

Curriculum Vitae

Dr. Sainath K

Associate Professor

Department of Chemical Engineering
B.M.S. College of Engineering
PO No. 1908, Bull Temple Road
Bengaluru 560019

Email: Sainath.che@bmsce.ac.in
Sainath.ban@gmail.com

Google Scholar ID:

https://scholar.google.co.in/citations?user=Uq_pWLsAAAAJ&hl=en

Researcher ID: 0-8103-2015

orcid.org/0000-0003-3910-9401

Scopus ID: 55929338400

Vidwan-ID : 113938



Education

Name of the Course	University/Institute	Year of Passing	Percentage of Marks/CPI	Remarks
Ph.D.	IIT Bombay, Mumbai	2021	8.25	FCD
M. Tech.	IIT Guwahati, Assam	2013	9.37	FCD
B. E. (Chemical Engineering)	VTU, B. M. S. College of Engineering, Bengaluru	2010	81	FCD
Diploma (Chemical Engineering)	Sri Jayachamarajendra Polytechnic	2004	71	FCD

Work Experience

☼ Working as Assistant Professor in the Department of Chemical Engineering, B.M.S. College of Engineering since September 2010.

☼ Worked with SAB Miller India, SKOL Breweries, Unit: Charminar Breweries, Shivampet (then India's biggest brewery), Sangareddy, Hyderabad from February 2005 to August 2007

- Worked in all the units including brewing, fermentation and filtration
- In-charge of entire process section

Research Publications in National/International Journals

Sl. No.	Authors	Title of the Paper	Journal Details
1.	Animesh Jana, A Vijayalakshmi, Suganesh Raghunathan, Aishwarya Shankar, Krishnamurthy Sainath, Akshay Modi	Does the rate of metal salt precursor addition during ZIF-8 nanoparticles preparation affect their morphology? Application in dye adsorption	Colloids and Surfaces C: Environmental Aspects Volume 2, 1 November 2024, 100030 https://doi.org/10.1016/j.colsuc.2024.100030 Online ISSN: 2949-7590
2.	Prakyath Prakash Thalya, Sumana Sinha, Krishnamurthy Sainath, Shabnam Siddiqui	Computational intelligence modelling of methylene blue adsorption by metal-organic frameworks	Indian Chemical Engineer, 22 July 2024, 349-365 https://doi.org/10.1080/00194506.2024.2370861 Volume 66, Issue 4 Print ISSN: 0019-4506 Online ISSN: 0975-007X
3.	Preety Kumari, Krishnamurthy Sainath, Snehasis Biswas, Jayesh Bellare	Risk mitigation to healthcare workers against viral and bacterial bioaerosol load in laparoscopic surgical exhaust with a new flow mode in hollow fiber membranes-based filter	Journal of Hazardous Materials Volume 461, 5, January 2024, Article number 132517 https://doi.org/10.1016/j.jhazmat.2023.132517 Print ISSN: 0304-3894 Online ISSN: 1873-3336 Web of Science and Scopus Indexed Impact Factor: 13.6
4.	Shabnam Siddiqui, Srinath Surananai, Krishnamurthy Sainath, Mohammed Zubair Khan, Raghu Raja Pandiyan, Kuppusamy, Yalachigere Kempaiah Suneetha	Emerging Trends in the Development and Application of 3D Printed Nanocomposite Polymers for Sustainable Environmental Solutions	European Polymer Journal, Volume 196, 11 September 2023, Article number 112298 https://doi.org/10.1016/j.eurpolymj.2023.112298 ISSN: 0014-3057 Online ISSN: 1873-1945 Web of Science and Scopus Indexed Impact Factor: 6.0

5.	Krishnamurthy Sainath, Akshay Modi	Graphene Oxide and Its Derivatives as Additives in Polymeric Membranes for Water Treatment Applications	Book Chapter in Graphene and its Derivatives (Volume 2), pp 129–149, 24 August 2023 https://doi.org/10.1007/978-981-99-4382-1_6 Print ISBN: 978-981-99-4381-4 Online ISBN: 978-981-99-4382-1 Publisher Name: Springer, Singapore
6.	Namratha M, Selva Kumar S, Krishnamurthy Sainath	Enhancement of Program Outcomes for Cryptography and Network Security course using Alternate Assessment Tool: An Approach towards outcome-based education	Journal of Engineering Education Transformations (JEET), Volume 36, Issue 4, Pages 113-119, April 2023 https://doi.org/10.16920/jeet/2023/v36i4/23121 Issue with Print, ISSN: 2349 – 2473 ISSN: 2394-1707 Scopus Indexed
7.	Krishnamurthy Sainath, Preety Kumari, and Jayesh Bellare	Zeolitic imidazolate framework-8 nanoparticles coated composite hollow fiber membranes for CO ₂ /CH ₄ separation	Journal of Environmental Chemical Engineering Volume 9, Issue 5, October 2021, Article number 106052 https://doi.org/10.1016/j.jece.2021.106052 ISSN: 2213-3437 Web of Science and Scopus Indexed
8.	Krishnamurthy Sainath, Akshay Modi, and Jayesh Bellare	CO ₂ /CH ₄ mixed gas separation using graphene oxide nanosheets embedded hollow fiber membranes: Evaluating effect of filler concentration on performance	Chemical Engineering Journal Advances Volume 5, 15 March 2021, Article number 100074 https://doi.org/10.1016/j.ceja.2020.100074 ISSN: 2666-8211 Scopus Indexed
9.	Krishnamurthy Sainath, Akshay Modi, and Jayesh Bellare	In-situ growth of zeolitic imidazolate framework-67 nanoparticles on polysulfone/graphene oxide hollow fiber membranes enhance CO ₂ /CH ₄ separation	Journal of Membrane Science Volume 614, Issue C, Article number 118506 15 November 2020 https://doi.org/10.1016/j.memsci.2020.118506 ISSN: 0376-7388 Web of Science and Scopus Indexed
10.	Krishnamurthy Sainath and Pallab Ghosh	Stabilization of Silicone Oil-in-Water Emulsions by Ionic Surfactant and Electrolytes: The Role of Adsorption and Electric Charge at the Interface	Industrial and Engineering Chemistry Research Volume 52, 15808–15816, October 18, 2013 https://doi.org/10.1021/ie401490c ISSN: 0888-5885 Web of Science and Scopus Indexed

11.	Shubham Singh, Soham Roy Chowdhury, Bindushree R P, Kinnera P, Krishnamurthy Sainath	Removal of CO ₂ using Aqueous Blends of Amines by Chemical Absorption Method: Modelling	Journal of Modern Chemistry & Chemical Technology, STM Journals, Vol 1, issue 1, 119 – 123, March 2014 https://doi.org/10.37591/jomcct.v5i1.1981 ISSN: 2229-6999
12.	Krishnamurthy Sainath and Pallab Ghosh	Electrical properties of silicone Oil-water interface in the presence of ionic surfactants and salt: Importance in the stability of oil-in-water emulsions	Chemical Engineering Communications Volume 201, Issue 12, 1645 – 1663, June 23, 2014 https://doi.org/10.1080/00986445.2013.823543 ISSN: 0098-6445 Web of Science and Scopus Indexed
13.	Shivakumar R, Usha H S, ChetanA Nayak, Krishnamurthy Sainath and Samita Maitra	Establishing Program Educational Objectives	Journal of Engineering Education Transformations (JEET), October 2015 Issue with Print, ISSN: 2349 - 2473, Online eISSN: 2394-1707, October 2015 https://doi.org/10.16920/jeet/2015/v29i2/83046 ISSN: 2394-1707 Scopus Indexed

Papers Presented in National/International Conferences

Sl. No.	Authors	Title of the Paper	Conference Details
1.	Rakshitha K M, Reethya Giridhar, and Krishnamurthy Sainath	Comparative Analysis of Pristine and Modified Banana Peel Hydrochar for Cr (VI) Adsorption: Insights from CCD and ANN Modeling	BioChESS-2025 held at the Department of Chemical Engineering, Siddaganga Institute of Technology, Tumakuru, on 14 th June 2025. (The team is bestowed with 1st prize with a cash prize of Rs. 3000)
2.	Rakshitha K M, Reethya Giridhar, and Krishnamurthy Sainath	Comparative Study of Modified Hydrochar for Hexavalent Chromium Removal Using CCD and ANN Modelling	INSIGNIA-25 organized by Shri Dharmasthala Manjunatheshwara College of Engineering and Technology, Dhavalagiri, Dharwad, Karnataka, on 17 th May 2025. (The team is bestowed with 1st

Sl. No.	Authors	Title of the Paper	Conference Details
			prize with a cash prize of Rs. 1500)
3.	Sushmitha Acharya, A V Samanvitha Bhat, Shabnam Siddiqui, and Krishnamurthy Sainath	Machine Learning Models for Prediction of Thermal Performance of Heat Pipes: A Different Approach	1 st International Conference on Technological Innovations in Chemical Engineering Towards Sustainability, organized by Sri Venkateswara College of Engineering, Tamil Nadu, on 22 nd April 2025. (The team is bestowed with 2nd best paper presentation award, with a cash prize of Rs. 400)
4.	Rakshitha K M, Reethya Giridhar, and Krishnamurthy Sainath	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	Syntropy 2025, a tech fest organized by MIT-WPU, Pune, India, on 17 th April 2025. (The team is bestowed with 2nd best paper presentation award, with a cash prize of \$150 USD)
5.	Bhoomika Chegu Vinay, Swathi M. Wadavi, Ojaswini A. Sastry, Malhaar Koparkar, and Krishnamurthy Sainath	Engineered Hydrochar for the Removal of Hexavalent Chromium: Synthesis, Characterization, and Performance Evaluation	Best Project Award at the institutional level 20223-24, 3 rd prize, held at BMSCE, Bengaluru, August 2024. (Received a cash prize of Rs. 10,000 to the team)
6.	Gunashree B M, Keerthana Nagesh, Rakshitha K M, Reethya Giridhar, and Krishnamurthy Sainath	Simulation of Supercritical CO ₂ -Brayton Cycle at a Natural Gas Compression Station	20 th edition of SCHEMCON – 2024, organized by Rajiv Gandhi Institute of Petroleum Technology (RGPT) at Jais, Uttar Pradesh, India, on 21 st September 2024
7.	Rakshitha K M, Reethya Giridhar, Krishnamurthy Sainath	Amine Modified ZIF-8 for Enhanced Chromium Removal from Wastewater	20 th edition of SCHEMCON – 2024, organized by Rajiv Gandhi Institute of Petroleum Technology (RGPT) at Jais, Uttar Pradesh, India, on 21 st

Sl. No.	Authors	Title of the Paper	Conference Details
			September 2024 (Received 1 st best paper presentation award with Rs. 2500/- cash prize and Late Lakshmi Nandakumar Award of the Institute for best presentation in SCHEMCON 2024)
8.	Bhoomika Chegu Vinay, Swathi M. Wadavi, Krishnamurthy Sainath	A Novel Green MOF for Cr(VI) Removal	National level student's technical symposium BioChESS 2023, organized by Departments of Biotechnology and Chemical Engineering, SIT, Tumakur, Karnataka, India, June 23 rd , 2023. (Received 1 st best paper presentation award with Rs. 2000/- cash prize)
9.	Parekh Aashi D, Munukutla Shruthi, Krishnamurthy Sainath	Methods of direct capture of CO ₂ from air: A mini-review	National Level Student Symposium, Chemovation 2022, organized by Dayananda Sagar College of Engineering, Department of Chemical Engineering, Bengaluru, Karnataka, India. (Received 2 nd best paper presentation award with Rs. 750/- cash prize)
10.	Wadavi M. Swathi, Vinay Chegu Bhoomika, Krishnamurthy Sainath	Synthesis and Characterization of Zeolitic Imidazolate Frameworks-8/Graphene Oxide Nanohybrids	5 th National Level Technical Symposium, ALCHEMIST-2022 (Data Science for Chemical Engineers), organized by Department of Chemical Engineering, KLE Technological University, Belagavi Campus, Karnataka, India, held on 3 rd June 2022 (Best paper presentation award of Rs. 2000)
11.	Shivakumar Jyothi, Ramesh G Rakshitha, Phaniraj Madhura, Suresh C Varshini, Krishnamurthy Sainath	Synthesis And Characterization Techniques of UiO-66	Recent Advances in Chemical Engineering towards Sustainable Future (RACES)-2022, organized by Department of Chemical Engineering, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, Gujarat, in association with ICT-IOC

Sl. No.	Authors	Title of the Paper	Conference Details
			Bhubaneswar IIT Kharagpur Extension Centre, Mouza-Samantpuri, Bhubaneswar-751013, Odisha, India, 17 th -18 th February 2022 (Best paper presentation award)
12.	Shamanthaka Aithal, Anirudh Anant Dambal, Krishnamurthy Sainath	Application of ZIF-8@GO: A mini review	Recent Advances in Chemical Engineering towards Sustainable Future (RACES)-2022, organized by Department of Chemical Engineering, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, Gujarat, in association with ICT-IOC Bhubaneswar IIT Kharagpur Extension Centre, Mouza-Samantpuri, Bhubaneswar-751013, Odisha, India, 17 th -18 th February 2022
13.	Parekh Aashi D, Munukutla Shruthi, Krishnamurthy Sainath	Review on direct capture of carbon dioxide from the atmosphere	Recent Advances in Chemical Engineering towards Sustainable Future (RACES)-2022, organized by Department of Chemical Engineering, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, Gujarat, in association with ICT-IOC Bhubaneswar IIT Kharagpur Extension Centre, Mouza-Samantpuri, Bhubaneswar-751013, Odisha, India, 17 th -18 th February 2022
14.	Raghunathan Suganesh, Aishwarya Shankar, Krishnamurthy Sainath	Green Synthesis of ZIF-8 Nanoparticles	Materials for Energy and Sustainability (MES-22), organized by SRMIST, Chennai, 20-21 st January 2022
15.	Smruti Venkatesh, Sakina Lokhandwalab, Krishnamurthy Sainath	Synthesis of Zeolitic Imidazolate Framework-67 Nanoparticles	Chemcon-2021, organised by IICHe Kolkata, 27-29 th December 2021 (Best poster presentation ward)
16.	Krishnamurthy Sainath, Akshay Modi, Jayesh Bellare	Graphene oxide nanosheets incorporated hollow fiber membranes	Research scholar symposium-2021, 20 th March 2021, Organised by Department of Chemical

Sl. No.	Authors	Title of the Paper	Conference Details
		enhance CO ₂ /CH ₄ separation	Engineering, IIT Bombay, Mumbai, India
17.	Krishnamurthy Sainath, Akshay Modi, Jayesh Bellare	Separation of CO ₂ from biogas using polysulfone/graphene oxide nanocomposite membranes	International conference: Indo Canadian Research Conclave on Sustainable Approaches to Carbon Capture Sequestration and Utilization (ICRC-CCSU), 12-13 th March 2021, organised by Department of Chemical Engineering, PDEU, Gujarat, India
18.	Krishnamurthy Sainath, Akshay Modi, Jayesh Bellare	A facile method of ZIF-67 synthesis on membranes for gas separation applications	Chemcon-2020, organised by IICChE Kolkata, 27-29 th December 2020 (Best paper presentation)
19.	Krishnamurthy Sainath, Akshay Modi, Surendra Kumar Verma, Jayesh Bellare	Novel in-situ grown ZIF-67 nanoparticles on polysulfone-graphene oxide hollow fiber mixed matrix membranes for efficient CO ₂ /CH ₄ separation	International Congress on Membranes & Membrane Processes 2020 (ICOM-2020), held during 7 th to 11 th December 2020, in virtual mode, London, UK
20.	Sameer Kalghatgi, Gayathri Nair, Sainath Krishnamurthy	Rotating Double Pipe Heat Exchanger	International Conference SPICE'18, on 6 th March 2018 in Adhiyamaan College of Engineering, Hosur, Tamil Nadu
21.	Mohammed Riyaz A M, Drishya Priya S, Sainath Krishnamurthy	Fluidized Bed Drying of Carrot and Beetroot Cubes	International Conference SPICE'18, on 6 th March 2018 in Adhiyamaan College of Engineering, Hosur, Tamil Nadu
22.	Junaid Rasheed Shaikh, Haritha Haridas, Rashmitha K Bloor, Stania D Peris and Krishnamurthy Sainath	Desalination of Sea-Water using Natural Adsorbents	National Conference ALCHEMIST-2017 on 1 st March 2017 in KLE College of Engineering and Technology, Belagavi
23.	Junaid Rasheed Shaikh, Haritha Haridas, Rashmitha K Bloor, Stania D Peris and Krishnamurthy Sainath	Identification of Potential Adsorbents for removal of ions in Sea water	National Conference, Chemovation 17, 6 th April 2017 in DSCE, Bengaluru
24.	Akash M B Kaushal, Vindhya K Masthi,	Extraction of Semi-Conductor Grade Silica	National Conference "Chemexcel 2016" on 21 st October 2016 in

Sl. No.	Authors	Title of the Paper	Conference Details
	Krishnamurthy Sainath	from Rice Husk Ash	Bapuji Institute of Engineering and Technology, Davanagere
25.	Mohamme Riyaz A M, Pavan P Nayak, Samita Maitra and Krishnamurthy Sainath,	Usage of Concentrating Solar Power to make Solar Water Desalination more Efficient	National Conference on Recent advances in Chemical, Biochemical and Environmental Engineering (RACBEE 2016) on 1 st October 2016 in SDM College of Engineering and Technology, Dharwad
26.	Mutthu Annamalai, Arul Ashok, Krishnamurthy Sainath	Modification of Polymers using Starch and its Applications	National Conference on Recent advances in Chemical, Biochemical and Environmental Engineering (RACBEE 2016) on 1 st October 2016 in SDM College of Engineering and Technology, Dharwad
27.	Aheli Sengupta, Halak Mehta, Jason Dsilva, Krishnamurthy Sainath	Biodegradation of Anionic and Cationic Surfactants: Review	National Conference on Recent Innovations in Process Engineering and Sustainability (RIPEs 2016), April 22 nd – 23 rd 2016, KLE Belgaum
28.	Shubham Singh, Soham Roy Chowdhury, Bindushree R P, Kinnera P and Krishnamurthy Sainath	Removal of CO ₂ Using Aqueous Blends of Amines by Chemical Absorption Method: Modeling	International conference on Green and Clean technologies in Chemical Engineering and Biotechnology, February 14-15 2014, SIT, Tumakuru, Karnataka
29.	Krishnamurthy Sainath, Pallab Ghosh	Zeta Potential of Silicone Oil–Water Interface in Presence of a Cationic Surfactant: The Effect of Salts	National Conference, Reflux 1.0, April, 6-7, 2013, IIT Guwahati, Assam (Best poster presentation)
30.	Krishnamurthy Sainath, Pallab Ghosh	Electrical Properties of Silicone Oil–Water Interface in Presence of Ionic Surfactants and Salt: Importance in The Stability of Oil-In-Water Emulsions	National Conference, Reflux 1.0, April, 6-7, 2013, IIT Guwahati, Assam (Best paper presentation)

List of Conference/Seminars/Webinars/Workshops attended

Sl. No.	Name of the Conference/Seminar/Workshop	Date	Place/Venue/Organizer
1	One Week FDP on Latest Trends in Additive Manufacturing	29 th Jan. to 2 nd February 2024	Department of Mechanical Engineering, BMSCE, Bengaluru
2	Inculcating Universal Human Values in Technical Education	25 th to 29 th September 2023	AICTE, New Delhi
3	VGST Sponsored Recent Trends in Polymer Processing, Product Design and Applied Rheology	9 th to 12 th August 2023	Department of Polymer Science and Technology, JSSSTU, Mysore
4	IUCEE Engineering Education Research Course	Oct. 2022 to July 2023	IUCEE, online
5	One-week Faculty Development Program on Polymer Composites for Engineering Applications” (PCEA-2023)	22 nd to 26 th May 2023	Department of Chemistry BMSCE, Bengaluru
6	Recent Trends in Power Electronics Applications to Renewable Energy, Smart Grids and Electric Vehicles	27 th to 31 st March 2023	Department of Electrical and Electronics Engineering, BMSCE, in collaboration with EEE Association, Bengaluru
7	Stadler Seminar Series: 2022 Edition	20 th September 2022	Centre for Advanced Research and Development (CARD), Christ University, Bengaluru
8	SWOC	9 th July 2022	Department of Management Studies and Research Centre, BMSCE, Bengaluru
9	Research Methodology – Tools and Techniques	25 th to 29 th April 2022	Department of Humanities & Sciences, Geetanjali Institute of Technical Studies, Udaipur
10	AICTE Training and Learning (ATAL) Academy, Advanced Experimental and Simulation Research Trends in Chemical Engineering	07 th to 11 th January 2022	NIT Hamirpur, Himachal Pradesh
11	AICTE-VTU joint training program on “An overview of teaching techniques in Innovation and Design thinking”	27 th to 31 st December 2021	VTU-HRDC
12	AICTE Training and Learning (ATAL) Academy, Framework for Online Assessment	9 th to 13 th August 2021	NITTTR, Chennai

Sl. No.	Name of the Conference/Seminar/Workshop	Date	Place/Venue/Organizer
13	TEQIP-III sponsored National Level Webinar on Implementation of NEP	27 th February 2021	B.M.S. College of Engineering, Bengaluru
14	AICTE sponsored FDP on Laboratory and Workshop Learning Skills in Conducting Practical Classes (virtual)	15 th to 20 th February 2021	J.N.T.U.A. College of Engineering (Autonomous), ANANTHAPURAMU - 515002, Andhra Pradesh
15	Grant Writing under Chemical Sciences domain (virtual)	11 th December 2020	IISc, Bengaluru
16	AICTE Training And Learning (ATAL) Academy, Waste to Technology	23-27 November 2020	BMS College of Engineering, Bengaluru
17	Advanced Research Trends in Chemical Engineering (ARTCE – 2020)	28 Oct.-1 Nov 2020	NIT Hamirpur, Himachal Pradesh
18	AICTE Training And Learning (ATAL) Academy, Novel Materials	05 – 10 October 2020	Online mode Conducted by Pillai College of Engineering, Mumbai
19	Web of Science “Basic Series” Certificate ID: 7070895303	September 2020	Online mode
20	Recent Advances in Nanoparticle, Films and Membranes	10 – 14 August 2020	Online mode Conducted by SIT Tumakuru, Karnataka
21	AICTE Sponsored one-week Short term training programme (STTP) Computation Fluid Flow and Heat Transfer (Phase-I)	24 July to 29 July 2020	Online mode Conducted by Gayatri Vidya Parishad College of Engineering, Visakhapatnam, AP
22	Analytical techniques for determining elemental constituents	8-9 June 2020	Online mode Conducted by SIT Tumakuru, Karnataka
23	Advancements in Material Science	5 - 6 June 2020	Online mode conducted by Jeppiaar Institute of Technology, Sriperumbudur, Tamilnadu

Sl. No.	Name of the Conference/Seminar/Workshop	Date	Place/Venue/Organizer
24	Effective and Efficient Online Teaching in the Age of Corona, A Hands On Workshop	22 – 24 May 2020	IIT Bombay, Mumbai
25	Novel Correlative Techniques using NMR and Electron Microscopy – JEOL YOKOGUSHI	5 th December 2019	SAIF, IIT Bombay
26	Management Development Program on “Role of Digitalisation on New Businesses”	7 th and 8 th September 2017	BMSCE, Bengaluru
27	AICTE QIP STTP on Applications of Emulsions, foams, and colloidal dispersions	23 Jan to 28 Jan 2017	IIT Madras, Chennai
28	Applications of Process Simulators in Chemical and Biochemical Engineering (APSCBE – 2016)	30 May to 3 June 2016	NIT Warangal, Telangana
29	One Day Outreach Symposium	27-02-2016	IISc. Bengaluru
30	Training Programme on IPR for Faculty of Engineering	04-02-2016	BMSCE, Bengaluru
31	Research quality through quality publications: Why? How? When?	30-10-2015 and 18 November 2015	BMSCE, Bengaluru
32	Awareness workshop on Outcome based education and accreditation	21 st July 2015	BMSCE, Bengaluru
33	IUCEE workshop on “Integrating Projects and Design into Core Engineering Courses: Enhancing Learning and Preparing Professions”	20 th July 2015	BMSCE, Bengaluru
34	VTU – VGST Sponsored FDP on Recent Advances and Developments in Downstream Processing (RADDP)	16 – 19 th June 2015	Dayananda Sagar College of Engineering, Bengaluru
35	Sustainability and Social Innovation	29 th May 2015	BMSCE, Bengaluru
36	Intellectual Property Rights: Significance for Academia	23 th March 2015	BMSCE, Bengaluru
37	Modeling Using MS Office Excel	21 st to 25 th July 2014	BMSCE, Bengaluru
38	Classical Modeling Concepts and Hands on Training using UniSim Simulation Software	30 th June to 2 nd July 2014	BMSCE, Bengaluru
39	Classical control theory and design using Matlab/Simulink	May, 22-23, 2014	BMSCE, Bengaluru
40	Statistics for Experimentalists	March, 17-	IIT Madras, Chennai

Sl. No.	Name of the Conference/Seminar/Workshop	Date	Place/Venue/Organizer
41	TEQIP Innovation Meet	29, 2014 September, 25-26, 2013	ICT, Mumbai
42	Outcome Based Education- The Science of Being a Teacher	June,10-15, 2013	BMSCE, Bengaluru
43	Latex and Excel for Research-Hands on Sessions	August, 2-7, 2013	BMSCE, Bengaluru
44	Identification of Slow Learners and Performance Enhancement	August, 20 th 2013	BMSCE, Bengaluru
45	Industry-Academia Workshop: Recent Trends in Oil and Gas Production Technology	February, 4-8, 2013	Sivasagar, Assam
46	Advanced Nanomaterials -Process, Characterization and Applications	July, 6-12, 2011	NIT Kozhikode, Kerala

Membership in National/Internal Societies

1. Associate Member of the Institution of Engineers India (IEI), Kolkata, India (AM1578705)
2. Life Member of Indian Institute of Chemical Engineers, India (LM-35344)
3. Member of International Water Association (ID: 0003529)
4. Life Member of Indian Desalination Association (an affiliate of International Desalination Association) (LM-552)
5. Life Member of International Association of Engineers (LM-294688)

Achievements

1. Awarded best project (3rd position) for my students' project group in the college-level best project BMSCE for 2023-24.
2. Awarded the best project (1st position) under IChE Best Project Award for 2023-24 for my project students' group, held at MSRIT, Bengaluru.
3. Awarded best paper presentation at National Level Student Symposium, Chemovation 2022, organized by Dayananda Sagar College of Engineering, Department of Chemical Engineering, Bengaluru, Karnataka, India, with a Rs. 750 cash prize.

4. Awarded best paper presentation at 5th National Level Technical Symposium, ALCHEMIST-2022 (Data Science for Chemical Engineers), organized by the Department of Chemical Engineering, KLE Technological University, Belagavi Campus, Karnataka, India, held on 3rd June 2022, with Rs. 2000 cash prize
5. Awarded best paper presentation at Recent Advances in Chemical Engineering towards Sustainable Future (RACES)-2022, organized by Department of Chemical Engineering, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, Gujarat, in association with ICT-IOC Bhubaneswar IIT Kharagpur Extension Centre, Mouza-Samantpuri, Bhubaneswar, held on 17th 18th February 2022
6. Awarded best poster presentation at Chemcon-2021 in Nanomaterials section, organised by IChE Kolkata, on 27th December 2021.
7. Received 2nd prize with a cash money of Rs. 2000 in the quiz competition organized by AZeotropy 2021, Department of Chemical Engineering, IIT Bombay.
8. Awarded best paper presentation at Chemcon-2020 in Nanomaterials section, organised by IChE Kolkata, on 27th December 2020.
9. Received 1st prize (the best paper and poster presentation) in REFLUX 2013, IIT Guwahati, Assam.
10. Received 1st prize (the best paper and poster presentation) in REFLUX 2013, IIT Guwahati, Assam.
11. Qualified the Graduate Aptitude Test in Engineering, (GATE), 2011- Chemical Engineering.
12. Secured 7th VTU rank in Chemical Engineering for the batch 2006 – 2010, for all over Karnataka.

Competence

1. Languages: English, Hindi, and Kannada (read, write and speak); Telugu (read and speak); and Tamil (Speak)
2. Computer skills: Windows-XP/Vista/7/8/10, Expert in Microsoft Office- all versions, MATLAB-R2013a (basics), and Expert in Origin plotting software
3. Simulation software: UNISIM R410 and DWSIM (basics)

MOOCs Certification Courses

Sl. No.	Course	Date
---------	--------	------

Sl. No.	Course	Date
1.	IUCEE Felder Brent Effective Teaching and Learning course 2024-25	May 2024 to April 2025
2.	8 module courses offered by National Initiative for Technical Teachers Training	Oct 2024 to April 2025
3.	English for Research Paper Writing	July to Dec 2024
4.	Biostatistics and Design of Experiments	Jan to Mar 2024
5.	Unit Operations of Particulate Matter	Jan to Feb 2023
6.	Physical and Electrochemical Characterizations in Chemical Engineering	Jan to Mar 2022
7.	Nanotechnology and Nano-sensors, Part1	June 2020
8.	Nanotechnology: A Maker's Course	May 2020
9.	Introduction to Research	Jan to Feb 2016
10.	Introduction to Bioreactors	Mar to April 2016

Events/Workshops Organized

Sl. No.	Events Coordinated	Details
1.	Five-Day Workshop on Essentials of MS Office and Google Apps for Office Staff and Lab Instructors	9 th to 13 th September 2024, BMSCE, Bengaluru
2.	Two-Day Hands-on Workshop on MS Word, Excel, and PowerPoint: For Technical Papers, Thesis, and Documentation	22 nd to 23 rd September 2022, BMSCE, Bengaluru
3.	Proficiency training: MS Word and Excel for Report and Technical Paper Writing	13 th to 17 th September 2021, BMSCE, Bengaluru
4.	Three days Finishing School on "Documentation using MS Office and Latex"	17 th , 19 th and 20 th April 2018, BMSCE, Bengaluru
5.	Three days Faculty Development program on "Process Simulation using <i>UniSim</i> ® Design Software	15 th to 17 th March 2018, BMSCE, Bengaluru
6.	Best project competition under IChE BRC	17 th May 2014, BMSCE, Bengaluru

Guest lecture delivered/Resource Person

Sl. No.	Event/Topic	Details
1.	Invited as a Judge to evaluate the Oral presentations	BioChESS-2025 held at the Department of Chemical Engineering, Siddaganga Institute of Technology, Tumakuru, on 14 th June 2025
2.	Delivered a talk on the topic “ <i>The Art of the Conference Paper: Writing with Impact</i> ”	Department of Medical Electronics, BMSCE, for the benefit of 4 th and 6 th semester students, on 7 th April 2025
3.	Handled two sessions on “ <i>Tools for Evaluation and Rubrics for Evaluation</i> ”	OBE and Teaching & Learning Practices, held during 17 th to 18 th January 2025, at KSRMCE, Kadapa, AP
4.	A talk was delivered on the topic “ <i>Membranes for Gas Separation</i> ”	29 th May 2024, Training Course for Quality Improvement “ <i>Advances in Membrane Technologies & Applications for Oil & Gas Industry</i> ” organized by Centre of Excellence in Oil, Gas, and Energy (CoE-OGE), IIT Bombay
5.	A talk was delivered on the topic “Research Methodology and Techniques”	5 th May 2023, MCA department, BMSCE, Bengaluru
6.	Five-Days International Online FDP on “Novel & Sustainable Membrane Technology”- delivered a talk on Composite HFMs for effective CO ₂ and CH ₄ Gas Separation” on 20 th October 2022	17 th to 21 st October 2022, SIT, Tumakuru
7.	Two Days Hands-on Workshop on MS Word, Excel, and PowerPoint: For Technical Papers, Thesis, and Documentation	22 nd to 23 rd September 2022, BMSCE, Bengaluru
8.	Proficiency training: MS Word and Excel for Report and Technical Paper Writing	13 th to 17 th September 2021, BMSCE, Bengaluru
9.	Three days Finishing School on “Documentation using MS Office and Latex”	17 th , 19 th and 20 th April 2018, BMSCE, Bengaluru
10.	Three days Faculty Development program on “Process Simulation using UniSim® Design Software	15 th to 17 th March 2018 BMSCE, Bengaluru
11.	What is after Diploma in Chemical Engineering?	17 th March 2017, Sri Jayachamarajendra (Govt.) Polytechnic, Bengaluru

Funded projects

Sl. No.	Funding Agency	Co-PI	Year	Title of Project	Amount sanctioned
1.	Indian Institute of Chemical Engineers (IIChE) Bangalore Region	-	2024-25	Sustainable Adsorbent using Banana Waste to Produce Hydrochar for Efficient Hexavalent Chromium Removal from Wastewater: A Green Approach	Rs. 5000/-
2.	Indian Institute of Chemical Engineers (IIChE) Bangalore Region	Prof. Prathima B Assistant Professor Department of Civil Engineering B.M.S. College of Engineering, Bengaluru	2023-24	Low-cost adsorbent for Cr(VI) removal: Synthesis, characterization, and performance evaluation of leaf-based engineered hydrochar	Rs. 5000/-
3.	Karnataka State Council for Science and Technology (KSCST)	Prof. Prathima B Assistant Professor Department of Civil Engineering B.M.S. College of Engineering, Bengaluru	2023-24	Application of leaf biomass hydrochar as a sustainable method for immobilizing heavy metals in contaminated soils	Rs. 5,500/-
4.	Indian Water Works Association	Prof. Prathima B Assistant Professor Department of Civil Engineering B.M.S. College of Engineering,	2023-24	Experimental investigation on reactive nano-zero valent iron (nZVI) loaded biochar for removal of heavy metals from aqueous solutions	10,000/-

Sl. No.	Funding Agency	Co-PI	Year	Title of Project	Amount sanctioned
Bengaluru					
5.	Karnataka State Council for Science and Technology (KSCST)	Prof. Prathima B Assistant Professor Department of Civil Engineering B.M.S. College of Engineering, Bengaluru	2022-23	Immobilization of hexavalent chromium from contaminated agricultural soil using modified hydrochar	Rs. 6000/-
6.	Indian Institute of Chemical Engineers (IChE) Bangalore Region	-	2022-23	Removal of copper ions using composite cellulose acetate membranes	Rs. 5000/-

Courses Handled

1. Chemical Process Equipment Drawing	2. Material Science and Biomaterials	3. Chemical Technology
4. Mechanical Operations with Laboratory	5. Mass Transfer I with Laboratory	6. Chemical Equipment Design
7. Transport Phenomena	8. Applied Mathematics in Chemical Engineering	9. Numerical Techniques in Chemical Engineering
10. Interfacial Phenomena	11. Chemical Process Equipment Design and Drawing	12. Process Engineering Economics
13. Composite Materials	14. Novel Separation Technology	15. Pilot Plant and Scale-up Techniques
16. Chemical Reaction Engineering-I	17. Industrial Safety And Occupational Health	18. Advanced Separation Techniques
19. Analytical Instruments (Laboratory)	20. Fluid Mechanics (Laboratory)	

Projects Guided to Students

1. Banana Peel Based- Hydrochar and Modified Hydrochar for Hexavalent Chromium Removal: A Comparative Study Using CCD and ANN Modelling: Rakshitha K M, Reethya Giridhar, and Sachin Aravinda: [June 2025](#)
2. Engineered Hydrochar for Removal of Hexavalent Chromium: Synthesis, Characterization, and Performance Evaluation: Bhoomika Chegu Vinay, Malhaar Koparkar, Ojaswini A Sastry, and Swathi M. Wadavi: [June 2024 \[Awarded best project in IChE BRC and BMSCE\]](#)
3. Removal of Copper Using Composite Cellulose Membranes: Debankur Kumar Saha, Harshit Kumar Dinesh Pandit, Ishan Sinha, and Shubhi Tiwari: [July 2023](#)
4. Chitosan-Based Nanocomposite Films for Antimicrobial Food Packaging: Anirudh Reddivari, Rakshitha S, Suganesh R, and Nayan J: [July 2022](#)
5. Synthesis of ZIF-8@GO for Copper Ions Removal from Aqueous Solution: Shamanthaka Aithal, Varun K, and Syed Amaan Hussain Syed Barey: [July 2022](#)
6. Dye Wastewater Treatment Using Coagulation and Adsorption: Pavan Kumar S D, Prathiksha Doddamani, Hanumantha Raya T, Ranganatha B R: [May 2018](#)
7. Purification of Hard-Water using Bio-sorbents: Haritha Haridas, Junaid Rasheed Shaikh, Rashmitha K Bloor, Stania Deborah Peris: [May 2017](#)
8. Synthesis and Characterization of Alumina Particles: Roopashree M V, Swetha J, Tilakapriya Ganesh: [May 2016](#)
9. Thermodynamic analysis of fluidized bed drying of Vegetables: Anusha Rai, Nishmita, Shilpa, Thulasilatha: [May 2015](#)
10. Study of Rotating Double Pipe Heat Exchanger: Jayaprakash, Pradeep Poojary, Sandeep: [May 2015](#)
11. Thermodynamic analysis of fluidized bed drying of carrots and modelling studies: Nitesh Agarwal, Pooja Kumari Jain V, Rachit Agarwal: [June 2014](#)
12. Removal of CO₂ using Aqueous Blends of Amines by Chemical Absorption Method: Modelling and Simulation: Bidushree R P, P Kinnera, Shubham Singh, Soham Roy Chowdhury: [June 2014](#)

---***---***---