



SURESH KANCHAPOGU

Assistant Professor
Department of Chemical Engineering
Maulana Azad National Institute of Technology
Bhopal

+91-7013955615
ksuresh@manit.ac.in
suresh.chemineer@gmail.com

Contact Details

Address	Room No CH207, Department of Chemical Engineering, MANIT Bhopal, Bhopal-462003, Madhya Pradesh, India.
Email Id	Suresh.chemineer@gmail.com , ksuresh@manit.ac.in , ksuresh.manit@gmail.com .
Phone No.	0755-405-1807 (O) +91-7013955615 (M) +91-9085884489 (R)
Google Scholar	https://scholar.google.co.in/citations?user=tQTYnCMAAAAJ&hl=en
Scopus Author ID	https://www.scopus.com/authid/detail.uri?authorId=57200817488
Linked In	
ORCID	https://orcid.org/0000-0001-8122-3289
Vidwan	https://vidwan.inflibnet.ac.in/profile/421542

EDUCATIONAL QUALIFICATION

DEGREE	INSTITUTE	YEAR OF PASSING
PhD (Chemical Engineering)	Indian Institute of Technology Guwahati, Guwahati Assam	2016
M. Tech (Chemical Engineering)	Indian Institute of Technology Guwahati	2012
B. Tech (Chemical Engineering)	Andhra University College of Engineering Visakhapatnam, Andhra Pradesh	2010
Intermediate XII	A.P.S.W.R Jr College, Chilkoor, Andhra Pradesh	2006
Class X	A.P.S.W.R School, Krishna Rao Palem, Andhra Pradesh	2004

TEACHING AND RESEARCH EXPERIENCE

Teaching Experience				
Organization	Start Date	End Date	Designation	Nature of Work
MANIT Bhopal	21-12-2023	Present	Assistant Professor Grade-I	Teaching and Research
MANIT Bhopal	04-01-2019	20-12-2023	Assistant Professor Grade-II	Teaching and Research
MITS Gwalior	05-01-2018	01-01-2019	Assistant Professor	Teaching and Research
NIT Calicut	23-12-2016	05-05-2017	Assistant Professor	Teaching and Research

Subjects Taught

U.G	Mass Transfer
	Heat Transfer
	Process Equipment Design & Drawing
	Optimization Techniques
	Membrane Science and Technology
	Advanced Material Characterization
	Risk Analysis and Hazop
	Environmental Sciences
P.G	Advanced Separation Technology
	Industrial Catalysis

	Environmental Science & Technology
	Optimization Techniques in Chemical Engineering
	Novel Separation Processes

ACADEMIC PROJECTS

PhD Thesis Title: Development and Characterization of Fly ash based Ceramic Membranes for Separation of Oil-in-Water Emulsions Separation July 2012-December 2016

Under the Guidance of Prof. G. Pugazhenth

Abstract: A unique study in the literature indicated promising opportunities for oil-in-water emulsion filtration applications of low cost fly ash based ceramic membranes. TiO_2 , Al_2O_3 and TiO_2 -fly ash composite membranes have been reported to be effective for oil-in-water emulsion filtration. Considering the state-of-the-art associated to fabrication engineering and application aspects of low cost ceramic and TiO_2 composite membranes, this work addresses experimental investigations in six major areas namely:

- ✚ Preparation and characterization of low cost ceramic membranes
- ✚ Dead end microfiltration of synthetic oil-in-water emulsions using low cost ceramic membranes
- ✚ Cross flow microfiltration of synthetic oil-in-water emulsions using low cost ceramic membranes
- ✚ The fabrication of TiO_2 -Fly ash composite membrane by hydrothermal method and optimality of processes and process parameters by RSM (Response Surface Methodology)
- ✚ Dead end MF of synthetic oil-in-water emulsions using ceramic support, TiO_2 , Al_2O_3 composite membranes.
- ✚ Cross flow MF of synthetic oil-in-water emulsions using the ceramic support, TiO_2 composite membranes and investigated the fouling analysis.

M. Tech Thesis: Development and Characterization of Ceramic Membrane derived from Inexpensive Raw Materials.

July 2011-July 2012

Under the Guidance of Prof. G. Pugazhenth

Abstract: A series of ceramic membranes was fabricated using inexpensive raw materials by uniaxial pressing method followed by sintered at 900°C . Experimental investigations are carried out on separation of oil-in-water emulsions. Oil permeates flux and Rejection was obtained using membrane MF, un known oil concentrations in feed and permeate is predicted through UV-vis Spectrophotometer analysis. Comparison of permeate flux and rejection results of this work membranes with the literature data showed a better performance.

Industrial Project: Industrial training in Production Plants of LGPI
LG Polymers India Pvt. Ltd.

1-24th June 2009

B.Tech Project:

Manufacturing of methanol.
2010

June 2009-March

Under the Guidance of **Prof. G.M.J. Raju**

Abstract: Methanol is a widely used commercial gaining importance day by day for the production of various other commercial compounds and also as fuel. This project report aims at manufacturing methanol by selecting a process from various alternatives on the basis of their merit and demerits. Material Balance, Energy Balance and Design calculations are shown for the selected process. The project report also gives guidelines for the location and layout of the plant. Finally various costs entering the setup of methanol plant are calculated showing individual components.

Teaching assistant in Engineering Mechanics, IIT GUWAHATI

December 2012 to May
2013

Under Supervision of **Prof. B.P. Mandal**

PUBLICATIONS

List of Journals

Publication						
Authors	Title	Journal	Vol. No. Page No.	Year	SCI/ Scopus	Impact Factor
Kanchapogu Suresh, G Pugazhenthhi, R Uppaluri	Fly ash based ceramic microfiltration membranes for oil-water emulsion treatment: Parametric optimization using response surface methodology	Journal of Water Process Engineering	Volume 13 Pages 27-43	2016	SCIE and Scopus	7
Kanchapogu Suresh, G Pugazhenthhi	Development of ceramic membranes from low-cost clays for the separation of oil-water emulsion	Desalination and Water Treatment	Volume 57 Pages 1927-1939	2016	SCIE and Scopus	1.273
Kanchapogu Suresh, G Pugazhenthhi	Cross flow microfiltration of oil-water emulsions using clay based ceramic membrane support and TiO ₂ composite membrane	Egyptian journal of petroleum	Volume 26 Pages 679-694	2017	SCIE	0.936
Kanchapogu Suresh, Tekula Srinu, Alope Kumar Ghoshal, G Pugazhenthhi	Preparation and characterization of TiO ₂ and γ -Al ₂ O ₃ composite membranes for the separation of oil-in-water emulsions	RSC advances	Volume 6 Pages 4877-4888	2016	SCIE and Scopus	4.036
Kanchapogu Suresh, G Pugazhenthhi, R Uppaluri	Preparation and characterization of hydrothermally engineered TiO ₂ -fly ash composite membrane	Frontiers of Chemical Science and Engineering	Volume 11 Pages 266-279	2017	SCIE and Scopus	4.5
D Vasanth, Kanchapogu Suresh, G Pugazhenthhi	Fabrication of circular shaped ceramic membrane using mixed clays by uniaxial compaction method for the treatment of oily wastewater	International Journal of Nano and Biomaterials	Volume 5 Pages 75-88	2014	SCIE and Scopus	0.6
Kanchapogu Suresh, Neetika Katara	Design and development of circular ceramic membrane for wastewater treatment	Materials Today: Proceedings	Volume 43 Pages 2176-2181	2021	Scopus	3.2
Kanchapogu Suresh	Recycling of fly ash for development of value added products	Materials Today: Proceedings	Volume 46 Pages 5666-5674	2021	Scopus	3.2

Rahul Jarariya, K Suresh	Spinel ferrite nanomaterials-MgFe ₂ O ₄ -Synthesis by appropriate microwave solution combustion (Msc) method of visible light-responsive photocatalyst for Rb21 dye degradation	Materials Today: Proceedings	Volume 72 Pages 2618-2629	2023	Scopus	3.2
Yennam Rajesh, Hetansha Boricha, Aishwarya Suryavanshi, Abhijeet Gajare, Suyog Jain, Kanchapogu Suresh	Synthesis, characterization and adsorption studies on activated carbon adsorbent synthesized from Kigelia africana for removal of acid blue 113 dye from synthetic solution	Materials Today: Proceedings	https://doi.org/10.1016/j.matpr.2023.11.046	2023	Scopus	3.2

International and National Conferences

1. **Kanchapogu Suresh**, Prakhar Jain, Sandeep Patel, Bhavya Dravid, Manya Chopra have presented a paper entitled “Synthesis and Application of Eco-Friendly Adsorbent for Treatment of Congo-Red Dye Aqueous Solution” in the 1st International Conference on Separation & Purification Techniques: Environmental Applications held on 19th -20th January 2024 organized by the Department of Chemical Engineering, National Institute of Technology Raipur.
2. **Kanchapogu Suresh**, Amish Gour, Mukesh Kumar Yadav, Vidhi Jani, have presented a paper entitled “Preparation, Characterization and Application of Mixed Clay Based Low-Cost Ceramic Membrane in Treatment of Oil-in-Water Emulsions” in An International Conference on Energy Transition: Challenges and Opportunities, IICHE-CHEMCON 2023 held on 27th -30th December, 2023 NDIAN INSTITUTE OF CHEMICAL ENGINEERS, Celebrating 75 Years of Glorious Journey, 76th INDIAN CHEMICAL ENGINEERING CONGRESS, organized by IICHE Kolkata.
3. **Kanchapogu Suresh**, Jitendar Patel , Rakesh Rawat, Harshit Pratap Singh, presented a paper entitled on “Synthesis, Characterization and Application of Cobalt aluminate spinel (CoAl₂O₄), Cobalt aluminium LDH (Co–Al–LDH) adsorbent and Neem Bio-adsorbent for Treatment of Textile Industrial Wastewater”, International Conference on Advances in Smart Materials, Chemical and Biochemical Engineering (**CHEMSMART-2022**), held on 16th-18th December, 2022, organized by Department of Chemical Engineering, National Institute of Technology Rourkela.
4. **Kanchapogu Suresh**, Dhruv Pratap Singh , Ashutosh Kumar Kapri, Ravi Ahirwar, presented a paper entitled on “Development of Tubular Ceramic Membrane from Mixed Clay Materials through Extrusion Technique” in 3rd international conference on Chemical, Bio and Environmental Engineering (**CHEMBIOEN-2022**) on 4-5th, November 2022, organized by Department of Chemical Engineering, BVRIT, Hyderabad, in collaboration with the Department of Chemical Engineering, National Institute of Technology Jalandhar and.
5. **Kanchapogu Suresh**, presented a research article on “Cost-effective Fly ash Based Tubular Ceramic Microfiltration Membrane for Treatment of Livestock’s Effluents” as a contributed talk in International Conference on Cutting-edge Research in Materials and Sustainable Chemical Technologies (**CRMST-2022**) January 27-29, 2022 organized by Department of Chemical Engineering and Department of Chemistry Manipal University Jaipur In association with Catalysis Society of India.
6. **Kanchapogu Suresh**, presented a paper entitled “Development of Cost-effective and Ecofriendly Tubular Ceramic Microfiltration Membrane for Poultry Farm Wastewater Treatment” in the International Conference on “Advances in Chemical and Environmental Engineering (**ACEE-2021**)” held on 16th-17th December, 2021, organized by Department of Chemical Engineering, National Institute of Technology Raipur.
7. **Kanchapogu Suresh**, presented a paper titled “Design and Development of Circular Ceramic Membrane for

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- Wastewater Treatment” in the International Conference on Advanced Materials Behaviour & Characterization organized by Mattest Research Academy, Chennai during 18 - 23 July, 2020.
8. **Kanchapogu Suresh** and G. Pugazhenth, Performance Evaluation of Microfiltration Ceramic Membrane from Fly ash by Treatment of Oily Wastewater, **DAE-BRNS Symposium on Emerging Trends in Separation Science and Technology (SESTEC-2014)**, 25-28 February 2014, Bhabha Atomic Research Center, Mumbai, Maharashtra.
 9. **Kanchapogu Suresh** and G. Pugazhenth, Treatment of Oily Wastewater by Ceramic Membrane from Fly ash, **Annual Chemical Engineering Symposium (Reflux 2.0)**, 29-30 March 2014, Indian Institute of Technology Guwahati, Guwahati, Assam.
 10. **Kanchapogu Suresh** and G. Pugazhenth, Utilization of Fly ash in Fabrication of Ceramic Membrane, **Annual Symposium on Solid Waste Management (RECYCLE 2014)**, 6 April 2014, Indian Institute of Technology Guwahati, Guwahati, Assam.
 11. **Kanchapogu Suresh**, Tekula Srinu, A.K. Ghoshal and G. Pugazhenth, Treatment of Oily Wastewater using TiO_2 Microfiltration Membrane Prepared on Ceramic Support, **International Conference on Advances in Chemical Engineering & Technology (ICACE '14)**, 16-18 October 2014, Thangal Kunju Musaliar College of Engineering, Kollam, Kerala.
 12. **Kanchapogu Suresh** and G. Pugazhenth, Development and Characterization of Thermally Stable Novel Ceramic Membrane from Inorganic Clay Materials for Treatment of Synthetic Oil-water Emulsions, **National Seminar on Recent Trends in Fundamental and Applied Chemical Sciences (RTFACS-2014)**, 19-21 November 2014, Dibrugarh University, Dibrugarh, Assam.
 13. **Kanchapogu Suresh**, Manpadu Ramesh and G. Pugazhenth, Low Cost Ceramic Microfiltration Membrane for Treatment of Oil-Water Emulsions in Cross Flow Mode, **International Conference on New Frontiers in Chemical, Energy and Environmental Engineering (INCEEE-2015)**, 20-21 March 2015, National Institute of Technology Warangal, Warangal, Telangana.
 14. **Kanchapogu Suresh**, Prediction of Gas Phase Hold up in a Co-Current Gas Liquid Flow Through Packed Beds, **A National Level Seminar (MECHON-2K8)**, 17-18 October 2008, Al-Ameer College of Engineering and Information Technology, Visakhapatnam, Andhra Pradesh.
 15. **Kanchapogu Suresh**, Arsenic Poisoning and Purification of Drinking Water, **A National Level Students' Technical Symposium (CHEMOSPHERE-2K8)**, 19 December 2008, Department of Chemical Engineering, S.V.U. College of Engineering, Tirupati, Andhra Pradesh.

Conference Proceedings

1. Tekula Srinu, **Kanchapogu Suresh**, A.K.Ghoshal and G. Pugazhenth, Development and Characterization of TiO_2 Microfiltration membrane on Ceramic Support for Treatment of Oily Wastewater, International Conference on Advances in Chemical Engineering and Technology, **ICACE TKMCE'14**, 16-18th October 2014, TKM College of Engineering, Kollam, Kerala, *Elsevier*, 2014, 235-239. (ISBN: 9789351072843).

Workshops and Symposiums

1. I have actively participated as volunteer in **RIPPLES-2007, National Symposium of Chemical Engineering Students**, 4-5th January 2007, conducted by Department of Chemical Engineering, A.U. College of Engineering, Visakhapatnam, Andhra Pradesh.
2. I have participated as **VOLUNTEER** in the **CHEMCON-2009 (Indian Chemical Engineering Congress-2009)** held during 27-30th December 2009 at Department of Chemical Engineering, College of Engineering (A), Andhra

University, Visakhapatnam, Andhra Pradesh.

3. I have participated in the **National Workshop** on “**TECHNICAL WRITING**” conducted under the Technical Education Quality Improvement Programme (**TEQIP**) sponsored by the Ministry of Human Resource Development, Government of India, Held on 6-7th December 2014, Centre for Educational Technology, IIT Guwahati. Assam.
4. I have participated in the **National Course** on “**MEMBRANE TECHNOLOGY AND APPLICATIONS**” conducted under the Technical Education Quality Improvement Programme (**TEQIP**) sponsored by the Ministry of Human Resource Development, Government of India, Held on 9-10th December 2014, Centre for Educational Technology, IIT Guwahati. Assam.
5. I have participated in the **Second Symposium on Advances in Sustainable Polymers (ASP-15)** held during 21-22nd January 2015, Indian Institute of Technology Guwahati, Guwahati, Assam.
6. I have participated in **preconference Work Shop** on “**Drinking water purification and industrial wastewater treatment**” on 19th March 2015 conducted in connection with the International Conference on New Frontiers in Chemical, Energy and Environmental Engineering (INCEEE-2015), during 20-21st March 2015, Golden Jubilee Celebration of Department of Chemical Engineering, NIT Warangal, Warangal, Telangana.

BOOK CHAPTERS PUBLISHED

S.No	Authors	Title of the Book	Name of Publisher with ISSN/ISBN No.	Year of Publication
i.	Kanchapogu Suresh S. Suresh	Handbook of Nanomaterials and Nanocomposites for Energy and Environmental Applications	Springer, Cham Online ISBN: 978-3-030-11155-7	2021
ii.	Kanchapogu Suresh G. Pugazhenth	International Conference on Advances in Chemical Engineering and Technology ICACE TKMCE 2014	Elsevier Publications ISBN:978-93-5107-284-3	2014

POST GRADUATE DISSERTATIONS GUIDED

S. No.	Name of Candidate	Title of Dissertation	Year of award
i.	Neetika Katara (182117203)	Design and fabrication of circular ceramic membrane for wastewater treatment	2020

UNDER GRADUATE PROJECTS GUIDED

S.No.	Name of Candidate	Title of Project	Year of award
i.	S. Narendra (161117033) Aishwar Palia (161117013) Harshit Sharma (161117009)	Fabrication and characterization of fly ash based ceramic membrane for wastewater treatment.	2020
ii.	Shubham Yadav (161117012) Khagendra Lidhoriya (161117056) Yogita Chourasia (161117022)	Preparation, characterization, application of fly ash based ceramic bricks.	2020
iii.	Swikriti Wankhede (171117039)	Treatment of ground water containing carcinogenic	2021

	Naincy Modi (171117044) Harshit Pathak (171117070)	heavy metals.	
iv.	Harsh Ravikar (171117005) Varnit Gajpal (171117055)	HERO (High Efficiency Reverse Osmosis) Seawater De-Salination.	2021
v.	Pranav Khandelwal (171117064) Sarva Jangid (171117066)	Catalytic pre-treatment processes for lignocellulosic biomass from Bio-refinery perspective.	2021

National or International conference organized as Chairman or Secretary

Sr. No.	Post held Chairman or Secretary	Details of conference organized	Duration	
i.	Secretary	Recent Innovation in Chemical Engineering (RICE-2021)	08-02-2021	09-02-2021

Institute Level Additional Responsibilities

1. Assistant Warden for 1st Year UG Hostel, Dr. APJ Abdul Kalam Hostel 10 C, MANIT Bhopal from March 2019 to April 2020 and From January 2023 to till date.
2. Member of Anti Ragging Committee in MANIT Bhopal Institute from January 2022 to January 2023.
3. GATE coordinator for the Department of Chemical Engineering, Madhav Institute of Technology and Science (MITS) Gwalior, from January 2018 to December 2018.

MEMBERSHIP IN PROFESSIONAL BODIES

1. Indian Institute Of Chemical Engineers Life Member From 2021
2. The Institute Of Engineers (India) Life Member From 2021

ACHIEVEMENTS

- ☑ I have secured mandal first rank in SSC in 2004.
- ☑ Qualified in GATE 2010 and GATE 2011.
- ☑ I won the session best paper award (Oral) for presenting the research paper titled “ Low cost Ceramic Microfiltration Membrane for Treatment of Oil-in-Water Emulsions in Cross Flow Mode” at the International Conference on New Frontiers in Chemical, Energy and Environmental Engineering (INCEE-2015) organized during 20-21 March, 2015 at Department of Chemical Engineering, NIT Warangal.

TECHNICAL PROFICIENCY

- ☑ Chemical Soft wares : Chem draw. Chemcad; Gaussian Software
- ☑ Programming Tools: Mat lab; Design Expert Software; Origin Pro 8.

EXTRA CURRICULARS

- ☑ Bagged second prize in quiz competition in the event “NEBULA-09” conducted in Andhra University college of Engineering and Technology, Vishakhapatnam, Andhra Pradesh.
- ☑ Bagged second prize in KABADDI in the event children day celebration conducted in A.P.S.W.R School at Nuzvid, Andhra Pradesh.

DETAILS OF OUTREACH ACTIVITY

1. Delivered an expert lecture on topic “Process Equipment Design and Scale-Up” in one day webinar held on 01-11-2020, organized by Institute of Engineering, Jiwaji University, Gwalior.
2. Delivered an expert lecture on topic “Development and application of ceramic membrane for oily wastewater treatment” in A

Five-Day Online Faculty Development Program on “TEACHING AND LEARNING STRATEGIES FOR FRONTIERS IN MEMBRANES FOR WASTEWATER TREATMENT” during 8th – 12th March, 2021, organized by NIT Warangal
3. Delivered an expert lecture on topic” Design and development of fly ash based ceramic membrane for wastewater treatment in webinar lecture series organized by Assam Engineering College under TEQIP-III from 8 th -11 th December 2020
4. Attended as BOS member in Board of Studies meeting held on 10 th July 2021 for framing the UG syllabus of Chemical Engineering program in GIET University, Gunpur.
5. Delivered an expert lecture on topic” Cost-effective and Eco-friendly ceramic membranes for wastewater treatment”, organized by department of chemical engineering, K.K. Wagh Institute of Engineering Education and Research, Nashik.