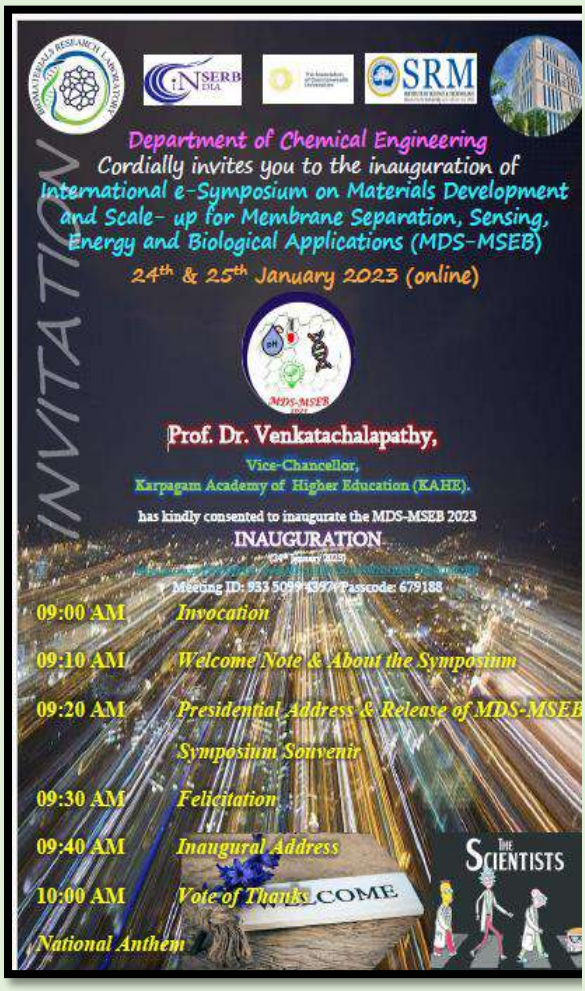
Convenors

Dr. S. Anandhakumar, Associate Professor, Chemical Engineering

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

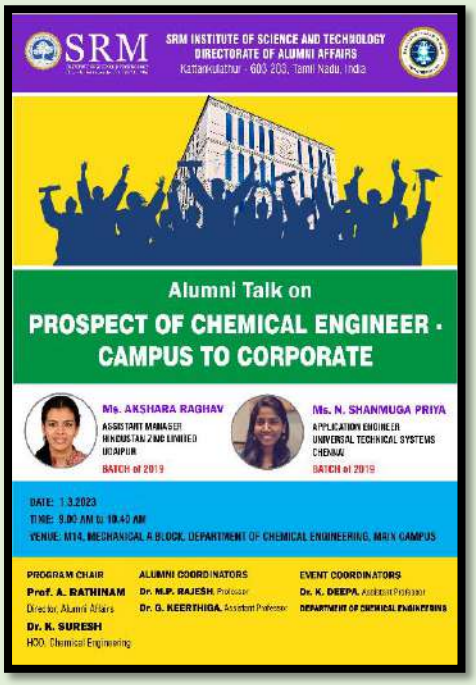
About the event

The academicians, scholars, and experts from all over the world discussed and debated topics focusing on the significance of materials development and scale-up for membrane separation, sensing, energy, and biological applications, and also interacted well with the audience during this two-day event. The views expressed and discussed on this platform by the resource persons and paper presenters made the audience to understand the challenges associated with nanomaterials synthesis and their applications in various fields.



[2] Alumni Talk on Prospect of Chemical Engineer - Campus to Corporate
Date: 01-03-2023
Program Chair
Prof. A. Rathinam, Director, Alumni Affairs
Dr. K. Suresh, Associate Professor & Head in - charge, Chemical Engineering
Alumni Coordinators
Dr. M. P. Rajesh, Professor, Chemical Engineering
Dr. G. Keerthiga, Assistant Professor, Chemical Engineering
Event Coordinator
Dr. K. Deepa, Assistant Professor, Chemical Engineering

About the event
The Alumni accentuated the importance of industrial training and internship experience when stepping into the chemical engineering industry and also shared about their research projects during undergraduate studies and encouraged students to always be on the lookout for such opportunities. They explained the importance of doing research during undergraduate years to gain practical knowledge about the various concepts in Chemical Engineering and urged the knowledge of coding skills and simulation software like ASPEN to strengthen one's skillset. They also provided an insight into the tedious procedure of applying higher studies abroad and also discussed about the scope of Chemical Engineering in different countries of the world. The interactive session provided the students with invaluable knowledge and perspective as they make their way towards becoming proficient engineers of tomorrow.


SRM
SRM INSTITUTE OF SCIENCE AND TECHNOLOGY
DIRECTORATE OF ALUMNI AFFAIRS
Kattankulathur - 603 203, Tamil Nadu, India
Alumni Talk on
PROSPECT OF CHEMICAL ENGINEER - CAMPUS TO CORPORATE
Ms. AKSHARA RAGHAV
ASSISTANT MANAGER
HINDUSTAN ZINC LIMITED
UDAIPUR
BATCH of 2019
Ms. N. SHANMUGA PRIYA
APPLICATION ENGINEER
UNIVERSAL TECHNICAL SYSTEMS
CHENNAI
BATCH of 2019
DATE: 1.3.2023
TIME: 9.00 AM to 10.40 AM
VENUE: M14, MECHANICAL A BLOCK, DEPARTMENT OF CHEMICAL ENGINEERING, MAIN CAMPUS
PROGRAM CHAIR
Prof. A. RATHINAM
Director, Alumni Affairs
Dr. K. SURESH
HOD, Chemical Engineering
ALUMNI COORDINATORS
Dr. M.P. RAJESH, Professor
Dr. G. KEERTHIGA, Assistant Professor
EVENT COORDINATORS
Dr. K. DEEPA, Assistant Professor
DEPARTMENT OF CHEMICAL ENGINEERING


GPS Map Camera
Department of Chemical Engineering, SRM Institute of Science and Technology, India
Alumini talk on prospect of Chemical engineer-campus to corporate
Lat 8.806547° Long 78.134205°
01/03/23 09:20 AM GMT +05:30


GPS Map Camera
Department of Chemical Engineering, SRM Institute of Science and Technology, India
Alumini talk on prospect of Chemical engineer-campus to corporate
Lat 8.806547° Long 78.134205°
01/03/23 09:41 AM GMT +05:30


GPS Map Camera
Department of Chemical Engineering, SRM Institute of Science and Technology, India
Alumini talk on prospect of Chemical engineer-campus to corporate
Lat 8.806547° Long 78.134205°
01/03/23 10:00 AM GMT +05:30

[3] Technical Seminar on An Over View of Petroleum Refinery
Date: 10-03-2023

Coordinators
Dr. K. Suresh, Associate Professor & Head in charge, Chemical Engineering
Dr. K. Anbalagan, Assistant Professor, Chemical Engineering
Dr. M. Magesh Kumar, Assistant Professor, Chemical Engineering

About the event
Mr. Chiranjeevulu, Retd Chief Manager, ONGC-MRPL, Mangalore discussed interesting topics about petroleum industries such as Career development plans for chemical engineers in petroleum industry, Roles and responsibilities of chemical engineers, Petroleum refineries in India, Refinery configuration, Operating units in refineries etc.

[4] Outreach Activity for Future Chemical Engineers
Date: 27-03-2023
Coordinators
Dr. M. P. Rajesh, Professor, Chemical Engineering
Dr. K. Sofiya, Assistant Professor, Chemical Engineering
Dr. E. Kavitha, Assistant Professor, Chemical Engineering
Dr. E. Poonguzhali, Assistant Professor, Chemical Engineering

About the event

The main objective of the outreach program is to enable the school student's community to know about the prospects in the field of Chemical Engineering, the facilities available in the Department of Chemical Engineering and in SRMIST. Events like workshop, Quiz, Debate etc., were organized for the school students.


SRM
OUTREACH ACTIVITY
Department of Chemical Engineering
for Future
CHEMICAL ENGINEERS
₹ 2000/-
₹3000/-
₹ 1000/-
FOR SCHOOL STUDENTS
STANDARD 9th to 12th
MARCH 27, 2023
About SRM
About Outreach Program
VISION
MISSION
About Chemical Engineering
Department
COORDINATORS


GPS Map Camera
Kattankulathur, Tamil Nadu, India
SRM Mechanical Block, college road, Potheri, Kattankulathur, Tamil Nadu 603203, India
Lat 12.820826°
Long 80.039339°
27/03/23 03:24 PM GMT +05:30
Google


SRM
OUTREACH ACTIVITY
Organised by
Department of Chemical Engineering
In association with
Institutions Innovation Council &
SRM Innovation Incubation and Entrepreneurship Centre
SCHEDULE
27
MARCH
9:30 AM
WELCOME ADDRESS
9:45 AM
INAUGRAL ADDRESS
10:00 AM
ABOUT OUTREACH
10:30 AM - 11:30 AM
QUIZ
11:30 AM - 12:30 PM
GUESS THE PROCESS
1:30-3:00 PM
DEBATE
1:10 PM - 4:30 PM
FAB LAB VISIT (OFFLINE)

[5] Alumni Talk - A Chemical Engineer's Journey from Theory to Practice
Date: 30-03-2023
Program Chair
Dr. A. Rathinam, Director, Alumni Affairs
Dr. K. Suresh, Associate Professor & Head in - charge, Chemical Engineering
Alumni Coordinators
Dr. M. P. Rajesh, Professor, Chemical Engineering
Dr. G. Keerthiga, Assistant Professor, Chemical Engineering

About the event
The Alumni discussed the importance of software such as ASPEN for simulation and inspired the students to become scientist by sharing their journey map. They also insisted students to take up renewable energy fields as it is a booming industry now. They also discussed about the role of chemical engineers in efficient effluent treatment in industries and also insisted students to take up entrepreneurial career.


GPS Map Camera
Department of Chemical Engineering, SRM Institute of Science and Technology, India
Alumini talk on prospects of Chemical Engineering
Lat 8.806547° Long 78.134205°
30/03/23 12:40 PM GMT +05:30


GPS Map Camera
Department of Chemical Engineering, SRM Institute of Science and Technology, India
Alumini talk on prospects of Chemical Engineering
Lat 8.806547° Long 78.134205°
30/03/23 12:49 PM GMT +05:30


GPS Map Camera
Department of Chemical Engineering, SRM Institute of Science and Technology, India
Alumini talk on prospects of Chemical Engineering
Lat 8.806547° Long 78.134205°
30/03/23 12:51 PM GMT +05:30


GPS Map Camera
Department of Chemical Engineering, SRM Institute of Science and Technology, India
Alumini talk on prospects of Chemical Engineering
Lat 8.806547° Long 78.134205°
30/03/23 12:48 PM GMT +05:30


SRM
GPS Map Camera
Department of Chemical Engineering, SRM Institute of Science and Technology, India
Alumini talk on prospects of Chemical Engineering
Lat 8.806547° Long 78.134205°
30/03/23 12:48 PM GMT +05:30

[6] One Day Students Upskilling Motivational Workshop on Computational Techniques for Chemical Engineers- A Preface Training on COMSOL

Date: 27-04-2023

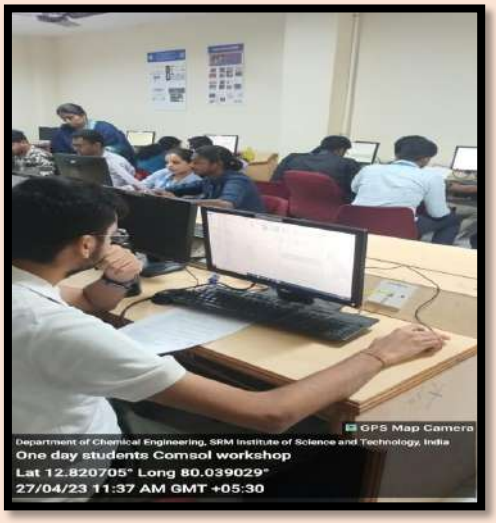
Organizer

Dr. G. Keerthiga, Assistant Professor, Chemical Engineering

About the event

The primary objective of the workshop is to train students on COMSOL and wisely practice the software for chemical engineering applications. The observed outcomes of this event include understanding of basic concepts,

- Ability to solve basic problems and apply core knowledge.
- Understood how the design software helps in Multiphysics.



[7] Chem Project Expo – 2023
Dates: 04-05-2023 to 05-05-2023

Convenor
Dr. K. Suresh, Associate Professor & Head in - charge, Chemical Engineering
Coordinators
Dr. E. Kavitha, Assistant Professor, Chemical Engineering
Dr. E. Poonguzhali, Assistant Professor, Chemical Engineering
Organizing Committee Members
Dr. K. Anbalagan, Assistant Professor, Chemical Engineering
Dr. S. Kiruthika, Assistant Professor, Chemical Engineering
Dr. G. Keerthiga, Assistant Professor, Chemical Engineering

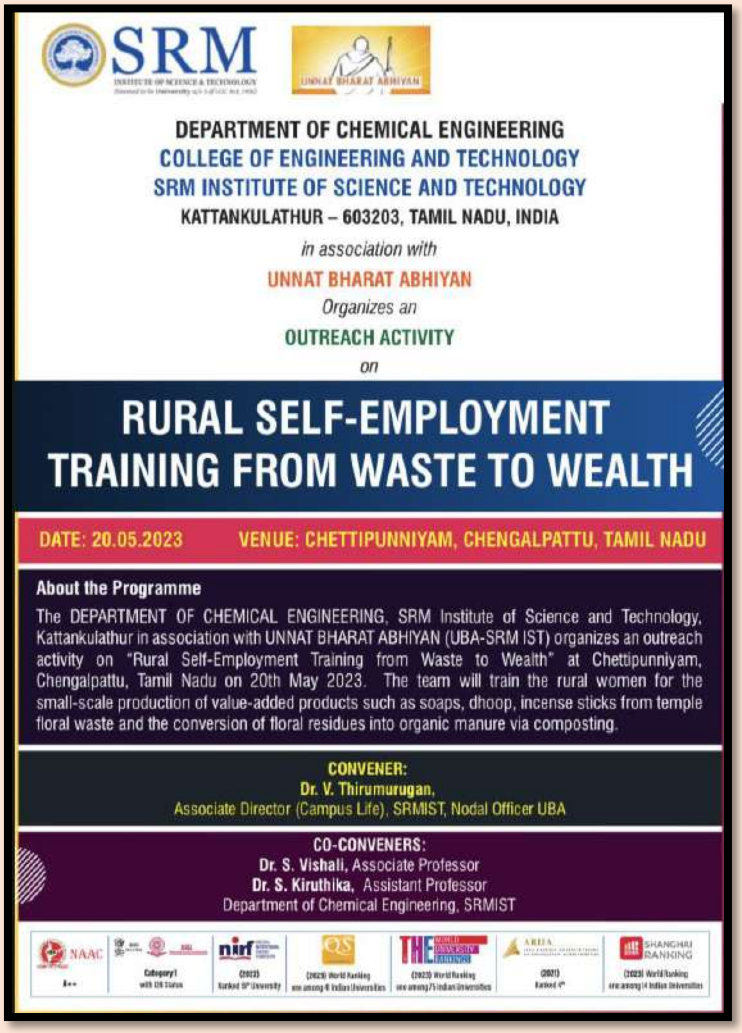
About the event
The main objective of the expo is to provide a platform for the students to present their research findings and to know about the prospects in the field of Chemical Engineering. This would motivate and facilitate the students to interact with experts and provide the opening for generating novel ideas.


SRM

[8] Outreach Activity on Rural Self-Employment Training from Waste to Wealth
Date: 20-05-2023
Organizers
Dr. S. Vishali, Associate Professor, Chemical Engineering
Dr. S. Kiruthika, Assistant Professor, Chemical Engineering

About the event

- Rural women and physically challenged were involved in all the stages of operation, viz., collection, segregation, drying, value-added product making, converting residues into organic manures and so on.
- Training women/differently-abled people in making products from floral waste developed the self-employment opportunity and the circular economy.
- Enhancement of rural women's financial independence.
- Raising their life standard through self-employment opportunities.



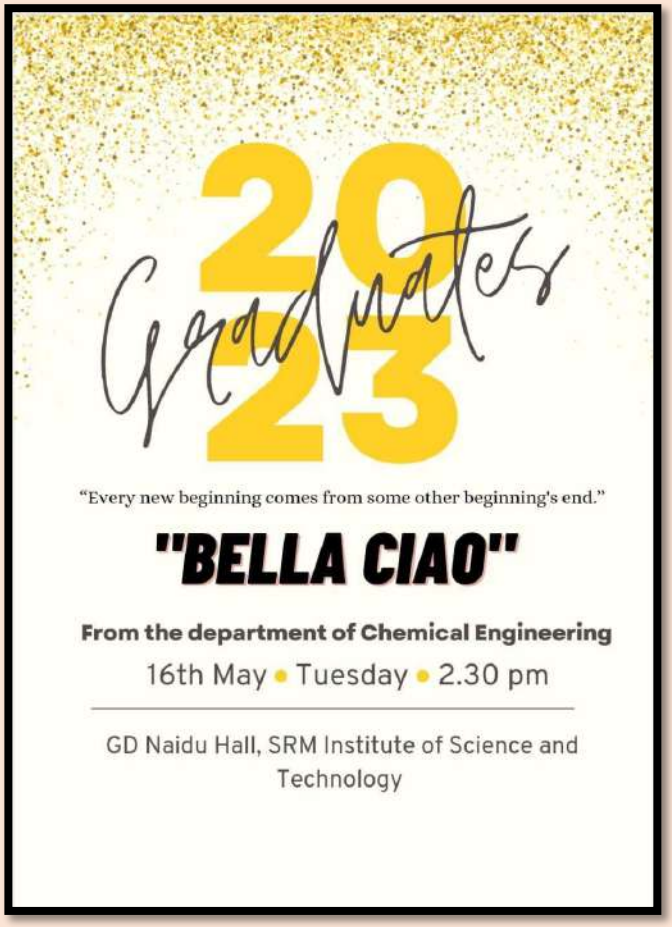
[9] Freshers Day - AURORA 2023
Date: 02-02-2023
Organizers
Dr. D. Nanditha, Assistant Professor, Chemical Engineering
Student co-ordinators
Sam Daniel, Mitun, Thrisa, Tramila, Pranav, Praveena, Nishanth
II-year, B. Tech. Chemical Engineering Students

About the event
The fresher's day is a welcome event for the newcomers who joined the department with a gesture of extending a friendly atmosphere and also it will be a motivating event for the freshers. Several exciting fun activities and games were organized for the students. This event also helped the student to showcase their hidden talents.

[10] Farewell 2023 - Bella Ciao 2023
Date: 16-05-2023
Organizers
Dr. K. Sofiya, Assistant Professor, Chemical Engineering
Dr. G. Keerthiga, Assistant Professor, Chemical Engineering
Student coordinators
Ilansuriyan A, U. Suriya
(III-year, B. Tech. Chemical Engineering Students)

About the event
The farewell day will always be a memorable day for graduating students. It marks the end of their college life and the start of a new chapter. It is a day of celebration, reflection, and gratitude – a time to look back on the memories and friendships made over the years. Several

fun games and activities were organized for the students. It was a great time to reflect on the lessons learned and the memories made. It was a special day and one that will be remembered for years to come.



Alumni Corner
Message from the Alumni

Pranjal Uniyal
Customer Success Manager
LRN Technologies & Content Solutions
Bangalore
B.Tech. (2014-2018)

*I am **Pranjal Uniyal** and I **graduated from SRM University in 2018.** SRM has provided me with a strong technical background, and the parallel persistent involvement in extracurricular activities has inculcated in me a sense of teamwork & leadership along with the development of my communication skills and business ethics. The faculty and my friends in college helped me not only in my academics but also in developing my interpersonal skills. Because of their support, I was able to get a placement offer from one of the leading Education consultant companies in the B2C market and used the skills I learned in college to transition to the B2B market after 2 years. I'll always be grateful for the resources this institution has provided me.*

Aadilah Mohamed Ali,
Process Engineer
ST Microelectronics
Singapore
B. Tech. (2015-2019)

*I'm **Aadilah Mohamed Ali**, a Chemical Engineering graduate of SRM Institute of Science and Technology, having completed my B. Tech. from **2015 to 2019.** My journey pursuing a Bachelor's Degree in Chemical Engineering was nothing short of exhilarating. The dedicated faculty effortlessly navigated through challenging subjects, fostering my deep appreciation for the course. The approachability of the faculty allowed me to clarify doubts without hesitation, contributing to my academic success. With this wholesome education, I confidently pursued a Master of Science at the National University of Singapore (NUS), where I continued to build on the strong foundation laid at SRMIST. The skills and knowledge gained during my undergraduate years played a pivotal role in my success at NUS, opening doors to further academic and professional opportunities. I remain indebted to the invaluable resources offered by SRMIST, and I'm certain that future batches will continue to benefit from this enriching experience*

Memories Corner

B. Tech. Chemical Engineering, Batch 2019 – 2023

M. Tech. Chemical Engineering, Batch 2021 – 2023

Creative Corner

SRM CHEMICAL ENGINEERING AT STATE-LEVEL FORUM!!

Dr. S. Vishali
Associate Professor, Chemical Engineering

It was a great and long journey, that started in the year 2018, with a small idea of how to handle the grey water. The idea slowly escalated after seeing the promising results of the proposed technology. The results helped to go for an Indian patent. SRM supported our idea and granted a fund of Rs. 1.75 lakhs under the Selective Research Excellence Initiative (SERI), which motivated us to further progress.
When we heard about the call for **State-level Enviro Solvers Hackathon 2023,** from **the Tamil Nadu Pollution Control Board** on the eve of **World Environment Day 2023,** we decided to project our idea under the theme "Water Saved," in the state-level forum with much confidence in our technology. The Hackathon was open to all categories of participants, viz., Academicians, MSMEs and Startups. Among the 600+ applications, 196 were identified to provide solutions for the theme, from which the top 15 were invited for the presentation. We made our presentation on "**GREY WATER TREATMENT SUBUNIT IN WASHING MACHINES: A HYBRID APPROACH TOWARD WATER MANAGEMENT**," which was truly appreciated by the panel members and the audience. The solution proposed will reduce the demand for fresh water to a greater level.

Among these 15 participants, with double happiness, myself, **Dr. S. Vishali,** Associate Professor, along with my colleague **Dr. S. Sam David,** Assistant Professor, Department of Chemical Engineering, CET, SRMIST, KTR received a **State-level Third Prize along with One Lakh Rupees** as cash prize from The **Hon'ble Minister for Environment and Climate Change, Government of Tamil Nadu, Thiru. Siva. V. Meyyanathan** and **Ms. Supriya Sahu I.A.S**., Additional Chief Secretary Environment and Climate Change, Government of Tamil Nadu on 06-06-2023.

We felt **super proud to represent the Department of Chemical Engineering, SRMIST,** in the state-level forum. More than that we got a golden opportunity to share our happiness with our Honourable Chancellor **Dr. T. R. PAARIVENDHAR, M. P.,** on the same day of the event. What more do we need other than this!!! Honestly, I have waited 19 long years for this single minute. We were truly motivated during this journey and hopefully will inspire many others. Without any doubt we will add many more feathers to the cap of SRM.

CHEMICAL REVOLUTION: CARBON-CAPTURE INNOVATIONS

Kanishka G -Final Year B. Tech., Chemical Engineering

In the ever-changing landscape of medicine, one innovation stands out as a game-changer that could once again change the way we approach climate change and environmental sustainability. Carbon Capture, Utilization, and Storage (CCUS) technology has emerged as a beacon of hope and is making waves as a recent development that holds promise to address carbon emissions and reduce their impact on our planet. Carbon dioxide (CO_2) emissions have long been a major cause of climate change. Leading experts in the field of chemistry are actively collaborating to devise innovative solutions for carbon capture, addressing the pressing challenge of reducing CO_2 emissions. Their efforts are concentrated on capturing carbon dioxide from diverse sources, encompassing industrial processes, power plants, and even the earth's atmosphere.

The captured carbon is subsequently directed towards storage or repurposed through recycling for various sustainable applications. This concerted focus reflects a commitment to mitigating the impact of greenhouse gas emissions on the environment. The innovation relies on advanced materials and technologies that facilitate the efficient separation of CO_2 from the air stream. Insulation, capillaries, and absorption mechanisms play an important role in CO_2 capture, often with incredible efficiency. Once captured, CO_2 can be transported and stored in geological processes, reused for oil production, or converted into valuable chemicals and products. The impact of CCUS extends beyond environmental benefits. By preventing a significant portion of CO_2 emissions from reaching the atmosphere, these technologies can help countries meet climate goals and contribute to global efforts to limit warming. Furthermore, revenue can be generated by converting captured CO_2 into marketable products, generating additional revenue to support the economic viability of the technology.

The cost, scale and long-term safety of carbon storage are among the concerns researchers address. However, progress is already underway. Collaborative research efforts for reducing costs and refining technologies while incorporating renewable energy into CCUS systems can significantly reduce emissions. The advent of CCUS technology underscores the importance of education and collaboration in medicine,

because colleges and universities equip students with the knowledge and skills, they need to lead such innovations.

Research partnerships and industry collaborations are essential for translating success into practical solutions with lasting impact in perpetuity. Advances in carbon capture and utilization exemplify the dynamic and changing nature of chemistry. This innovation offers a glimpse into a future where sustainability and growth continue. As chemists continue to refine and expand CCUS technology, they are not only changing the face of their field, but also playing an important role in creating a carbon-positive environment for our planet.

THERMAL DEPOLYMERIZATION – AN OVERVIEW

Sheik Mohamed Wahith S and Ilansuriyan A, Final Year B. Tech., Chemical Engineering

Sheik Mohamed Wahith S

Ilansuriyan A

Introduction

Thermal depolymerization (TDP) is the process of converting a polymer into a monomer or a mixture of monomers by predominantly thermal means. It may be catalyzed or un-catalyzed and is distinct from other forms of depolymerization which may rely on the use of chemicals or biological action. This process is associated with an increase in entropy. For most polymers thermal depolymerization is a chaotic process, giving a mixture of volatile compounds. Materials may be depolymerized in this way during waste management, with the volatile components produced being burnt in the form of synthetic fuel in a waste-to-energy process. For other polymers, thermal depolymerization is an ordered process giving a single product or a limited range of products. These transformations are usually more valuable. They form the basis of plastic recycling technologies. Therefore, this study proposes segregating plastic waste for recycling into high-quality alternative fuels while adhering to the circular economy concept.

Pyrolysis was used to convert PP, PET, HDPE, LDPE, and mixed-plastic wastes into alternative fuels. The plastic wastes were pyrolyzed to produce alternative fuels in a fixed-bed batch reactor. A mass balance was used to estimate the yield of the fuel products, primarily liquid (oil), gas, and other fractions, with a focus on condensate oil. Various forms of spectroscopy and thermal analysis were leveraged to characterize the chemical composition and thermal behavior of the condensate oil, including gas chromatography, Fourier transform infrared spectroscopy, differential scanning calorimetry, and thermogravimetric analysis. The moisture content, density, refractive index, cetane number, kinematic viscosity, pourpoint, flash point, and acid value of the

oils produced by pyrolysis of plastic wastes were used to evaluate their properties, quality, and performance.

Process

In the method used by CWT, the water improves the heating process and contributes hydrogen to the reactions. The feedstock material is first ground into small chunks and mixed with water if it is dry. It is then fed into a reaction chamber where it is heated to around 250 °C and subjected to 600 psi (4 MPa) for approximately 15 minutes, after which the pressure is rapidly released to boil off most of the water. The result is a mix of crude hydrocarbons and solid minerals, which are separated. The hydrocarbons are sent to a second-stage reactor where they are heated to 500 °C, further breaking down the longer chains, and the resulting mix of hydrocarbons is then distilled like conventional oil refining.

Working with turkey offal as the feedstock, the process proved to have yield efficiencies of approximately 85 %; in other words, the energy contained in the end products of the process is 85 % of the energy contained in the inputs to the process (most notably the energy content of the feedstock, but also including electricity for pumps and natural gas for heating). Alternatively, if one considers the energy content of the feedstock to be free (i.e., waste material from other process), one could consider the energy efficiency of the process to be 560 % (85 units of energy made available for 15 units of energy consumed).

The company claims that 15 to 20 % of feedstock energy is used to provide energy for the plant. The remaining energy is available in the converted product. Higher efficiencies may be possible with drier and more carbon-rich feedstocks, such as waste plastic. By comparison, the current processes used to produce ethanol and biodiesel from agricultural sources have energy efficiencies in the 320 % range when the energy used to produce the feedstock is considered (sugar cane, corn, soybeans, and the like). As these energy efficiencies include the energy cost to produce the feedstock and the above TDP energy efficiency does not, these values are not directly comparable. The process breaks down almost all materials that are fed into it. TDP even efficiently breaks down many types of hazardous materials, such as poisons, and difficult-to-destroy biological agents such as prions.

Understanding the impact of thermal depolymerization to accelerate a circular economy

Thermal depolymerization, a process that breaks down waste materials into reusable components, is increasingly being recognized as a pivotal tool in advancing a circular economy. This innovative technology offers a sustainable solution to the world's waste problem, transforming it into a valuable resource. In essence, thermal depolymerization mimics the natural geological process that converts organic material into oil. However, instead of taking millions of years, this process is expedited to just a few hours in a controlled industrial setting. The process involves the application of heat and pressure to waste materials, breaking them down into their basic molecular components. These

components can then be repurposed into valuable commodities such as oil, gas, and other chemical products.

The role of thermal depolymerization in achieving a circular economy is multi-faceted. Firstly, it addresses the issue of waste management. The world generates over 2 billion tons of municipal solid waste annually, according to the World Bank. This figure is expected to grow by 70 % by 2050 if current consumption and waste management practices continue. Thermal depolymerization provides a viable solution to this problem, as it can process a wide variety of waste materials, including plastics, tyre, and organic waste, reducing the volume of waste that ends up in landfills. Secondly, thermal depolymerization promotes resource efficiency. In a circular economy, the aim is to keep resources in use for as long as possible, extracting the maximum value from them while in use, and then recovering and regenerating products and materials at the end of their service life. By converting waste into reusable components, thermal depolymerization aligns perfectly with this principle. It transforms waste, which is often viewed as a problem, into a resource, thereby promoting resource efficiency and reducing the demand for virgin materials.

Thirdly, thermal depolymerization contributes to energy security and reduces dependency on fossil fuels. The oil and gas produced through this process can be used as a source of renewable energy. This not only provides a sustainable alternative to fossil fuels but also helps to reduce greenhouse gas emissions, mitigating climate change. However, it's important to note that the widespread adoption of thermal depolymerization faces several challenges. These include the high cost of the technology, regulatory barriers, and the need for a steady supply of waste materials. Despite these challenges, the potential benefits of thermal depolymerization in advancing a circular economy are undeniable. In conclusion, thermal depolymerization plays a crucial role in the transition towards a circular economy. It offers a sustainable solution to the global waste problem, promotes resource efficiency, and contributes to energy security. While there are challenges to its widespread adoption, the benefits it offers make it a promising technology for the future. As we strive to create a more sustainable world, thermal depolymerization could very well be the game-changer, turning the problem of waste into a solution for resource efficiency and energy security.

Advantages

If thermal depolymerization were used to make oil on a large scale, the planet's plastic waste heaps would provide a free, massive supply to work with. According to the United Nations, the world has generated an estimated 7 billion metric tons of plastic pollution, only 10 % of which has been recycled. It causes serious public health issues worldwide for humans. Preserving ocean wildlife relies on reducing the amount of pollution in the World's waterways. However, an estimated 11 million metric tons of plastic waste enter the oceans annually. This also pollutes sources that provide drinking water to humans and pollutes ocean food supplies with microplastics. Recycling and switching to plastic alternatives may reduce the amount of waste produced in the future. However, the world needs a solution for the existing plastic pollution that's already out there. Thermal depolymerization is a clear answer to the problem. With so much plastic waste readily

available, thermal depolymerization oil would be relatively inexpensive, especially compared to the costs of conventional drilling.

Limitations

Thermal depolymerization process only breaks long molecular chains into short chains. As a result, small molecules like methane or carbon dioxide cannot be converted into oil using this process. Hence, there is a need for additional refining steps. In addition, as the process requires temperature greater than 400 °C (752 °F), toxic byproducts like furan and dioxin may be released in addition to methane and carbon dioxide.

Environmental Impact

Besides reducing waste and by-products using water as a medium, thermal depolymerization process also produces fuel resources that can benefit the World. Invaluable fuel products can be produced from organic waste and low-quality feed stocks in an environment-friendly manner. It also yields clean crude oil products by removing sulfur and nitrogen compounds.

In a completely thermal depolymerization-based economy, the amount of CO_2 produced by the burning of fuels is exactly balanced by the plants grown to be used for thermal depolymerization feedstock. The amount of energy hitting the earth is about 5000 times more than the total amount of energy used by all human activity. Therefore, with an optimum use of the thermal depolymerization technology, the earth might conveniently support ten times its current population at a high standard of living. The technology is yet to make an impact as an alternative for producing liquid crude oil due to high cost of the entire process. Upon resolving this issue, thermal depolymerization could help bring the shortage of the dwindling fuel resources across the globe to an end.

Celebrity Chemical Engineers

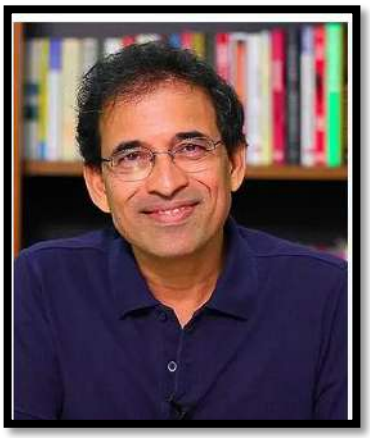
Palanivel Thiagarajan – Honourable Minister for Information Technology & Digital Services, Tamil Nadu

Palanivel Thiagarajan (PTR) is an Indian politician and the current Minister of Information Technology and Digital Services of Tamil Nadu. Following his schooling at The Lawrence School, Lovedale, and Vikaasa School, Madurai, **Thiagarajan graduated with a degree in Chemical Engineering From the National Institute of Technology, (formerly, Regional Engineering College), Tiruchirappalli.** He obtained a master's degree in operations research and a Ph.D. in human factors engineering/engineering psychology at University at Buffalo. He then completed his MBA in financial management at MIT Sloan School of Management. He is a patent holder of Methods & Systems for providing structured loan commitment transactions. He began his career in 1990 as an independent consultant in Operations and Systems Improvement. In 2001 he joined Lehman Brothers Holdings Inc. as Trader and Co-Portfolio Manager – Firm Relationship Loan Portfolio. He then worked for Standard Chartered Bank, Singapore in the Global Capital Markets division. He left Standard Chartered Bank as Managing Director, Financial Markets Sales in 2014. Thiagarajan was elected as the Member of the Legislative Assembly (MLA) from Madurai Central Assembly constituency in the 2016 Tamil Nadu Legislative Assembly election. He was re-elected in the 2021 Tamil Nadu Legislative Assembly election. He was the Finance and Human Resources Management Minister of Tamil Nadu since May 2021. He has released a White Paper on Tamil Nadu's finances after a long time. In a cabinet reshuffle on May 11, 2023 by the Tamil Nadu government, he was made as the Information Technology and Digital Services minister of the state.

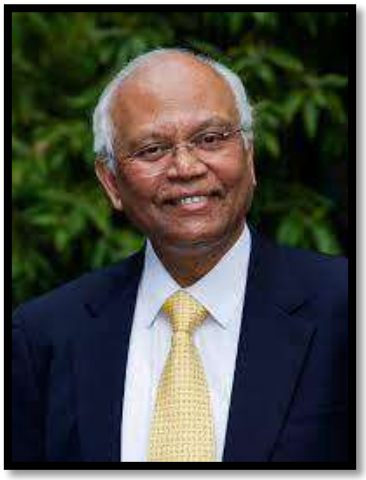
Bharathi Baskar - Director, Head Core Operations at Citi Bank & Tamil Orator

Bharathi Baskar is a famous Tamil orator and a public speaker. She is so popular for her debate talk show named Pattimandram. Her comedy talk shows became the most famous because of her witty remarks and comic timing. Bharathi Baskar completed her Post Graduation in Business Administration from the prestigious Anna University. Before the starting of her anchoring career and a job at Citi bank, she was a **Chemical Engineer from Alagapa College of Technology,** Chennai. Along with that, she also holds the position of Senior Vice President, at Citi Bank Chennai and a popular public speaker for over 20 years as of now. She is also the author of some very famous books being *APPA ENNUM VILLAN (TAMIL), NEE NADHI POLA ODIKONDIRU and SIRAGAI VIRI PARA.* She loves to write short moral stories. Some of her stories were so good that they were published in the Tamil magazine "KALKI". She is the Director, Head Core Operations at Citi Bank.

Srinivas – Singer, Music Composer, Music Show Judge etc.,
Srinivas or Srini as he is fondly referred to is an award-winning playback singer who has sung over 2000 songs in Tamil, Malayalam, Telugu, Kannada and Hindi. He is also a music composer. The soul-stirring magic of Kishore Kumar-R. D. Burman deeply influenced him in his childhood days. He went to complete his **B.Tech. Chemical Engineering from Bombay University, Department of Chemical Technology (UDCT, now known as ICT)**; during which he represented his university in youth festivals. After pursuing his career as a **Chemical Engineer** and a marketing professional for 10 years, his passion for music got the better of him, and did very well in that field. His famous Tamil songs include "Thayya Thayya & "En Uyire" from the movie Uyire, "Oru Poiyavadhu sol kanne from the movie Jodi and many more. He was the recipient of the State Award by the Government of Tamil Nadu for his song 'Minsara Poove' from the film 'Padayappa' and also the Kerala State Award for the song 'Baansuri' from the film 'Raathrimazha'. He was also conferred with the title 'Kalaimamani' by the Tamil Nadu Government.



Harsha Bhogle - Indian Cricket Commentator and Journalist
Many times, while watching a cricket match, we have heard Harsha Bhogle doing commentary. Nobody knew that this personality is a **Chemical Engineer**. He earned a **B.Tech. degree in Chemical Engineering from Osmania University's, College of Technology in Hyderabad.** He received a PGDM from Indian Institute of Management Ahmedabad.
He developed interest in commentary, at the time when the cricket matches in India were broadcasted in English. This man despite being a Chemical Engineer is the most respected personality when it comes to both English and Hindi Commentary. Also, many people say that his English is unmatchable in today's era of Commentary. He started commentating at the age of 19 with All India Radio, while living in Hyderabad. In 1991–92, he became the first Indian commentator to be invited by the Australian Broadcasting Corporation during India's cricket series before the 1992 Cricket World Cup. He has worked eight years for the BBC as part of their commentary team in the 1996 and the 1999 Cricket World Cups.



Dr. Raghunath Anant Mashelkar - former Director General of the Council of Scientific and Industrial Research (CSIR) & President of Institution of Chemical Engineers.

He studied at University of Bombay's, Department of Chemical Technology (UDCT; now the Institute of Chemical Technology, Mumbai) where he obtained BE degree in Chemical Engineering in 1966, and PhD degree in 1969. Dr. Raghunath Mashelkar, the great Sr. Chemical Scientist fought in the Courts of America for the Turmeric Patent of India and then received great awards in both India and America after his surpassing victory. Led by Mashelkar, CSIR successfully fought the battle of **revocation of the US patent on wound healing properties of turmeric** claiming that this was India's traditional knowledge and therefore not novel. Mashelkar also chaired the Technical Committee, which **successfully challenged the US patents on Basmati Rice** by RiceTec Company, Texas, (2001). This opened up new paradigms in the protection of traditional knowledge with WIPO bringing in a new internal patent classification system, where sub-groups on traditional knowledge were created for the first time. This led to the creation of **India's Traditional Knowledge Digital Library**, which helped in prevention of the grant of wrong patents on traditional knowledge.

திருக்குறள்

குறள் எண் – 471
பால் – பொருட்பால்
இயல் – அரசியல்
அதிகாரம் – வலியறிதல்

வினைவலியும் தன்வலியும் மாற்றான் வலியும்
துணைவலியும் தூக்கிச் செயல்

Transliteration

Vinaivaliyum Thanvaliyum Maatraan Valiyum
Thunaivaliyum Thookkich Cheyal

English Couplet

The force the strife demands, the force he owns, the force of foes, the force of friends; these should he weigh ere to the war he goes

பொருள்

செயலின் வலிமை, தனது வலிமை, பகைவரின் வலிமை, இருசாராருக்கும் துணையாக இருப்போரின் வலிமை ஆகியவற்றை ஆராய்ந்தறிந்தே அந்தச் செயலில் ஈடுபட வேண்டும்

Couplet Explanation

Let (one) weigh well the strength of the deed (he purposes to do), his own strength, the strength of his enemy, and the strength of the allies (of both), and then let him act

Translation

Judge act and might and foeman's strength
The allies' strength and go at length