



B.M.S. COLLEGE OF ENGINEERING, BENGALURU

Autonomous Institute, Affiliated to VTU

Department of Chemical Engineering

Activities from June 2024 to May 2025

June 2024

June 20, 2024: A Memorandum of Understanding (MoU) has been signed between the Central Manufacturing Technology Institute (CMTI), Bengaluru, and the B.M.S. College of Engineering. Dr. Y. K. Suneetha, Professor and Head, and Prof. Shabnam Siddiqui from the Chemical Engineering Department are the faculty coordinators for this collaboration.



June 26, 2024: Dr Hari Prasad Uppara, Assistant Professor in the Department of Chemical Engineering, co-authored with Dr R. Shiva Kumar, Venu Gopal Gowda and Dhanush H, presented a paper titled “Enhanced supercapacitive performance of Cu-NiO based MOF impregnated carbon

electrode: Synthesis, characterization and electrochemical investigation” in an International Conference on Recent Trends in Transport Processes (RTTP - 2024), June 24 - 26, 2024 organised by Department of Chemical Engineering in association with Indian Institute of Chemical Engineers (IICChE). The team has been awarded the “First prize award in oral presentation”.

July 2024

July 5, 2024: Dr. Y. K. Suneetha, Professor in the Department of Chemical Engineering, co-authored with Dr. Hari Prasad Uppara, Shruthi Munukutla, Aashi D Parekh, Sakshi Patel, presented a paper titled, “Development of pectin-based bioplastic films – An approach towards Sustainable Development Goals” in a “4th International Conference on Waste, Energy and Environment” held during 3rd – 5th July 2024, organized by Center for Waste Management - IRC, Sathyabama Institute of Science and Technology, Chennai. The book of the abstract was published with ISBN No: 978-93-83409-91-4.



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July 19, 2024: The faculty Inventors Dr. Y. K. Suneetha, Prof. and Head and Mrs. Shabnam Siddiqui, Assistant Professor of Chemical Engineering Department, BMSCE, are successful in updating the status of the collaborated work between CMTI and BMSCE to the level of the Transfer of Technology available to the public for industrialization. The faculty are thankful to both Institutions for their support.



July 22, 2024: Mrs. Shabnam Siddiqui and Dr. Sainath K, Assistant Professors in the Department of Chemical Engineering, along with a UG-2024 batch student, Prakyath Prakash Thalya, in collaboration with Dr. Sumana Sinha, Associate Professor in NITTE Meenakshi Institute of Technology, Bengaluru, published a research article titled “*Computational intelligence modelling of methylene blue adsorption by metal-organic frameworks*” in the journal Indian Chemical Engineer, a Q4 journal indexed in the Web of Science. DOI: 10.1080/00194506.2024.2370861.

July 31, 2024: Dr. Shivakumar R, Associate Professor in the Department of Chemical Engineering, in association with Mrs. Manjula, Assistant Professor in the



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Department of Information Science and Engineering, BMSCE, published an Indian patent titled "A system and a method for waste disposal and segregation for bio-oil extraction," with an application number of 202441043331 A.

August 2024

August 7, 2024: Dr. Sainaath K, Assistant Professor in the Department of Chemical Engineering, delivered a talk on "Green Technology in Wastewater Treatment" for Chemical Engineering students of Karnataka (Govt.) Polytechnic Mangalore, online.



August 7, 2024: Bhoomika Chegu Vinay (1BM20CH012), Swathi M. Wadavi (1BM20CH057), Ojaswini A. Sastry (1BM20CH030), and Malhaar Koparkar (1BM20CH025), 8th-semester students of

the Chemical Engineering department won the prestigious Best Project Award at the institutional level 20223-24, 3rd prize, held at BMSCE, Bengaluru. The title of the project is "Engineered Hydrochar for the Removal of Hexavalent Chromium: Synthesis, Characterization, and Performance Evaluation," under the guidance of Dr. Sainath K, Assistant Professor in the Chemical Engineering Department and Mrs. Prathima B, as co-guide, Assistant Professor in Civil Engineering Department.



August 11, 2024: Sulsaa Dangi (1BM21CH039), a 7th semester student of the Chemical Engineering Department, presented a poster titled "Transformation of Recovered Metals from E- Waste to Electro-



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Catalyst” at the Student Regional Conference (SRC) 2024 held at NIT Rourkela, India, under the guidance of Dr. Hari Prasad Uppara, Assistant Professor in the Chemical Engineering Department. The team was awarded 1st place in the student poster competition, and the cash prize was 200\$.



August 11, 2024: Seema N Poojary (1BM21CH037), a 7th-semester student of the Chemical Engineering Department, presented a paper titled “*Development of structured adsorbent for defluoridation*” at the Student Regional Conference (SRC) 2024 held at NIT Rourkela, India, under the guidance of Mrs. Shabnam Siddiqui, Assistant Professor in the Chemical Engineering Department. The team was awarded 1st place in the student technical

paper presentation with a cash prize of 200\$.



August 21, 2024: Dr. Y. K. Suneetha and an alumnus of BMSCE incubated the start-up company at BIG Innovation Center, BMSCE Campus. Dr. Y. K. Suneetha gets the credit as the first BMSCE Faculty member to incubate at BIG Innovations.





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September 2024

September 10, 2024: To explore the possible collaboration for research and Internship opportunities for our students, Dr. C. T. Puttaswamy and Dr. Chetan A Nayak, Professors, Dr. Sreelakshmi Diddi and Dr. Shivakumar R, Associate Professors, and Dr. Sainaath K and Dr. Hariprasad Uppara, Assistant Professors in the Department of Chemical Engineering, visited *HP Green R&D Centre*, located in KIADB Industrial Area, Tarabahalli, Devanagundi, Hoskote, Bengaluru.



September 13, 2024: The Department of Chemical Engineering, in association with the Department of Information Science and Engineering, organized a workshop titled “*Essentials of MS Office and Google Apps for Office Staff and Lab Instructors*” from September 9th to 13th, 2024. Around 43 participants benefited from this workshop.



September 20, 2024: G Divyashree (1BM21CH009), Pranav Karanth MS (1BM21CH030), and Seema N Poojary (1BM21CH037), 7th-semester students of the Chemical Engineering Department participated in the National level Inter-



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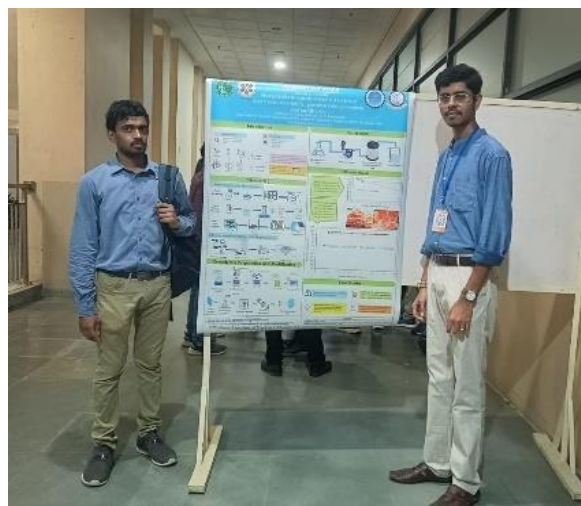
Activities from June 2024 to May 2025

college Hackathon- GreenHack'24 held at SSN College of Engineering, Tamil Nadu, India, under the guidance of Prof. Shabnam Siddiqui, Assistant Professor in the Chemical Engineering Department. They have been awarded 3rd place with a cash prize of Rs. 5000.

September 20, 2024: Gunashree B M (1BM21CH011), Keerthana Nagesh (1BM21CH017), Rakshitha K M (1BM21CH032) and Reethya Giridhar (1BM21CH034) 7th-semester students of the Chemical Engineering Department presented a poster entitled, "*Simulation of Supercritical CO₂-Brayton Cycle at a Natural Gas Compression Station*" at the 20th edition of SCHEMCON - 2024 Rajiv Gandhi Institute of Petroleum Technology (RGPT), Jais, Uttar Pradesh, India, under the guidance of Dr. Sanjay Kumar and Dr. Sainath K, Assistant Professors in Chemical Engineering Department.

September 20, 2024: Kuladeep D (1BM22CH018) and Guru Sai Pavan (1BM22CH014), 5th-semester students of the Chemical Engineering Department, presented a poster titled "*Microplastics in*

aquatic systems: A review of occurrence, monitoring, potential risks, prevention and purification" at the 20th edition of SCHEMCON - 2024 Rajiv Gandhi Institute of Petroleum Technology (RGPT), Jais, Uttar Pradesh, India, under the guidance of Dr. G N Rameshaiah, Professor in Chemical Engineering Department.



September 20, 2024: Banupriya G N (1BM22CH009), 5th-semester student of the Chemical Engineering Department, presented a poster titled "*Fault Detection and Diagnosis in Batch Reactor Using Artificial Intelligence (ANN) and Algorithm*" at the 20th edition of SCHEMCON - 2024 Rajiv Gandhi Institute of Petroleum Technology (RGPT), Jais, Uttar Pradesh, India, under the



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guidance of Dr. G N Rameshaiah, Professor in Chemical Engineering Department.



September 21, 2024: Keerthana Nagesh (1BM21CH017) and Gunashree B M (1BM21CH011) 7th-semester students of the Chemical Engineering Department presented a paper at the 20th edition of SCHEMCON - 2024 entitled, "*Acetate Ion Sensing by Hydrazones Derived from 2,4-dinitrophenylhydrazine*". This event was organized by the Rajiv Gandhi Institute of Petroleum Technology (RGIPT), Jais, Uttar

Pradesh, India, on the 21st and 22nd of September 2024. This project was done under the guidance of Dr. Chetan A. Nayak, Professor, Department of Chemical Engineering BMSCE, and Dr. G. S. Ananthnag, Assistant Professor, Department of Chemistry, BMSCE.



September 21, 2024: Rakshitha K M (1BM21CH032) and Reethya Giridhar (1BM21CH034), 7th-semester students of the Chemical Engineering Department, presented a paper entitled, "*Amine Modified ZIF-8 for Enhanced Chromium Removal from Wastewater*" at the 20th edition of SCHEMCON – 2024, organized by Rajiv Gandhi Institute of Petroleum Technology (RGIPT) at Jais, Uttar Pradesh, India, under the guidance of Dr. Sainath K, Assistant Professor, Department of Chemical Engineering, BMSCE.



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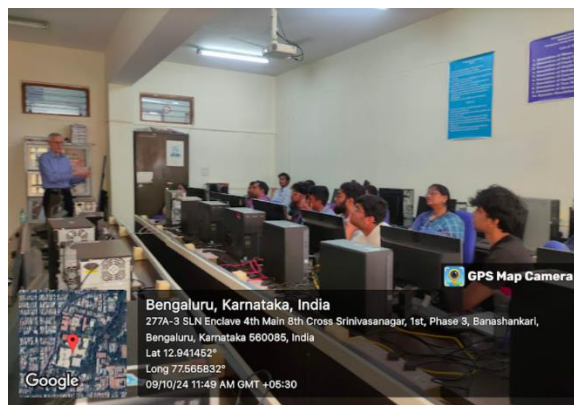
October 2024

October 3, 2024: Prof. Shabnam Siddiqui, Assistant Professor in the Department of Chemical Engineering, BMSCE, conducted one-day skill development training in 3D printing technology for women was conducted at Cambridge Institute of Technology, Bengaluru, in association with AMSI, EOS, and Additive Learning. This basic training was organized by the IW3DP-BMSCE student chapter, and thirty female students participated.



October 09, 2024: Professor William Clark,

Purdue university, USA, visited the Department of Chemical Engineering to interact with the final year students to sensitize them for the higher studies in USA.



October 10, 2024: Dr. Shivakumar R, Associate Professor and Dr. Chetan A Nayak, Professor in the Department of Chemical Engineering, BMSCE, published a paper entitled “A review of sensor-based E-health monitoring devices”, in the Journal Periodico di Mineralogia, Edizioni Nuova Cultura, Volume 93, No. 5, PP: 347-368, a Q3 paper WOS indexed [DOI: 10.5281/zenodo.13912084]. ISSN: 0369-8963.

October 18, 2024: Dr. Sreelakshmi Diddi, Associate Professor in the Department of Chemical Engineering, BMSCE, attended a One-Week Faculty Development / Training



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Program on “Process Optimization” between October 14th -18th, 2024, Organized by the Department of Chemical Engineering, UPL University of Sustainable Technology, Bharuch, Gujarat & IChE Student Chapter-SRICT.

October 24, 2024: Rakshitha K M (1BM21CH032) and Reethya Giridhar (1BM21CH034), 7th-semester students of the Chemical Engineering Department, are bestowed with *Late Lakshmi Nandakumar Award of the Institute for best presentation in Schemcon 2024*. Students worked under the guidance of Dr. Sainath K, Assistant Professor, Department of Chemical Engineering, BMSCE.

October 25, 2024: Dr. Sreelakshmi Diddi, Associate Professor in the Department of Chemical Engineering, BMSCE, attended a One -Week Short -Term Course on “Recent Advances in Wastewater Treatment Techniques” (RAWTT-2024) between 21st to 25th October 2024 conducted by the Dept. of Chemical Engineering, NIT Srinagar, Jammu & Kashmir, India.

November 2024

November 15, 2024: Dr. G. N. Rameshaiah, Professor in the Department of Chemical Engineering, BMSCE, was invited to *Chair a Session* at the Fifth International Conference on Recent Advances in Engineering Sciences (ICRAES 2024) organized by M S Ramaiah Institute of Technology, Bengaluru held on 14th and 15th November 2024.

December 2024

December 03, 2024: a major milestone was achieved by signing a license agreement for the Technology Transfer of “*Synthesis and Biodegradation of Polydimethylsiloxane for application as media in AFFM.*” The technology, developed by Dr. Y. K. Suneetha (PI), Professor, and Mrs. Shabnam Siddiqui (Co-PI), Assistant Professor, Department of Chemical Engineering, was transferred to M/s. Stoicheiodis Scientia. The research was successfully conducted through a collaboration between CMTI and BMSCE. This TOT showcases the commercial potential of the technology and its practical applications in AFFM.



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December 13, 2024: Dr. Chetan A Nayak, Professor & HoD Chemical Engineering Department and Dr. Shivakumar R, Associate Professor placement officer of Chemical Engineering Department, visited Utthunga Technologies, Bangalore, to discuss the industry institute collaboration regarding internship for pre-final year students and recruitment of final year students as graduate trainees for their organisation.



December 14, 2024: Dr. Sreelakshmi Diddi and Hari Prasad Uppara, Associate Professor and Assistant Professor in the Department of Chemical Engineering, attended a one-week faculty development program on “Python for Chemical Engineers” organized by GVP College of Engineering (Autonomous), Visakhapatnam, Andhra Pradesh.



December 17, 2024: Dr. C T Puttaswamy, Professor in the Department of Chemical



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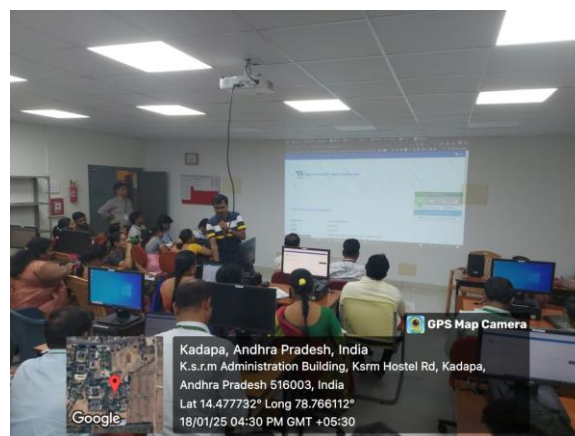
Engineering, invited the industry Fluidyn Consultancy Pvt. Ltd. to give a pre-placement talk for final-year students. The industrial expert, Mr. Sreejith, visited the department and presented the organization and the package details to the students.



December 26, 2024: Dr. Hari Prasad Uppara, Dr. Shiva Kumar R, along with final year UG students of the Chemical Engineering Department, published an article titled “A ternary MOF-based Ce–Ni–Cu oxide for energy storage applications: structural, optical, and impedance studies” in Journal of Materials Science: Materials in Electronics, 36, 55 (2025). (WOS indexed, Q2).
<https://doi.org/10.1007/s10854-024-14114-x>

January 2025

January 18, 2025: Dr. Sainath K, Assistant Professor in Department of Chemical Engineering, served as a resource person for 3-day Faculty Development Program on OBE and Teaching & Learning Practices, held during 17th to 18th January 2025, at KSRMCE, Kadapa, AP.



January 22, 2025: Dr. Sainath K, Assistant Professor in the Chemical Engineering Department has participated & completed successfully one day offline FDP on “Outcome Based Education” organized by B.M.S. College of Engineering Bengaluru.



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January 22, 2025: Dr. Sanjay Kumar, Assistant Professor in the Chemical Engineering Department has participated & completed successfully one day offline FDP on “*Best Practices in Teaching*” organized by B.M.S. College of Engineering Bengaluru.



January 22-25, 2025: Dr. Sanjay Kumar, Assistant Professor in the Chemical Engineering Department has participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on “*AI-driven Innovations: Transforming Core Engineering Disciplines*”

from 20/01/2025 to 25/01/2025 organized by Sri Sivasubramaniya Nadar College of Engineering.



January 24, 2025: Dr. Y K Suneetha, Professor in the Department of Chemical Engineering, BMSCE, participated in international machine tool and manufacturing technology exhibition, IMTEX 2025, and exhibited synthesized precision making media as one of the successful academia, collaborator with CMTI, held during 23rd to 29th January 2025.





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January 31, 2025: Dr. Chetan A Nayak, Professor and HOD in the department of Chemical Engineering participated in One week Online Faculty Development Programme (FDP) "An Initiation to Meditation" organized by Department of Computer Science and Engineering, BMSCE in collaboration with Prajapita Brahma Kumaris Ishwariya Vishwa Vidyalaya, Bangalore from 27th Jan-31st Jan 2025.



February 2025

February 1, 2025: Dr. Sainath K, Assistant Professor in the Department of Chemical Engineering, completed the three-credit course "English for Research Paper Writing" offered by NITTTR Chennai in Swayam from July to December 2024 with a

consolidated score of 94%.



February 1, 2025: Dr. Shivakumar R, Associate Professor in the Department of Chemical Engineering, is awarded a certificate for completing the *IUCEE International Engineering Educator Certification Program* (Fall 2024). The course lasted six months and mainly focused on enabling the participants to understand the principles of learner-centered teaching. The participants were also required to design or redesign a course and its elements, emphasizing learning outcomes, develop different teaching and active learning strategies for implementing these elements, and finally, design formative and summative assessment tools and rubrics for outcomes assessment.



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Faculty in the Department of Chemical Engineering, along with final year UG students (2019-2023 batch) published an article titled “*Fabrication of MOF-derived Ce–Cu nanofibers for ameliorating photocatalytic properties*” in Journal of Porous Materials, 1-8, (2025), WOS indexed, Q2. <https://doi.org/10.1007/s10934-025-01763-4>

February 1, 2025: Dr. Sanjay Kumar, Assistant Professor in the Chemical Engineering Department, participated & completed AICTE Training and Learning (ATAL) Academy Online Elementary FDP on “*Theoretical and Experimental Approaches on Materials*” from 27/01/2025 to 01/02/2025 organized by Anna University Regional Campus Tirunelveli.

February 8, 2025: Dr. Sanjay Kumar, Assistant Professor in the Chemical Engineering Department, participated & completed AICTE Training and Learning (ATAL) Academy Online Elementary FDP on “*Nanomaterial and Energy Storage-Sustainable Future*” from 03/02/2025 to 08/02/2025 organized by K.S. School of Engineering and Management.



February 8, 2025: Dr. Hari Prasad Uppara, Dr. Sanjay Kumar, and Dr. C T Puttaswamy,



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March 2025

March 1, 2025: The start-up Stoicheiodis Scientia Private Limited founded (8th September 2024) by Dr. Y. K. Suneetha, Professor in the Department of Chemical Engineering, is successfully incubated virtually at Catalyst for Women Entrepreneurs (CWE), Bengaluru.

**WELCOMING OUR CWE
PLATINUM MEMBER**

Suneetha YK

FOUNDER,

Stoicheiodis Scientia is a chemical engineering startup focused on superfinishing and healthcare. The product is engineered for precision surface finishing, ensuring superior material removal and polishing. Additionally, it is marketed as therapeutic putty, offering hand therapy benefits through controlled resistance and flexibility for rehabilitation exercises.

*We wish her dynamic growth of her business on CWE platform!
We wish her dynamic growth of her business on CWE platform!
We wish her dynamic growth of her business on CWE platform!*

CWE
FOR WOMEN
ENTREPRENEURSHIP

March 1, 2025: Piyush Kumar, 8th-semester student of Department of Chemical

Engineering presented a paper titled “Synthesis of Dust Suppressants using Lignin from industrial waste” in a 1st National conference on Climate Resilience and Environmentally sustainable Technologies (NITK-CREST 2025) during 27th February to 1st March. The Co-authors are Dr. Sreelakshmi Diddi, Associate Professor in the Department of Chemical Engineering, and three students of 8th-semester: Mayura Shetty, Khushi Singh, and P Mohammed Rafi.



March 6, 2025: Dr. Chetan A Nayak, Professor & HoD in the Department of Chemical Engineering was deputed to Faculty Development Program on “*The Resilient Educator: Adapting to challenges in educating New Age Engineers*” held on 6th



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7th March 2025 organized by Vision
Karnataka Foundation, Bengaluru.



March 9, 2025: Dr. Y. K. Suneetha, Professor in the Chemical Engineering Department, founder director of start-up Stoicheiodis Scientia Private Limited, has successfully incubated at Bangalore Bioinnovation Centre (BCC) as one of the first cohort winners of “WEscalate Program 2024-25”, and the most inspiring Women-Led Start-ups of 2024-25.



March 13, 2025: The final presentations for the project works carried out by students of University of Washington, Seattle under different NGOs for the Event "Grand Challenges Impact Lab 2025", was held on 13th March 2025 at B.M.S. College of Engineering, Bengaluru. The presentations were evaluated by the faculty members and the associated NGO at BMSCE. This program is in collaboration with the University of Washington, Seattle. Dr. Samita Maitra, Professor, Department of Chemical Engineering, BMSCE is the institutional Coordinator from BMSCE and



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Prof. Julian Marshall – Professor, University of Washington, Seattle is the institutional Coordinator from University of Washington, Seattle. Dr. Chetan Nayak – Professor and Head, Department of Chemical Engineering, BMSCE, Dr. Shivakumar R - Associate Professor, Department of Chemical Engineering, BMSCE, and Dr. Chethana R. - Assistant Professor, Department of Civil Engineering, BMSCE are the other program coordinators who are instrumental completing the program from 3rd January 2025 to 13th March 2025.



March 13, 2025: Dr. Sanjay Kumar, Assistant Professor in the Department of Chemical Engineering participated in 2 days international seminar on “Indian Knowledge Systems” from 12/03/2025 to 13/03/2025 organized by B.M.S. College for Women.



March 14, 2025: Dr. Chetan A Nayak, Professor and HOD of in the Department of Chemical Engineering received a fund of Rs. 6500 from KSCST under Student Project Programme - 48th Series for the topic “Development of a Novel Membrane process to concentrate pomegranate juice” for 8th semester project- students are Keerthana Nagesh (1BM21CH017) and Gunashree B M (1BM21CH011).

March 14, 2025: Mrs. Shabnam Siddiqui, Assistant Professor in the Department of Chemical Engineering received a fund of Rs. 6000 from KSCST under Student Project Programme - 48th Series for the topic “3D printed PLA Filters reinforced with HAP and CS for flouride removal” for 8th semester project: students are Seema N Poojary (1BM21CH037), Vaishnavi K



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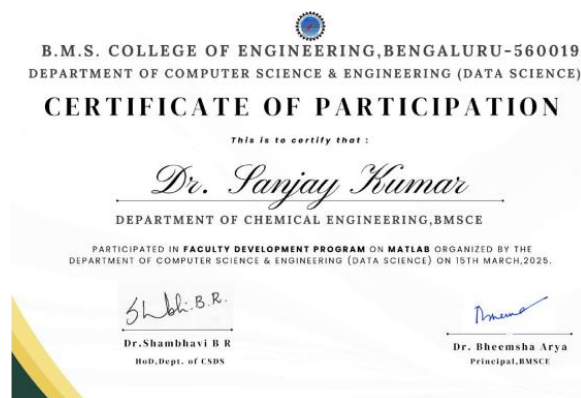
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(1BM21CH044) Soham Sidhantha
(1BM21CH038), and Bala Murugan
(1BM21CH005).

March 15, 2025: Dr. Sanjay Kumar, Assistant Professor in the Department of Chemical Engineering participated in FDP on “Matlab” from 15/03/2025 to 15/03/2025 organized by BMSCE.



March 22, 2025: Shaun Len Dsouza, 4th semester student of Chemical Engineering department presented a paper titled “A Review on Nano-Bubble Technology for Wastewater Purification” in the 2nd international conference on sustainable water, organized by KPR Institute of Engineering and Technology, Coimbatore, on 21.03.2025 and 22.03.2025. The co-authors are Dr. G. N. Rameshaiah, Professor

in the Department of Chemical Engineering, Aboobaker Ansaf, R Amirtha, and Smeethal Santhosh- 4th semester students of Chemical Engineering department.



March 24, 2025: Dr. Sreelakshmi Diddi, Faculty In-charge, ChemE Connect Club, Associate Professor in the Department of Chemical Engineering, arranged an engaging session of 'Product Showcasing' by Zysk Technologies at the Department of Chemical Engineering at 3 pm on 24th March 2025. The speakers were Aashish Nagaraj, an alumnus of the department, Vilas and Puneeth. The session featured a detailed product showcase of TestMySkills.AI, a platform developed by Zysk to assess and self-enhance skills. The speakers explained its functionality, real-world applications, and how it helps



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individuals evaluate their expertise in various domains and make themselves employable.

<https://doi.org/10.1016/j.clay.2025.107791>

April 2025



Department of Chemical Engineering
ChemE Connect
Presents
“Testmyskill.ai”
by
Zysk Technologies
Speakers: Aashish Nagaraj and Vilas
ZYSK TECHNOLOGIES
YOUR GAIN IS OUR GAIN
Date: 24 March 2025
Time: 3:00 pm
Venue: Ch-3002

April 05, 2025: Stoicheiodis Scientia Private Limited, a start-up founded by Dr. Y. K. Suneetha Professor in the Chemical Engineering Department exhibited its products in the Start-up Mahakumbh-2025, with the tag “*Bharath Innovates*”. This was the biggest and the first Asian exhibition organised with the theme Bharath@2047: Unfolding the Bharath Story at Mandapam, New Delhi during 3rd to 5th April 2025.

April 07, 2025: Dr. Sainath K, Assistant Professor in the Department of Chemical Engineering, was invited to give a guest lecture on “*The Art of the Conference Paper: Writing with Impact*” by Dr. M. S. Suma, Professor in the Department of Medical Electronics, BMSCE, for the benefit of 4th and 6th semester students.

March 27, 2025: Mrs. Shabnam Siddiqui, Assistant Professor and Dr.Y K Suneetha, Professor, Department of Chemical Engineering published a research paper titled, “*Rheological behaviour and printability optimization of geopolymer ink for direct ink writing*” in the Q1 Journal, ‘Applied Clay Science’ with Impact factor 5.3.



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April 08, 2025: The IICHe-BMSCE Student Chapter, conducted a two-day workshop titled “AI Tool Integration to Automate Research in Academics” on the 7th and 8th of April 2025. Dr. G. N. Rameshaiah, Professor, Department of Chemical Engineering, Faculty in-charge of the Chapter was the organizer.



April 14, 2025: Seema N Poojary (8th semester), Vaishnavi K (8th semester), K R Yadava Priyan (4th semester) and I

Mohammed Farhan (4th semester) students of Chemical Engineering Department won the 1st prize for the project titled “3D printed PLA filters reinforced with HAp and CS for flouride removal” in the Smart Materials and Additive Manufacturing category; 9th National Level Techno-Exhibition held on 13th and 14th April, 2025 organized by Dr. Ambedkar Institute of Technology, Bengaluru. The work was carried under the guidance of prof. Shabnam Siddiqui, Assistant Professor, Department of Chemical Engineering, BMSCE. The team is bestowed with a cash prize of INR 25,000.



April 15, 2025: AICHE Student Chapter organized an event “CHEMBINGO” on 15th April 2025 during 2 pm to 4 pm. Dr. Samita Maitra, Professor, Department of Chemical



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Engineering, Faculty in-charge of the Chapter was the organizer.



April 17, 2025: Rakshitha K M and Reethya Giridhar, 8th semester students of Chemical Engineering, under the guidance of Dr. Sainath K, Assistant Professor in the Department to Chemical Engineering, presented their research work titled “Amine Modified ZIF-8 for Enhanced Chromium Removal from Wastewater through Central Composite Design (CCD)” and “Enhanced Hexavalent Chromium Removal Using Modified Banana-based Hydrochar: A CCD-Based Optimization Study” in the Syntropy 2025, a tech fest organized by MIT-WPU, Pune, India. The team is bestowed with 2nd best paper award.

April 19, 2025: The Department of Chemical Engineering organized an expert lecture on

“Introduction to Oil and Gas Industry: Role of Chemical Engineers” on 19th April 2025.

The talk was delivered by Sri. Manjunath Rao, Director – Process Engineering at Utthunga, Bengaluru, and a former professional at FODE, Mott MacDonald, and WorleyParsons. The lecture provided students with an insightful overview of how the oil and gas industry functions across its upstream, midstream, and downstream sectors. Mr. Rao elaborated on the essential contributions of chemical engineers in areas like plant design, safety, operations, and optimization. A special focus was given to the importance of simulation tools in the oil and gas sector, with real-world examples of how simulation enhances operational efficiency and process safety. The session witnessed enthusiastic participation from 41 students, and concluded with an interactive Q&A. The event was coordinated by Dr. Sreelakshmi Diddi, under the guidance of Dr. Chetan A Nayak, HOD.

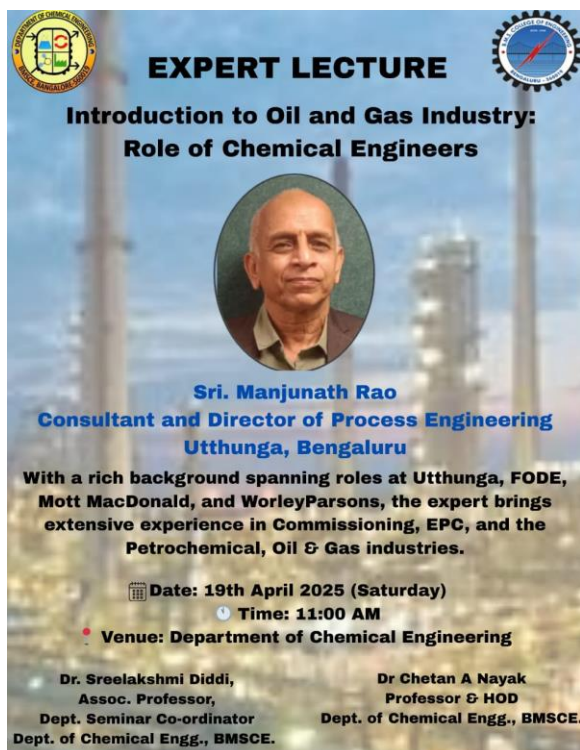


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Department of Chemical Engineering

Activities from June 2024 to May 2025



EXPERT LECTURE
**Introduction to Oil and Gas Industry:
Role of Chemical Engineers**

Sri. Manjunath Rao
**Consultant and Director of Process Engineering
Utthunga, Bengaluru**

With a rich background spanning roles at Utthunga, FODE, Mott MacDonald, and WorleyParsons, the expert brings extensive experience in Commissioning, EPC, and the Petrochemical, Oil & Gas industries.

Date: 19th April 2025 (Saturday)
Time: 11:00 AM
Venue: Department of Chemical Engineering

Dr. Sreelakshmi Diddi,
Assoc. Professor,
Dept. Seminar Co-ordinator
Dept. of Chemical Engg., BMSCE.

Dr. Chetan A Nayak
Professor & HOD
Dept. of Chemical Engg., BMSCE.

April 22, 2025: Sushmitha Acharya, A V Samanvitha Bhat, 6th semester Chemical Engineering Students presented their research article titled “*Machine Learning Models for Prediction of Thermal Performance of Heat Pipes: A Different Approach*” at 1st International Conference on Technological Innovations in Chemical Engineering Towards Sustainability, organized by Sri Venkateswara College of Engineering, Tamil Nadu, under the guidance of Dr. Sainath K and Prof. Shabnam Siddiqui,

Assistant Professors in the Department of Chemical Engineering. The team is bestowed with 2nd best paper presentation award and the paper has been published in the form of a book with ISBN: 978-93-49566-57-6, Bharti Publications.

May 2025

May 02, 2025: The CHEM-E-KALAKAR club of Chemical Engineering Department conducted an event “The Challengers” a dynamic and engaging event curated by the newly formed core committee under the guidance of Faculty Coordinator Prof. Shabnam Siddiqui, Assistant Professor in the Department of Chemical Engineering.



May 03, 2025: Dr. Y. K. Suneetha, Professor in the Department of Chemical Engineering attended a program at Bangalore Bioinnovation Centre organized by BBC



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jointly with LA TROBE University, Australia. Dr. Suneetha presented her startup products and application as a part of it. The AUS-IND Connect Program was conducted with an objective of exposure to opportunities in Australia to the startups incubated at BBC with the incubator-Founders and Funders at LA TROBE University incubation centre.



of a strong foundation in the concepts of undergraduate chemical engineering and their application in the industry.



May 06, 2025: Dr. Shivakumar R, Associate Professor in the Department of Chemical Engineering, attended an FDP program titled “*Statistical Analysis with Excel*” from 1st to 6th May 2025, organized by research foundation of India.

May 05, 2025: Department of Chemical Engineering arranged a Guest Lecture by Dr. Hemanth, LR., Manager R&D, Samco Inc, Kyoto, Japan, on “*Emerging Materials in Semiconductor Industry*” for chemical engineering students. Dr Hemanth highlighted the role of chemical engineers in the semiconductor industry. The importance





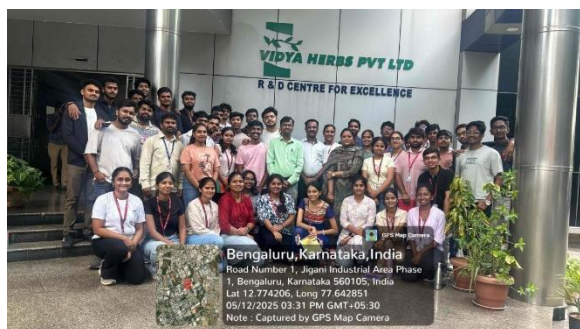
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May 12, 2025: Dr. Sainath K and Prof. Shabnam Siddiqui, Assistant Professors in the Department of Chemical Engineering, organized industrial visit to M/s. Vidya Herbs in Jigani Industrial Area, Bengaluru, for the benefit of 6th and 8th semester Chemical Engineering students. Around 41 students were part of this industrial visit and Mr. Narayan Rao, Instructure of the Department was also in the team.



May 15, 2025: Dr. Y K Suneetha, Professor in the Department of Chemical Engineering and Founder Stoicheiodis Scientia Private Limited, delivered a talk on “Startup to Make in India”, a journey from teaching to entrepreneurship, at Auditorium 2, BMSCE, during innovation week held during May15-20, 2025 by Institute Innovation Council, BMSCE.



May 19, 2025: Board of Studies (BoS) meeting for Chemical Engineering & Biotechnology cluster was conducted. Dr. Chetan A Nayak, Chairman BOS, and Dr. Saisha Vinjamuri, Convener BOS, along with the members Dr. Vidya Shetty K, Expert Member, VTU Nominee; Dr. Ranganath D., External member-CH; Dr. Nagendra H.G., External member-BT, Dr. Samita Maitra, Dr. Savithri Bhat, Mr. Ashok Kumar S, Dr. Shivakumar R, Dr. Sainath K, and Mr. Pradeep S were present.





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May 17, 2025: Rakshitha K M, Reethya Giridhar, 8th semester students of the Department of Chemical Engineering, under the guidance of Dr. Sainath K, Associate Professor in the Department of Chemical Engineering, presented their final year research project work titled “*Comparative Study of Modified Hydrochar for Hexavalent Chromium Removal Using CCD and ANN Modelling*” in the conference INSIGNIA-25 organized by Shri Dharmasthala Manjunatheshwara College of Engineering and Technology, Dhavalagiri, Dharwad, Karnataka, and won 1st prize with a cash prize of Rs. 1500.



May 21, 2025: Department of Chemical Engineering conducted “Open Day” for the exhibition of the projects conducted by 8th semester students (2025 batch) of the department.



May 23, 2025: A bootcamp on Rotating Machinery – Compressors developed by M/s. Modelicon Bengaluru as part of the



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SamridDHI Skill-building Initiative of Ministry of Heavy Industries, under mentorship of Indian Institute of Science (IISc), Bengaluru was held under the direction of Head of the Department, Chemical Engineering – Dr. Chetan A Nayak, and Dr. Sree Lakshmi Diddi, Coordinator on 23 & 24 May 2025. This boot camp had the following aspects: Concept videos, Hands-on tutorials, 3D interactive models, Virtual Reality (VR) and Assessments & certifications. The session commenced with a series of lectures of explaining the fundamentals of rotating machines and everything from basic unit systems to rotor dynamics and diagnostics.



Professor in the Department of Chemical Engineering attended the distinguished lecture titled “Easy and Lazy Technical Writing: Solid Logic to Invoke an Aha-Experience” delivered by Prof. Akihiko K. Sugiyama (Ken), organized by the IEEE Signal Processing Society Bangalore Chapter at B.M.S. College of Engineering, Bengaluru.



May 26, 2025: Dr. Sainath K, Associate Professor, Mrs. Shabnam Siddiqui, Assistant Professor, Department of Chemical Engineering, cleared the exams of all eight module courses offered by NITTT, under AICTE.

May 26, 2025: Dr. Sainath K, Associate



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May 26, 2025: Dr. G. N. Rameshaiah, Professor in the Department of Chemical Engineering, attended 10 days faculty development program on “*AI Innovations in Computer Vision and Medical Imaging: Emerging Trends and Research Perspectives*”, organized by Department of ECE, National Institute of Technology (NIT) Raipur, Chhattisgarh - 492010, sponsored by Ministry of Electronics and Information Technology, Govt. of India, during 15th to 26th May 2025.

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