CURRICULAM VITAE

Dr. G. Arthanareeswaran FRSC

CORRESPONDENCE ADDRESS

: Professor
Group Leader, Membrane Research Laboratory
Department of Chemical Engineering,
National Institute of Technology Tiruchirappalli 620 015 (NITT), India
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FELLOW

Fellow of the Royal Society of Chemistry (FRSC),
Royal Society of Chemistry, UK

QUALIFICATIONS

Ph.D. Chemical Technology,
Allagappa College of Technology, Anna University, Guindy, Chennai, India

M.Tech. (Petroleum Refining and Petrochemicals)
Allagappa College of Technology, Anna University, Guindy, Chennai, India

B.Tech. (Chemical Engineering)
Coimbatore Institute of Technology, Coimbatore, Bharathidasan University, India

CURRENT POSITION

: Professor
Department of Chemical Engineering, National Institute of Technology
Tiruchirappalli 620 015, India

PREVIOUS RELEVANT EXPERIANCE

Mar. 2018 to Present	:	Professor of Chemical Engineering, National Institute of Technology, Tiruchirappalli (NITT), India
Nov. 2011 to Mar. 2018	:	Associate Professor of Chemical Engineering, National Institute of Technology, Tiruchirappalli (NITT), India
Nov. 2008 - Nov. 2011	:	Assistant Professor of Chemical Engineering, National Institute of Technology, Tiruchirappalli (NITT), India
Aug. 2007- Nov. 2008	:	Lecturer of Chemical Engineering, National Institute of Technology, Tiruchirappalli (NITT), India
April 2005 - Aug. 2007	:	Lecturer of Chemical Engineering, Allagappa College of Technology, Anna University, Chennai, India
July 2001 – April 2005	:	Teaching and Research Associate, Allagappa College of Technology, Anna University, Chennai, India

VISITING PROFESSIONAL EXPERIANCE

30th January 2010 - 7th February 2010 : **Visiting Scientist**,
Department of Mechanical Engineering,
University of Sao Paulo, Brazil.

1st June 2010 to 30th August 2010 : **Visiting Scientist,**
Department of Chemical Engineering,
Loughborough University, UK

1st April 2011 to 30th August 2011 : **Visiting Scientist,**
Department of Chemical Engineering,
Monash University, Clayton, Australia

10th October 2013 to 7th December 2013 : **Visiting Researcher,**
Advanced Membrane Technology Research Centre (AMTEC)
Universiti Teknologi Malaysia (UTM),
Malaysia

7th March 2014 to 21st March 2014 : **Visiting Professor,**
Department of Environmental Engineering,
Konkuk University, SEOUL, 143-701, South Korea.

21st May 2015 to 14th June 2015 : **Visiting Research Professor,**
Advanced Membrane Technology Research Centre (AMTEC)
Universiti Teknologi Malaysia (UTM),
Malaysia

10th May 2016 to 13th February 2017 : **Visiting Professor (Brainpool)**
Department of Environmental Engineering,
Konkuk University, SEOUL, 143-701,
South Korea

AWARDS AND HONORS

Name of the Award and year	**Awarding Organization**
2017-Distinguished Scientist in Chemical Engineering	Venus Research Foundation, India
2017-Hiyoshi Environmental Award	Outstanding Research In the field of Environmental conservation, Hiyoshi Corporation, Japan.
2017-Australian Awards Ambassador	Promote Australian education and Research in India**,** Australian Higher Commission, India.
2016-Brain Pool Fellowship	Enhance the R&D level of Korea by injecting foreign scientists, KOFCT, Korea.
2011-Endeavour Executive Award	Brings leading researchers to Australia to undertake research and professional development, Government of Australia.
2010-Research Exchange award	India-UK Research collaboration, The Royal Academy of Engineering, UK.
2007-Young Scientists award	Awarded by Department of Science and Technology, India under Fast Track Scheme for sponsored project.

RESEARCH GRANTS

Year	Amount (INR)	Project title and sponsored agency
2007-2009	700000	Removal of Toxic Metal Ions using Polymeric Membranes Sponsored by Department of Science and Technology, India
2009-2011	1600000	**Indo- Brazil Joint collaboration Research Project,** Development and application of inorganic membranes in the treated of wastewater of processing of sugarcane, Sponsored by DST, India- CNPq, Brazil
2010	€3000 Pounds	Ultrafiltration, concentration, inorganic salts, permeate Sponsored by Royal Academy Of Engineering, London, UK
2011	600000	Current development on waste water treatment in India Sponsored by The Royal society, UK and DST, India
2012-2015	2562000	Novel Energy Production from Distillery Effluent Treatment by Bioelectrochemical Method Sponsored by Department of Biotechnology, India
2013-2016	3000000	**Indo-Korea Joint Collaboration Research Project,** - Development of biofouling resistant membranes for waste water treatment Sponsored by DST, India and MST, Korea
2018-2020	5000000	**UKIERI Joint Collaborative Research Project,** - Training of Trainers towards capacity building in skills and education (ToT-CBSE) under MSDE-UKIERI Skills Thematic Institutional Partnership Sponsored by UKIERI, India
2018-2021	2950000	**INDO-HUNGARIAN Joint Collaborative Research Project,** - Development of a new approach in wastewater treatment with the self-cleaning membrane technology and regeneration of membranes via natural source for restoring water ecosystem Sponsored by DST, India
2018-2021	2900000	**ASEAN INDIA Joint Collaborative Research Project,** Reduction in greenhouse gas emission with synergistic mixed matrix membrane for CO2 separation Sponsored by ASEAN-India Science,Technology & Innovation Cooperation

Industry- Academic partnership

Funding agency	Industry	Project title	Project amount (INR)	Outcome
The Royal Academy of Engineering UK	Galaxy Research Technologies	Development of innovative solution to serve water technology for clean and sustainable water resources	4991000	Developed membrane filters with distribution of the pores with micro- and nano-dimensions for perfect filtration of polluted water. Demonstrated the innovative and cheapest membranes system for clean water supply.

Prototype Development Project with support of Industry

Funding agency	Industry	Project title	Project amount (INR)	Outcome
MHRD, India	Freshara Picklz Exports and GENERAL TEKNIX	Solar-powered multi-effect membrane distillation for high water recovery and ZLD	1000000	In India, the commercial availability of MD water modules is very limited and no industry has the technology to manufacture ME-VMD module. Hence, the prosperity of manufacturing startup and commercialization is very obvious. Rising awareness on environmental concern and stringent laws forces the desalination, petroleum, mining, food and power sector to go for ZLD at their premises. These industries will be the potential customer of this technology.

PUBLICATIONS

	All	Since 2016
h-index	*31*	*28*
i10-index	*71*	*64*
Citations	*3297*	*2312*

Reference: Google scholar

ORCID: orcid.org/0000-0002-6166-8018
ResearcherID: L-6341-2013

1. K.Venkatesh, **G. Arthanareeswaran**, “Fabrication of zwitterion TiO2 nanomaterial based nanocomposite membranes for improved antifouling, antibacterial properties, hemocompatibility and reduced cytotoxicity” *ACS Omega* (**2021**) In press.
2. Y. Lukka Thuyavan, J. Juhana, **G. Arthanareeswaran** "Functionalized boron nitride embedded sulfonated poly (ether ether ketone) proton exchange membrane for direct methanol fuel cell applications." *Journal of Environmental Chemical Engineering*, (**2021**), 9, 105876.
3. G. Gnanaselvan, M.S.P.Sudhakaran, **G.Arthanareeswaran**, “Efficient removal of anionic, cationic textile dyes and salt mixture using a novel CS/MIL-100 (Fe) based nanofiltration membrane” *Chemosphere*, (**2021**), 284, 131244.
4. S. Sujithra, Y. Subin Sabilon, **G. Arthanareeswaran** “Investigation of intrinsic bisphenol separation capacity of zeolitic imidazolate framework-8 based membranes” *Desalination and Water Treatment*, (**2021**), 227, 1-10.
5. Y. Lukka Thuyavan, J. Jaafar, **G. Arthanareeswaran**, "Synthesis and characterization of conductive polymer coated graphitic carbon nitride embedded sulfonated poly (ether ether ketone) membranes for direct methanol fuel cell applications." *International Journal of Energy Research* (**2021**).

6. S.A. Gokulakrishnan, **G Arthanareeswaran**, Laszlo Zsuzsanna, "Recent development of photocatalytic nanomaterials in mixed matrix membrane for emerging pollutants and fouling control, membrane cleaning process" *Chemosphere,* (**2021**) 281, 130891.
7. S. Elakkiya, **G. Arthanareeswaran**, D.B.Das "Embedding low–cost 1D and 2D iron pillared nanoclay to enhance the stability of polyethersulfone membranes for the removal of bisphenol A from water" *Separation and Purification Technology*, (**2021**), 266, 118560.
8. S. Elakkiya, **G. Arthanareeswaran**, A.F. Ismail, "Review on characteristics of biomaterial and nanomaterials based polymeric nanocomposite membranes for seawater treatment application" *Environmental Research,* (**2021**) 197, 111177.
9. B. Sasikumar, S. Bisht, **G. Arthanareeswaran**, "Performance of polysulfone hollow fiber membranes encompassing ZIF-8, SiO2/ZIF-8, and amine-modified SiO2/ZIF-8 nanofillers for CO2/CH4 and CO2/N2 gas separation*" Separation and Purification Technology*, (**2021**) 264, 118471.
10. S. Bisht, B. Sasikumar**, G. Arthanareeswaran**, "Proton exchange composite membranes comprising SiO2, sulfonated SiO2, and metal–organic frameworks loaded in SPEEK polymer for fuel cell applications." *Journal of Applied Polymer Science*, (**2021**), 138, 50530.
11. K. Venkatesh, **G. Arthanareeswaran**, A. Chandra Bose, "Diethylenetriaminepentaacetic acid-functionalized multi-walled carbon nanotubes/titanium oxide-PVDF nanofiber membrane for effective separation of oil/water emulsion" *Separation and Purification Technology*, (**2021**), 257, 117926.
12. Seshasayee, M. S., Yu, Z**., Arthanareeswaran, G**., & Das, D. B. (2020). Preparation of nanoclay embedded polymeric membranes for the filtration of natural organic matter (NOM) in a circular crossflow filtration system. *Journal of Water Process Engineering*, (**2020**) 37, 101408.
13. Thuyavan, Y. Lukka, **G. Arthanareeswaran**, A. F. Ismail, P. S. Goh, M. V. Shankar, and N. Lakshmana Reddy. "Treatment of synthetic textile dye effluent using hybrid adsorptive ultrafiltration mixed matrix membranes." *Chemical Engineering Research and Design* (**2020**). 159, 92-104.
14. N. Santos, Érika, Zsuzsanna László, Cecilia Hodúr, **G. Arthanareeswaran**, and G. Veréb. "Photocatalytic membrane filtration and its advantages over conventional approaches in the treatment of oily wastewater: A review." *Asia-Pacific Journal of Chemical Engineering*: (**2020**), 15, e2533. doi.org/10.1002/apj.2533
15. Das, Diganta B., Mostafa Mabrouk, Hanan H. Beherei, and **G. Arthanareeswaran**. "Pharmaceutical Particulates and Membranes for the Delivery of Drugs and Bioactive Molecules." *Pharmaceuticals* **(2020**): 412. 10.3390/pharmaceutics12050412.
16. Mehta, Priya, V. Seenuvasan, Gopal Sathyaraj, G. Somenath, **G. Arthanareeswaran**, S. Kamatchi, "Fast sensing ammonia at room temperature with proline ionic liquid incorporated cellulose acetate membranes." *Journal of Molecular Liquids* (**2020)**, 305, 112820. 10.1016/j.molliq.2020.112820
17. K. Venkatesh, **G. Arthanareeswaran**, A. Chandra Bose, P.Suresh Kumar. "Hydrophilic hierarchical carbon with TiO2 nanofiber membrane for high separation efficiency of dye and oil-water emulsion." *Separation and Purification Technology* (**2020**), 241 116709. 10.1016/j.seppur.2020.116709

18. Veréb, Gábor, Péter Kassai, Erika Nascimben Santos, **G. Arthanareeswaran**, Cecilia Hodúr, and Zsuzsanna László. "Intensification of the ultrafiltration of real oil-contaminated (produced) water with pre-ozonation and/or with TiO 2, TiO 2/CNT nanomaterial-coated membrane surfaces." *Environmental Science and Pollution Research* (**2020)**: 1-11. doi.org/10.1007/s11356-020-08047-1.
19. B. Govardhanan**, G. Arthanareeswaran**, and M. Ashok. "Photocatalytic removal of organic pollutants and self-cleaning performance of PES membrane incorporated sulfonated graphene oxide/ZnO nanocomposite." Journal of Chemical Technology & Biotechnology, (2020), 95, 3012-3023.
20. D.George, P. U. Maheswari, K.M.M. Sheriffa Begum, K. **G. Arthanareeswaran**, Biomass-Derived Dialdehyde Cellulose Cross-linked Chitosan-Based Nanocomposite Hydrogel with Phytosynthesized Zinc Oxide Nanoparticles for Enhanced Curcumin Delivery and Bioactivity. *Journal of Agricultural and Food Chemistry*, 67 (**2019**) 10880-10890.
21. B Sasikumar, G. **Arthanareeswaran**, K. Sankaranarayanan, K. Jeyadheepan Synthesis and Formation of Phase-Tuned TiO2-/Ionic Liquid-Incorporated Polymeric Membranes for Ammonia Sensing at Room Temperature, *ACS Sustainable Chemistry & Engineering* (**2019**), 7, 15884-15895.
22. C.Evangeline, V. Pragasam, K. Rambabu, S. Velu, P. Monash, **G. Arthanareeswaran**, F. Banat, Iron oxide modified polyethersulfone/cellulose acetate blend membrane for enhanced defluoridation application. *Desalination and Water Treatment*, (**2019**),156, 177-188
23. R. Saranya, **G. Arthanareeswaran**, A.F. Ismail, Enhancement of anti-fouling properties during the treatment of paper mill effluent using functionalized zeolite and activated carbon nanomaterials based ultrafiltration, *Journal of Chemical Technology and Biotechnology*, (**2019**), 94, 2805-2815
24. G.Gnanaselvan, B.Sasikumar, **G. Arthanareeswaran**, Performance of composite PES/MOF-5 membranes for the treatment of textile wastewater, *Desalination and Water Treatment*,(**2019**),156, 220-228.
25. P. Aruna, **G. Arthanareeswaran**, S. Murali Mohan, Synthesis of highly stable PTFE-ZrP-PVA composite membrane for high-temperature direct methanol fuel cell, *International Journal of Hydrogen Energy* (**2019**). doi.org/10.1016/j.ijhydene.2019.04.164
26. K. Rambabu, F. Banat,G.S.Nirmala, S. Velu, ,**G. Arthanareeswaran**, Activated carbon from date seeds for chromium removal in aqueous solution. *Desalination and Water Treatment*, (**2019**), 156, 267-277
27. Mostafa Mabrouk, R. Rajakumari, Islam E. Soliman, Mohamed M. Ashour, Hanan H. Beherei, Khairy M. Tohamy, Sabu Thomas, Nandakumar Kalarikkal, **G. Arthanareeswaran**, D.B. Das, Nanoparticle- and Nanoporous-Membrane-Mediated Delivery of Therapeutics, *Pharmaceutics* (**2019**), 11, 294.
28. L.L.Nisha, Laali, **G. Arthanareeswaran**, T.V. Poonguzhali, T.A. Mohan, J. Valentina, Phycoremediation of hydrocarbon using two marine seaweeds from the Bay of Bengal coast of India. *Desalination and Water Treatment*, (**2019**), 156, 378-386.
29. K.Thiyagarajan, **G. Arthanareeswaran**, J.H. Kweon, D.B. Das, V. Jaikumar, Influences of nano zero valent ion and Fe2+ supported kaolin nanoparticles for metal ion separation thorough ultrafiltration. *Desalination and Water Treatment*, (**2019**), 156, 257-266.

30. A.Fahmi, **G. Arthanareeswaran**, Silver nano-particle coated hydroxyapatite nano-composite membrane for the treatment of palm oil mill effluent, Journal of Water Process Engineering, (**2019**), 31 , 100844.
31. S.Elakkiya, **G. Arthanareeswaran**, A. F. Ismail, Diganta B. Das, R. Suganya, Polyaniline coated sulfonated TiO2 nanoparticles for effective application in proton conductive polymer membrane fuel cell, *European Polymer Journal* (**2019**), 112, 696-703.
32. R. Sathish Kumar, **G.Arthanareeswaran**, Reduction of chemical oxygen demand and color from the rice mill wastewater by chitosan/2 (5 H)-furanone-incorporated ultrafiltration membrane system, *Separation Science and Technology* (**2019**) 54, 409-425.
33. G. Gnanaselvan, B. Sasikumar, **G. Arthanareeswaran**, Diganta B. Das, Removal of hazardous material from wastewater by using metal organic framework (MOF) embedded polymeric membranes, *Separation Science and Technology* (**2019**) 54, 434-446.
34. CP Om Ariara Guhan, *G. Arthanareeswaran*, Flow Analysis of Catalytic Converter—LCV BS III Applications for Optimising Pressure Drop, *In Innovative Design, Analysis and Development Practices in Aerospace and Automotive Engineering* (**2019**) 427-435. Springer, Singapore, 2019.
35. K.Rambabu, G. Bharath, P. Monash, S. Velu, Fawzi Banat, Mu Naushad, **G. Arthanareeswaran**, Pau Loke Show, Effective treatment of dye polluted wastewater using nanoporous CaCl2 modified polyethersulfone membrane, *Process Safety and Environmental Protection* (**2019**) 124, 266-278.
36. G. Gopi, **G. Arthanareeswaran**, A.F. Ismail, Perspective of renewable desalination by using membrane distillation. *Chemical Engineering Research and Design*, (**2019**) 144, 520-537.
37. R. Sathish Kumar, **G. Arthanareeswaran,** Nano-curcumin incorporated polyethersulfone membranes for enhanced anti-biofouling in treatment of sewage plant effluent, *Materials Science and Engineering: C* 94 (**2019**), 258-269.
38. Y. L., Thuyavan, **G. Arthanareeswaran**, A.F. Ismail, A. Sivasamy, N. Anantharaman, Concentration of whey protein from cheese whey effluent using ultrafiltration by combination of hydrophilic metal oxides and hydrophobic polymer, *Journal of Chemical Technology and Biotechnology*, (**2018**), 93, 2576-2591
39. S.Elakkiya, **G.Arthanareeswaran,** K.Venkatesh, J. Kweon, Enhancement of fuel cell properties in polyethersulfone and sulfonated poly (ether ether ketone) membranes using metal oxide nanoparticles for proton exchange membrane fuel cell, *International Journal of Hydrogen Energy* **(2018),** 43, 21750-21759
40. P. Sureshkumar, K. Venkatesh, Ee Ling Gui, S. Jayaraman, G. Singh, **G. Arthanareeswaran**, Electrospun carbon nanofibers/TiO2-PAN hybrid membranes for effective removal of metal ions and cationic dye *Environmental Nanotechnology, Monitoring & Management* (**2018**) 10, 366-376.
41. K.Deepa, M. Kesava, R. Sureshkumar, K. Dinakaran, **G. Arthanareeswaran**, Synthesis and electrochemical properties of blend membranes of polysulfone and poly (acrylic acid-co-2-(2-(piperazin-1-yl) ethylamino)-2-hydroxyethyl methacrylate) for proton exchange membrane fuel cell. *International Journal of Hydrogen Energy* (**2018**) 43, 21760-21768.

42. K. Sriram, P.Uma Maheswari, K.M. Meera Sheriffa Begum, **G.Arthanareeswaran**, Functionalized chitosan with super paramagnetic hybrid nanocarrier for targeted drug delivery of curcumin, *Iranian Polymer Journal* **(2018**), 27, 469–482
43. C.P.Om Ariara Guhan, **G.Arthanareeswaran**, K.N.Varadarajan, S.Krishnan, Exhaust System Muffler Volume Optimization of Light Commercial Vehicle Using CFD Simulation, *Materials Today: Proceedings* **(2018)** 5, 8471–8479
44. K.Sriram, P.Uma Maheswari, K.M. Meera Sheriffa Begum, **G.Arthanareeswaran**, G.Antoniraj Maria, K. Ruckmani, Curcumin drug delivery by vanillin-chitosan coated with calcium ferrite hybrid nanoparticles as carrier, *European Journal of Pharmaceutical Sciences*, **(2018)** 116, 48-60
45. B.Sasikumar, **G.Arthanareeswaran**, A.F.Ismail, Recent progress in ionic liquid membranes for gas separation, *Journal of Molecular Liquids*, **(2018),** 266, 330-341
46. Y. L., Thuyavan, **G. Arthanareeswaran**, A.F. Ismail, P. Prakash, Harvesting of microalgae Coelastrella sp. FI69 using pore former induced TiO_2 incorporated PES mixed matrix membranes, *Journal of Chemical Technology and Biotechnology*, **(2018)** 93, 645-655
47. H. Lade, Vikas Kumar, **G.Arthanareeswaran**, A.F.Ismail, Sulfonated poly(arylene ether sulfone) nanocomposite electrolyte membrane for fuel cell applications: A review, *International Journal of Hydrogen Energy*, **(2017)** 42, 1063-1074
48. **G.Arthanareeswaran**, K. Sriram, D. Renuga, P. Uma maheswari, K.M. Meera Sheriffa Begum, A Comparative Study on Chitosan and Benzimidazole Modified Chitosan as Antimicrobial and Mercury (Hg) Sensor Biomaterials, *Journal of Polymer Materials* (**2017**),34, 45-55
49. N. Awanga, Juhana Jaafara, A.F.Ismail, M.H.D.Othman, Mukhlis A.Rahman, N.Yusof, F.Aziz, W.N.W. Salleh, S.S.Suradi, H.Ilbeygi, W.N.E.Wan Mohd Noral Azman, **G.Arthanareeswaran**, Development of dense void-free electrospun SPEEK-Cloisite15A membrane for direct methanol fuel cell application: Optimization using response surface methodology, *International Journal of Hydrogen Energy* (**2017**), 42, 26496-26510.
50. **G.Arthanareeswaran**, A.F.Ismail, Enhancement of permeability and antibiofouling properties of polyethersulfone (PES) membrane through incorporation of quorum sensing inhibition (QSI) compound, *Journal of the Taiwan Institute of Chemical Engineers,* (**2017**),72, 200-212.
51. S.Velu, **G.Arthanareeswaran**, H.Lade, Removal of organic and inorganic substances from industry wastewaters using modified aluminosilicate-based polyethersulfone ultrafiltration membranes, *Environmental Progress & Sustainable Energy*,(**2017**), 36, 1612-1620.
52. R.Saranya, **G.Arthanareeswaran**, A.F.Ismail, N. Lakshmana Reddy, M.V.Shankar Efficient rejection of organic compounds using functionalized ZSM-5 incorporated PPSU mixed matrix membrane, *RSC Advances***, (2017**),7, 15536-15552.

53. H.Lade, W.J.Song, Y.J.Yu, J.H. Ryu, **G Arthanareeswaran**, JH Kweon, Exploring the potential of curcumin for control of N-acyl homoserine lactone-mediated biofouling in membrane bioreactors for wastewater treatment, *RSC Advances* (**2017**),7, 16392-16400.
54. Harsha Srivastava, Harshad Lade, Diby Paul, G. **Arthanareeswaran**, Ji Hyang Kweon Styrene-Based Copolymer for Polymer Membrane Modifications, *Applied Sciences* (**2016**), 6, 159;
55. Y. L., Thuyavan, N. Anantharaman, G, **Arthanareeswaran**, A.F. Ismail, Impact of solvents and process conditions on the formation of polyethersulfone membranes and its fouling behavior in lake water filtration. *Journal of Chemical Technology and Biotechnology* (**2016)** 91, 2568-2581
56. D. Deepak, **G. Arthanareeswaran**, Modeling and Performance Characteristics of Nanofiltration by DSPM and ARX Model *J. Applied Membrane Science & Technology*, (**2016)** 18, 1–7
57. K. Venkatesh, **G. Arthanareeswaran,** A.C. Bose, PVDF mixed matrix nano-filtration membranes integrated with 1D-PANI/TiO2 NFs for oil-water emulsion separation, *RSC Advances,* (**2016**) 6 , 18899-18908.
58. C.P. Om Ariara Guhan, **G. Arthanareeswaran**, K.N. Varadarajan, S. Krishnan, Numerical optimization of flow uniformity inside an under body- oval substrate to improve emissions of IC engines, *Journal of Computational Design and Engineering*, (**2016**) 3, 198-214.
59. S. Aditya Kiran, Y. Lukka Thuyavan, **G. Arthanareeswaran**, T. Matsuura, A.F. Ismail, Impact of graphene oxide embedded polyethersulfone membranes for the effective treatment of distillery effluent, *Chemical Engineering Journal*, (**2016**) 286, 528-537.
60. R. Saranya, M. Kumar, R. Tamilarasan, A.F. Ismail, **G. Arthanareeswaran**, (**2016**), Functionalised activated carbon modified polyphenylsulfone composite membranes for adsorption enhanced phenol filtration. *Journal of Chemical Technology and Biotechnology* **(2016)** 91, 748–761.
61. H.K. Pravallik, T.Y.Lukka, G. **Arthanareeswaran**, A.F. Ismail,Influence of copper oxide nanomaterials in a poly(ether sulfone) membrane for improved humic acid and oil–water separation, *J. Applied Polymer Science*, (**2016**) 133, 43873
62. K. Sriram, G. **Arthanareeswaran,** A. F. Ismail,Diby Paul, Effects of special nanoparticles on fuel cell properties of sulfonated polyethersulfone membrane, *International Journal of Polymeric Materials*, (**2016**) 65, 29-301,
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64. R. Saranya, **G. Arthanareeswaran**, A. F.Ismail, Dion D Dionysiou and Diby Paul, Zero-valent iron impregnated mixed matrix membranes for the treatment of textile effluent, *RSC Advances,* (**2015**) 5, 62486-62497

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66. Y. Lukka Thuyavan, N. Anantharaman, **G. Arthanareeswaran**, R.V. Mangalaraja, A.F. Ismail, Preparation and characterization of TiO_2-sulfonated polymer embedded polyetherimide membranes for effective Desalination, *Desalination*, **(2015)** 365, 355-364.
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69. A Sumisha, **G Arthanareeswaran**, AF Ismail, DP Kumar, MV Shankar,Functionalized titanate nanotube- polyetherimide nanocomposite membrane for improved salt rejection under low pressure nanofiltration, *RSC Advances*, **(2015)** 5, 39464-39473.
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71. M Kumar, R Tamilarasan, **G Arthanareeswaran**, AF Ismail, Optimization of methylene blue using Ca^{2+} and Zn^{2+} bio-polymer hydrogel beads: A comparative study, *Ecotoxicology and Environmental Safety*,**(2015)** 121,164-173.
72. R.Sathish Kumar, **G Arthanareeswaran**, D Paul, JH Kweon, Effective removal of humic acid using xanthan gum incorporated polyethersulfone membranes, *Ecotoxicology and Environmental Safety*, *Elsevier* **(2015)** 121, 223-228.
73. Y. Lukka Thuyavan, N. Anantharaman, **G. Arthanareeswaran**, A.F. Ismail, Modification of polyethersulfone using sericin and polyvinylpyrrolidone for cadmium ion removal by polyelectrolyte-enhanced ultrafiltration, *Desalination and Water Treatment***, (2014),** 56, 366-378.
74. Aruna Pagidi, R. Saranya, **G. Arthanareeswaran**, A.F. Ismail, Enhanced oil–water separation using polysulfone membranes modified with polymeric additives, *Desalination* **(2014)** 344, 280-288
75. A Ananth, **G Arthanareeswaran**, A.F. Ismail, YS Mok, T Matsuura, Effect of bio-mediated route synthesized silver nanoparticles for modification of polyethersulfone membranes, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **(2014)** 451,151-160
76. 24. R Saranya, **G Arthanareeswaran**, D.D. Dionysiou, Treatment of paper mill effluent using Polyethersulfone/functionalised multiwalled carbon nanotubes based nanocomposite membranes, *Chemical Engineering Journal*, **(2014)** 236, 369-377

77. R. Saranya, Y. Lukka Thuyavan, **G. Arthanareeswaran**, Development of Adsorbents-based Cellulose Acetate Mixed Matrix Membranes for Removal of Pollutants from Textile Industry Effluent, *Journal Teknologi*, **(2014)** 70, 1-5.
78. S.Sitaraman, K.M. Meera S. Begum, N. Anantharaman, **G. Arthanareeswaran** Enhancement of heat transfer in double pipe heat exchanger using novel inserts, *Progress in Chemical Engineering* **(2014)**
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84. **G. Arthanareeswaran**, S. Velu, Performance enhancement of polysulfone ultrafiltration membrane by blending with polyurethane hydrophilic polymer, *Journal of Polymer Engineering,*(**2012**),31,125-131
85. **G. Arthanareeswaran**, P. Thanikaivelan, Transport of copper, nickel and zinc ions across ultrafiltration membrane based on modified of polysulfone and cellulose acetate, *Asia-Pacific Journal of Chemical Engineering*, (**2012**) 7, 131-139.
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88. **G. Arthanareeswaran**, Victor M. Starov**,** Effect of solvents on performance of polyethersulfone ultrafiltration membranes: investigation of metal ion separations, *Desalination*, (**2011**) 267, 57-63.

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90. S.Velu, L. Muruganandam, **G.Arthanareeswaran**, Performance Enhancement of Polysulfone Ultrafiltration Membrane by Blending with Polyurethane Hydrophilic Polymer, *International Journal of Chemical and Analytical Science*, (**2011**) 2, 87-92
91. **G. Arthanareeswaran**, P. Thanikaivelan, Fabrication cellulose acetate-zirconia hybrid membranes for ultrafiltration applications: Performance, structure and fouling analysis, *Separation and Purification Technology*, (**2010**) 74, 230-235
92. M. Subas Chandra Bose, **G. Arthanareeswaran**, M. Raajenthiren, Modeling and simulation of an cellulose acetate blend ultrafiltration membrane by using bovine serum albumin solution, *International Journal of Polymeric Materials*, (**2010**) 59, 588–606.
93. **G. Arthanareeswaran**, S. AnandaKumar, Effect of additives concentration on performance of cellulose acetate and polyethersulfone blend membranes, *Journal of Porous Materials*, (**2010**), 17 515-522.
94. **G.Arthanareeswaran**, D. Mohan, M. Raajenthiren, Preparation, characterization and performance studies of ultrafiltration membranes with polymeric additive, *Journal of Membrane Science*, (**2010**) 350, 130–13
95. **G. Arthanareeswaran**, P. Thanikaivelan, M. Raajenthiren, Sulfonated poly(ether ether ketone) induced porous poly(ether sulfone) blend membranes for separation of protein and metal ions, *Journal of Applied Polymer Science*, (**2010**) 116, 995-1004.
96. **G. Arthanareeswaran**. N. Anatharaman. M. Raajenthiren, Characteristics, performance of blend CA/SPEEK ultrafiltration membranes prepared by phase inversion method using PEG 600 as an additive, *Journal of Applied Membrane Science & Technology*, (**2009**) 10,1–11
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98. S.Ananda Kumar, K.Shree Meenakshi, B.R.V.Narashimhan, S.Srikanth, **G.Arthanareeswaran,** Synthesis and characterization of copper nanofluid by a novel one step method, *Materials Chemistry and Physics*, (**2009**), 113, 57-62
99. **G. Arthanareeswaran**, P. Thanikaivelan, M. Raajenthiren, Preparation and characterization poly (methyl methacrylate) and sulfonated poly (ether ether ketone) blend ultrafiltration membranes for protein separation applications, *Materials Science and Engineering C*, (**2009**) 29, 246-252.
100. **G. Arthanareeswaran**, T.K.Sriyamuna Devi, D. Mohan, M. Raajenthiren, Effect of silica particles on cellulose acetate blend ultrafiltration membranes: Part I, *Separation and Purification Technology*, (**2008**) 64, 38-47.

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105. J. Abdoul Raguime, **G. Arthanareeswaran**, P. Thanikaivelan, D. Mohan, M. Raajenthiren, Performance characterization of cellulose acetate and poly(vinylpyrrolidone) blend membranes, *Journal of Applied Polymer Science*, (**2007**), 104, 3042-3049
106. **G. Arthanareeswaran**, N. Jaya, D. Mohan and M. Raajenthiren, Removal of chromium from aqueous solution by using cellulose acetate and sulfonated poly (ether ether ketone) blend ultrafiltration membranes, *Journal of Hazardous Materials,* (**2007**), B139, 44–49.
107. **G. Arthanareeswaran**, M. Muthukumar, M. Dharmendirakumar, D. Mohan, M. Raajenthiren, Studies on performance of cellulose acetate and poly(ethelene glycol) blend ultrafiltration membranes using mixture design concept of design of experiments, *International Journal of Polymeric Materials,* (**2006**), 55,1133-1154.
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109. R.Mahendran, R.Malaisamy, **G.Arthanareeswaran**, D.Mohan, Cellulose acetate–poly (ethersulfone) blend ultrafiltration membranes. II. Application studies, *Journal of Applied Polymer Science,* (**2004**), 92, 3659 –3665
110. **G. Arthanareeswaran**, K. Srinivasan, R. Mahendran, D. Mohan, M. Rajendran, V. Mohan, Studies on cellulose acetate and sulfonated poly (ether ether ketone) blend ultrafiltration membranes, *European Polymer Journal*, (**2004**), 40, 751-762

REPRESENTATIVE PUBLICATIONS **Science Direct's Top 25 Hottest Article**

1. **G. Arthanareeswaran**, P. Thanikaivelan, J. Abdoul Raguime, D. Mohan, Metal ion separation and protein removal from aqueous solutions using modified cellulose acetate membranes: Role of polymeric additives, *Separation and Purification Technology, Elsevier* 55, (2007), 8-15

2. **G. Arthanareeswaran**, P. Thanikaivelan, K. Srinivasn, D. Mohan, M. Rajendran, Synthesis, characterization and thermal studies on cellulose acetate membranes with additive, *European Polymer Journal*, *Elsevier* 40, (2004), 2153-2159.

PUBLICATION IN INDUSTRY MAGAZINES

1. **G. Arthanareeswaran**, Separation process balancing technology with economy, *Chemical world*, Chemical Industry magazine, (2009) 40
2. **G. Arthanareeswaran**, Ultrafiltration: separation with precision, cover story, *Chemical world*, Chemical Industry magazine, (2010) 42
3. **G. Arthanareeswaran**, Riding on the recycling wave: waste water treatment, *Chemical world*, Chemical Industry magazine, (2011) 26
4. **G. Arthanareeswaran**, Special Focus on Membrane Separation, *Chemical world*, Chemical Industry magazine, (December 2012) 28-29
5. **G. Arthanareeswaran**, Special Focus on Ultrafiltration Technology, *Chemical world*, Chemical industry magazine, (December 2012) 24-25
6. **G. Arthanareeswaran**, Zero liquid discharge system *Chemical world*, Chemical Industry magazine, (June 2013) 44-45

BOOK

1 D.B. Das, Mostafa, and G. Arthanareeswaran, Pharmaceutical Particulates and Membranes for Delivery of Drugs and Bioactive Molecules, MDPI, June 2020, ISBN: 978-3-03936-392-6.

2 M. Subas Chandrabose, G. Arthanareeswaran, Biopolymer ultrafiltration membranes and their modeling VDM Publishing Germany April 2011, ISBN :978-3639336634

3 G. Arthanareeswaran, Modification of polymer membrane for ultrafiltration applications VDM Publishing House Ltd Germany,January 2010, ISBN : 978-3639290585

BOOK CHAPTER

1. B.Sasikumar, G. Arthanareeswaran, Ionic liquid membranes for gas separation, Ionic liquid-Based Technologies for Environmental Sustainability, Publisher: Elsevier 2021, Accepted
2. R. Sathish Kumar, G., Arthanareeswaran, Biofouling in a Membrane System: Mechanisms, Monitoring and Controlling, Nova Science Publishers, Inc. Book: Membrane Bioreactors and Fouling: A Review and Directions for Research Editor: Jose King,PP 71-101 (ISBN: 978-1-53614-363-8) 2018.
3. R.Saranya, Y. Lukka Thuyavan, G. Arthanareeswaran, Development of adsorbents based cellulose acetate mixed matrix membranes for removal of pollutants from textile industry effluent Membrane Technology for Water and wastewater treatment, Energy and Environment (ISBN 9781138029019, February 2016),CRC press, Taylor & Francis.
4. R. Sathish Kumar, G. Arthanareeswaran., A.F. Ismail, "Nuclear Magnetic Resonance (NMR) Spectroscopy." In Membrane Characterization, pp. 69-80. Elsevier, 2017.(ISBN: 978-0-444-63776-5)
5. G. Arthanareeswaran, Radhe Shyam Thakur, Effect of inorganic particle on the performance of polyethersulfone-cellulose acetate utrafiltration membranes, Sustainable Membrane Technology for Energy, Water and Environment, (ISBN: 978-1-118-02459-1, February 2012) John Wiley and Sons

RESEARCH INTERESTS

- Membrane preparation and formation
- Membrane processes which include reverse osmosis, nanofiltration, ultrafiltration for water and wastewater treatment
- Pressure-driven membrane processes, membrane bioreactor technology, colloidal and interfacial aspects of membrane processes.
- Hybrid organic-inorganic membranes for separation applications
- Improved membranes for small molecule separations based on structure water purification and desalination, fouling resistance

Development of membrane materials and membrane technology for energy related application is also of special interest.

MEMBERSHIP IN SCIENTIFIC SOCITIES

1. Life Member - Indian Institute of Chemical Engineers
2. Life member - International Association of Engineers (IAENG) (Membership Number: 126407)
3 Life member - World Academy of Science, Engineering and Technology

REFEREED CONFERENCES

1. K. Sriram, **G. Arthanareeswaran**, K.M.Meera.S.Begum, Effects of nano particles on sulfonated polyethersulfone membrane for fuel cell application. *11th International Conference on Membrane Science & Technology (MST2013) held in Kuala Lumpur, Malaysia on 27- 29 August 2013.*
2. Y.Lukka Thuyavan, R.Saranya, **G. Arthanareeswaran**, N.Anantharaman, A.F. Ismail Clarification of sugarcane fruit juice using alginate/Polyethersulfone blend ultrafiltration membranes. *11th International Conference on Membrane Science & Technology (MST2013) held in Kuala Lumpur, Malaysia on 27-29August 2013.*
3. Arjun Ramesh, Shyam Sundar, **G. Arthanareeswaran**, S. Velu L.Muruganandam, Utilizing Optimized Imidazolium functionalized Polysulfone in a completely noble metal free alkaline membrane Fuel Cell. *11th International Conference on Membrane Science & Technology (MST2013) held in Kuala Lumpur, Malaysia on 27- 29 August 2013.*
4. N. S. Gowrishankar, **G. Arthanareeswaran**, M. Raajenthiren. Modeling and simulation of ultrafiltration membrane process, *International Conference on Modeling and Simulation*, 27-29 August 2007, pp. 345-352 Coimbatore, India.
5. K.Balamurugan, V. Subramanian, **G.Arthanareeswaran**, S. Sundar Raman, Computation of interaction energy of polystyrene and polymethyl methacrylates in the interface based on its tacticity: a molecular modeling investigation, *International Conference on Modeling and Simulation*, 27-29 August 2007, pp. 247-251, Coimbatore, India,.

6. **G. Arthanareeswaran**, D. Mohan, M. Raajenthiran Effect of alumina particles on cellulose acetate ultrafiltration membranes, *International Conference on Catalysis in Membrane Reactors* December 18 - 21,2008, Kolkata, India.
7. **G.Arthanareeswaran**, P.Thanikaivelan, M.Raajenthiren, Characteristics, performance of blend CA/SPEEK ultrafiltration membranes prepared by phase separation method using PEG 600 as an additive,*7th International Conference on Membrane Science & Technology*, May 12-14,2009,Kuala Lumpur, Malaysia.
8. Radhe Shyam Thakur, Debjyoti Sen, **G. Arthanareeswaran,** Effect of inorganic particle on the performance of polyethersulfone-cellulose acetate blend ultrafiltration membrane, *7th International Conference on Membrane Science & Technology*, May 12-14,2009,Kuala Lumpur, Malaysia.
9. M. Subas Chandra Bose, **G. Arthanareeswaran**, M. Raajenthiran, Preparation, characterization and application of polymer ultrafiltration membranes, *2nd International Conference on Polymer Processing and Characterization,* January 15-17, 2010, Kottayam, India
10. **G. Arthanareeswaran**, S. Velu, Performance enhancement of polysulfone ultrafiltration membrane by blending with polyurethane hydrophilic polymer, *2nd International Conference on Polymer Processing and Characterization*, January 15-17, 2010, Kottayam, India
11. A. Ananth, K.Thiyagarajan, **G.Arthanareeswaran**, Preparation and Characterization of PES-TEOS composite membranes: performance studies, *2nd International Conference on Natural Polymers, Bio-Polymers, Bio-Materials, their Composites, Blends, IPNs, Polyelectrolytes and Gels: Macro to Nano Scales September 24-26, 2010, Kottayam, India*
12. **G. Arthanareeswaran**, B.G. Prakash Kumar, M. Subas Chandra Bose, Effect of blend composition on morphology, pore statistics and permeability of the microporous membrane prepared by polyethersulfone/gelatin polymer blend, *2nd International Conference on Natural Polymers, Bio-Polymers, Bio-Materials, their Composites, Blends, IPNs, Polyelectrolytes and Gels: Macro to Nano Scales September 24-26, 2010, Kottayam, India*
13. Harsha P. Srivastava, N. Anantharaman, **G. Arthanareeswaran,** Synthesis and Characterization of PVDF- Atactic PS Blend, *Symposium on Recent and Emerging Advances in Chemical Engineering*, December 2-4, 2010, Chennai, India.
14. Harsha P. Srivastava, N. Anantharaman, **G. Arthanareeswaran**, Study of Morphology, Crystallinity and Phase Behavior of PVDF-GPPS Blends Membranes from X-ray Diffractometry and Fourier Transform Infra Red Spectroscopy (in ATR Mode), *CHEMCON-2010*, 27-29 December 2010, Chidambaram, India.
15. **G. Arthanareeswaran,** Preparation polymer blend membrane for the separation of metal ions using micellar enhanced UF, *6th IWA Specialist Conference on Membrane Technology for Water & Wastewater Treatment*, 4-7 October 2011, Aachen, Germany

16. Harsha P. Srivastava, N. Anantharaman, **G. Arthanareeswaran**, Performance of modified poly (vinylidene fluoride) membranes synthesized using atactic polystyrene (aPS) for textile applications, *1st International Conference on Membranes,* September 16-19, 2011, Kottayam, India
17. K. Sriram, R. Saranya, Y. Lukka Thuyavan, **G. Arthanareeswaran**, N. Anantharaman, Victor M. Starov, Fabrication of inorganic nanoparticles based sulfonated polyethersulfone membrane for fuel cell applications, *EUROMEMBRANE 2012,* 23-27 September 2012, London, UK.
18. K. Sriram, Y. Lukka Thuyavan, **G. Arthanareeswaran**, N. Anantharaman, Wirote Youravong, Novel chicken egg white blend ultrafiltration membranes for fouling resistance, *10thInternational conference on membrane science & technology: MST 2012,* 22-23 August 2012, Bangkok, Thailand.
19. R. Saranya, **G. Arthanareeswaran** and M. Matheswaran, An integrated treatment system for the reuse of kraft paper mill effluent, *International conference on membrane science & technology: MST 2012 Sustainable Energy and Environment, 22-23 August 2012, Bangkok, Thailand.*
20. R. Saranya, Achal Agarwal , **G. Arthanareeswaran**, Novel mixed matrix membranes prepared from Polyacrylonitrile/Kaolinite polymer nanocomposite for wastewater treatment applications, *International conference on Global Sustainability and Chemical Engineering, 24-26 April 2012, Malaysia*

TEACHING EXPERIENCE

Undergraduate Courses taught

Chemical Process equipment Design and Drawing-I, Technical Analysis laboratory, Heat Transfer, Heat Transfer and mass transfer laboratory, Principles of Chemical Engineering, Petrochemical Process equipment Design and Drawing-I, Non Conventional Processes Project Engineering, Process Engineering Economics, Safety in Chemical Industries, New separation Processes, Heat Transfer laboratory.

Postgraduate Courses taught.

Industrial Instrumentation, Process equipment design, Modern Separation process, Design of heat transfer equipments, CL801- Membrane Separations Technology - Principles and Applications

PhD Course work taught

CL801- Membrane Separations Technology- Principles and Application

UNIVERSITY LEVEL

December 2012 - 2014	:	Member, Equipment Purchase committee, NITT
November 2012 - 2014	:	Chairman, Transport Section, NITT
January 2012	:	Chairman, Class committee, PAC, NITT
August 2012	:	Doctoral committee member, NITT
January 2011	:	Doctoral committee member, Anna University, Chennai, India
July 2010	:	Member, Screening Committee for faculty recruitment, NITT
April 2009	:	Member, PhD scholar selection Committee, NITT
March 2008	:	Staff In charge, ALCHEMY, Student symposium, NITT

G. Arthanareeswaran

RESEARCH VISITS ABROAD

Institution	Universiti Teknologi Malaysia
Country	Malaysia
Period	11-May-2009 to 16-May-2011
Purpose of Visit	To present a paper in 7th International Conference on Membrane Science & Technology,

Institution	University of Sao Paulo, Brazil.
Country	Brazil.
Period	30th January 2010 - 7th February 2010
Purpose of Visit	Research work under Indo- Brazil Joint collaboration Research Project

Institution	Loughborough University, UK
Country	UK
Period	1st June 2010 to 30th August 2010
Purpose of Visit	Research work under Research Exchange between India-UK

Institution	Monash University, Clayton, Australia
Country	Australia
Period	1st April 2011 to 30th August 2011
Purpose of Visit	Research work under Endeavour Executive Award, Australia

Institution	RWTH Aachen University
Country	Germany
Period	04 October 2011 to 07 October 2011
Purpose of Visit	To present a paper in 6th IWA Specialist Conference on Membrane Technology for Water & Wastewater Treatment

Institution	Centre for Surface Chemistry and Catalysis, KU Leuven
Country	Belgium
Period	08 October 2011
Purpose of Visit	To deliver lecture in Centre for Surface Chemistry and Catalysis, KU Leuven
Institution	Prince of Songkla University, Thailand
Country	Thailand
Period	21 August 2012 to 25 August 2012
Purpose of Visit	To present a paper in 10th International conference on membrane science & technology
Institution	Universiti Teknologi Malaysia
Country	Malaysia
Period	26 August 2013 to 30 August 2013
Purpose of Visit	To present a paper in 11th International conference on membrane science & technology
Institution	Konkuk University, SEOUL, 143-701, South Korea.
Country	South Korea
Period	7th March 2014 to 21st March 2014
Purpose of Visit	Research Activity under Indo- Korea Joint collaboration Research Project
Institution	Universiti Teknologi Malaysia
Country	Malaysia
Period	21st May 2015 to 14th June 2015
Purpose of Visit	Research network between Indian and Malaysia
Institution	Konkuk University, SEOUL, 143-701, South Korea.
Country	South Korea
Period	10th May 2016 to 13th February 2017
Purpose of Visit	Research work under Brainpool fellowship, South Korea
Institution	Loughborough University, UK
Country	UK
Period	17th May 2017 to 2nd June 2017
Purpose of Visit	Research Visit under Indo-UK Joint collaborative Research Project

Ph.D. Thesis Supervision

Name	Reg. Year	Title	Role/Status
Mr. S. A. Gokula Krishnan	2019	Surface-Constructing of Visible-Light Photocatalytic Nanocomposite grafted Membrane for Degradation of Tetracycline and Humic Acid	Supervisor/ on going
Mr.B. SasiKumar	2017	Enhancement of Membrane performance for CO2 Separation by Incorporating Ionic liquid and Amine Functionalized Metal-Organic Frameworks (MOFs)	Supervisor/ on going
Mr.G Gopi	2016	Identifying and improving the sustainability of water production using solar powered membrane distillation	Supervisor/ on going
Mr. G. Mahendran	2016	Process intensification by coupling photocatalysis and pervaporation	Supervisor/ on going
Ms. S. Elakkiya	2016	Multifunctional polymer mixed matrix membranes tailored with metal oxide and clay nanomaterial for fuel cell and water application	Supervisor/ on going
Ms. K. Deepa,	2016	Study of relationship between nanoparticle size and shape anisotropy influences on the membrane performance for fuel cell and salt rejection studies	Supervisor/ on going
Mr. Govardhanan	2015	Application of membranes for hemodialysis	Co-Supervisor /On going
Mr. K.Venkatesh	2014	Hierarchical structured electrospun membrane modified with nanomaterials for efficient oil in water emulsion separation	Co-Supervisor /On going
Mrs. S.Suchithra	2014	Performance evaluation of different Modifiers in polymer membranes for Wastewater treatment	Supervisor/ Thesis Submitted
Mr.K.Sriram	2013	Hydrophobically modified chitosan with inorganic Metal oxide as hybrid nanocarriers for controlled Curcumin (drug) delivery	Co-Supervisor /Completed
Mr. Om Ariara Guhan C. P.	2013	Numerical optimization and CFD to improve emissions of IC engines	Supervisor/ Completed
Mr. R.Sathish Kumar	2013	Quorum Sensing Inhibitors Embedded Polyethersulfone Membranes for Enhancement of Biofouling Resistance in Wastewater Treatment	Supervisor/ Completed
Mr. Y.Lukka Thuyavan	2011	Study on synthesis of polymeric porous membrane with nanoparticles and its applications	Co-Supervisor / Completed
Ms. R.Saranya	2012	Modification of polymeric membrane by mixed matrix method for recovery and reuse of Industrial Effluents	Supervisor/ Completed
Mr. S. Velu	2010	Development and performance studies of polymeric membrane for wastewater treatment	Research Advisor/ Completed
Mr.Harsh P. Srivastava	2009	Preparation and Characterization of modified PVDF membranes by DIPS method and its application for treatment of Industrial Effluents	Supervisor/ Completed

Post graduate thesis guidance

Sl No	Name	Year	M.Tech thesis Title	Role/Status
1.	Mr. Akilash	2022	ANN and machine learning for ultrafiltration process	Supervisor/ ongoing
2.	Mr. M.Muhammaed	2022	Development of COF based membranes for gas sensors	Supervisor/ ongoing
3.	Ms.C.Shanmathi	2021	Comparison of artificial neural Networks (ANN) and mathematical Hermia's models for the Performance evaluation of polymer ultrafiltration Membranes	Supervisor/ Awarded
4.	Mr. Sanjay Bisht	2020	Estimation of Gas Permeability of Polysulfone/ZIF-8 Hollow Fiber Membrane Using Gas Permeation Models	Supervisor/ Awarded
5.	Mr. M Vasanthkumar	2019	Modelling and simulation of airgap membrane distillation	Supervisor/ Awarded
6.	Mr. D.Teja Nayak	2019	Amino acid and ionic liquid embeded Polymeric membrane for treatment of Toxic waste	Supervisor/ Awarded
7.	Mr.G. Gnanaselvan	2018	Performance of composite PES/MOF-5 membranes for the treatment of textile wastewater	Supervisor/ Awarded
8.	Mr. Anirudh Singh	2018	Performance evaluation of photocatalytic membranes for the treatment of pharmaceutical waste	Supervisor/ Awarded
9.	Ms. Fahmi Anwar	2017	Carbon Membrane for Nitrogen and Methane Separation	Supervisor/ Awarded
10.	Mr. Yohannan Subin Sabilon	2017	Synthesis and characterisation of PEI/ZIF8 Membranes for removal Bisphenol A from water	Supervisor/ Awarded
11.	Mr. Mayank Shukla	2017	Dynamic modelling and experimental validation of Direct Contact Membrane Distillation (DCMD) using Computational Fluid Dynamics (CFD) and Monte Carlo Simulations	Supervisor/ Awarded
12.	Ms. Srividhya Saragadam	2017	Indirect Control of Substrate Concentration of Waste Water Treatment Plant by Dissolved Oxygen Tracking	Supervisor/ Awarded
13.	Mr. Robin Raj	2017	Sodium CMC/ZnO Nanocomposite for Enhanced Removal Performance of Membrane	Supervisor/ Awarded
14.	Mr.Vikas Kumar	2016	Sulfonated polyether ether ketone/clays nanocomposite membranes for fuel cell application	Supervisor/ Awarded
15.	Mr. M. Satya Narayana	2016	Empirical modelling and optimization of lignin removal by cross flow ultrafiltration	Supervisor/ Awarded
16.	Miss. S Aditya Kiran	2015	Influence of bentonite in polymer membranes for effective treatment of car wash effluent	Supervisor/ Awarded
17.	Miss. A Sumisha	2015	Functionalized titanate nanotube for improved salt rejection under low pressure nanofiltration	Supervisor/ Awarded
18.	Miss. Aruna Padigagi	2014	Development membranes dairy waste water treatment	Supervisor/ Awarded
19.	Miss. Lakra Reshma	2013	Novel Ultrafiltration membrane technology for separation of organic acids and reducing sugars from rice husk	Supervisor/ Awarded
20.	Mr. K.Sriram	2012	Studies on modified sulfonated Polyethersulfone membrane for fuel cell applications	Supervisor/ Awarded

21.	Miss. R.Saranya	2012	An Integrated membrane treatment system for recovery and reuse of kraft paper mill effluent	Supervisor/ Awarded
22.	Mr. T.Vamsi Krishna	2012	Modeling for fouling control in ultrafiltration cell	Supervisor/ Awarded
23.	Mr. D.Deepak	2011	Modeling of Performance characteristics of Ultrafiltration Process	Supervisor/ Awarded
24.	Miss. K.Udaya Kranthi	2010	Modification of batch membrane filtration process	Supervisor/ Awarded
25.	Mr. A. Sheik Alaudin	2009	Development of Polymeric membranes for wastewater treatment	Supervisor/ Awarded
26.	Mr. U. Ashok Kumar	2009	Studies on gel polarized layer resistance through flat sheet UF membrane using egg albumin solution	Supervisor/ Awarded
27.	Miss. T.K. Sriyamuna Devi	2008	Performance studies on ultrafiltration membrane process	Supervisor/ Awarded
28.	Miss. K.Vijayalakshmi	2007	Studies on the removal of hexavalent chromium using polymers	Supervisor/ Awarded
29.	Mr. K.Balamurugan	2006	Molecular modeling of Polymer blends	Supervisor/ Awarded
30.	Mr. N.S. Gowrishankar	2006	Modeling of ultrafiltration membrane process	Supervisor/ Awarded
31.	Mr. J. Abdoul Raguime	2005	Removal of toxic heavy metal from waste water by ultrafiltration	Supervisor/ Awarded

International Conference Organized

Seminar/Conference	Role	Organized by	Venue/Duration
INDIA-UK Scientific seminar on Current development of wastewater treatment in India	**Chairman**	The Royal Society, UK and, DST, India	NIT-Tiruchirappalli 30th August 2011 to 2nd September 2011
International Conference on Green Technology for Environmental Pollution Prevention and Control (ICGTEPC-2014)	**Secretary**	Self-supported	NIT-Tiruchirappalli September 27-29,, 2014
International Conference on Membrane Technology and Its Applications (MemSep2017)	**Secretary**	Indian Membrane Society	NIT-Tiruchirappalli 2017-02-21 To 2017-02-23
International Conference on Desalination (InDACON 2018)	**Secretary**	Indian Desalination Association	NIT-Tiruchirappalli April 20-21, 2018
International conference on multifunctional and hybrid composite materials for energy, Environment and medical applications (ICMHCEE 2019)	**Convenor**	Self-supported	9 to 11 September 2019.

Plenary Lecture/Keynote address abroad

Title/event	Seminar/Conference/university	Year
Keynote address at Regional Congress on Membrane Technology 2020 (RCOM 2020	Universiti Teknologi Malaysia, Malaysia	**2021**
Keynote address at Chemicals & Materials for Emerging Technologies (CheMET) 2020	Qatar University, Qatar	**2020**
Keynote address at The 10th International Conference of Muhammadiyah and Aisyiah Higher Education Association (ICMAHEA)	Universitas Muhammadiyah Palembang, Indonesia	**2020**

Invited Talk	Jeju National University, South Korea	**2020**
Invited Talk	SKKU, South Korea	**2020**
Invited Talk	Konkuk University, South Korea	**2019**
Invited Lecture	University Szeged, Hungary	**2019**
Invited Lecture	Prince of Songkla University, Thailand	**2019**
Invited Lecture Water Research day	Loughborough University, UK	**2018**
Invited Lecture Water Research day	Loughborough University, UK	**2017**
13th International Conference On Membrane Science And Technology (MST 2017)	Keynote Speaker/ Diponegoro University, Indonesia	**2017**
Invited Seminar Series	Invited Seminar/ Kyungpook National University ,South Korea	**2015**
Invited Seminar Series	Invited Seminar/ Kyungpook National University ,South Korea	**2014**
11th International Conference on Membrane Science & Technology Malaysia on 27- 29 August 2013	Invited Talk, UTM, Malaysia	**2013**
International Scientific Collaboration Programme	Loughborough University, UK	**2010**

Invited Lecture in conference in India

Title/event	Seminar/Conference/university	Year
India-Canada Bilateral Virtual Conference On "Waste To Wealth" (W2w-2021),	SASTRA University, Tanjore, India	**2021**
International Online Congress On Membranes And Membrane Assisted Processes(ICMMAP 2021)	MG University, Kottayam, India	**2021**
INDO-ISRAEL SPARC Workshop "Membranes in Water Treatment: Opportunities & Challenges	Cochin University of Science and Technology (CUSAT), Kochi, Kerala, India	**2020**
International Online Conference onSustainable Technologies in Water Treatment and Desalination (STWTD – 2020)	National Institute of Technology Calicut, India	**2020**
Indo-German Bilateral Workshop on Membranes for Water and Energy (IGWMWE-19), 18-20 February, 2019	CSIR-CSMCRI, Bhavnagar-364002 (Gujarat) India.	2019
National Conference on Advances in Bioprocess & Downstream Process/ Advances in Bioprocess and Down	PSG College of Technology Coimbatore, India	**2016**
National workshop on nanoscience and nanotechnology (NWNST-2016)	Pondicherry University, Pondicherry, India	**2016**
Treatment of pollutant from water and air performance enhanced membrane separations /International conference on WATER from Pollution to Purification	MG University, Kottayam, India	**2015**
International conference on Recent Advances in Physics for Interdisciplinary Developments/ Emerging nanotechnology for membrane development and its application on energy efficient processes	Sathyabama University, India	**2014**

National conference on "National technologies for ecotechnologies for wastewater treatment: present challenges and future horizons/ Membrane separation technology for sustainable	Bharathiyar University, Coimbatore	**2014**
Second International conference on Membranes/ Application of bio polymer membrane materials for advance membrane separation process	Mahatma Gandhi University, Kottayam,India	**2013**
International conference on Membranes; Biological and Environmental Applications	MG University, Kottayam, India	**2011**

Plenary lecture/Keynote address in India

Title/event	Seminar/Conference/university	Year
Future of membrane process in green technologies and for water reuse,	International Conference on Recent Advances in Space Technology Applications & Climate Change, Sathyabama University, Chennai, India,14th November, 2010	Key note address
Emerging Technology of Nano membranes for promising Environmental Applications	2nd National Conference on nanotechnology: applications and its advantages in natural science, Manonmaniam Sundaranar University, India 5th February, 2011	Plenary Lecture
Membrane Separation Technologies, Application of Membranes to the Industrial Effluent Treatment	Short Term Training Programme on Industrial Effluent Treatment - Emerging Trends & Challenges Ahead, Annamalai University, India,15th June, 2012	Key note address
Emerging membrane technology for wastewater reuse and environmental protection	4th National conference on Application of the derivatives of chitin and chitosan 22nd and 23rd August 2014, held in India	Key note address

Editor Responsibilities

Journal Name	Role and Responsibilities	Publishers	SCI/SCIE /Scopus
Jurnal Teknologi	Editorial Board Member	UTM press	Scopus
Journal of Membrane and Separation Technology	Editorial Board Member	Lifescience global	Scopus
Journal of Applied Membrane Science & Technology,	Editorial Board Member	UTM press	Scopus
Membrane Water treatment	Guest Editor	Techno Press	SCIE
Ecotoxicology and Environmental Safety,	Guest Editor	Elsevier,	SCI
Desalination,	Guest Editor	Elsevier,	SCI
Pharmaceutics	Guest Editor	MPDI	SCIE
Desalination and water treatment	Guest Editor	Springer	SCIE
Asia-Pacific Journal of Chemical Engineering	Guest Editor	Wiley and Sons	SCIE
Emergent Materials	Associate Editor	Springer Nature	Scopus

Evaluation of doctoral thesis from other Universities

Sl.No	PhD Thesis Title	University/Institute	Year
1	Synthesis, Optimization and re-usability of bulk and supported Cesium Tungstophosphoric acid catalysis for trans-esterification reactions in Bio-Diesel production	Sathyabama University, India	2009
2	A study on excess thermodynamic properties of binary liquid mixtures containing dissolved inorganic salts	Anna University, India	2010
3	Studies on preparation and performance of biopolymeric membranes	Anna University, India	2010
4	Studies on removal of textile dyes from aqueous solution using minerals	Anna University, India	2010
5	Experimental Investigation on cold start emissions using electrically heated catalyst	M.G.R Educational and Research Institute University, Chennai, India	2010
6	Direct Conversion of tapioca stems Variance 226 white rose to ethanol by Fusarium oxysporum	Annamalai University, India	2010
7	Chemical and biological approaches in removal of dyestuff and metal ions from effluent treatment plant	Manonmaniam Sundaranar University, India	2013
8	Microbial decolourization of textile dyeing effluent	Annamalai University, India	2013
9	Development and characterisation of thermoplastic polyurethane-natural rubber / epoxidised natural rubber blends and their chitin reinforced composites	Calicut University, India	2013
10	Fermentative production and modeling of xylitol	Annamalai University, India	2013
11	Adsorption of textile dye effluent using activated carbon obtained from biomass	Anna University, India	2014
12	Batch fermentation studies on alkaline protease production using synthetic and complex medium by newly isolated *Bacillus Subtilis* AKRS3	Anna University, India	2014
13	Studies on idly batter fermentation-kinetics and modelling	Annamalai University, India	2014
14	Chromium (VI) adsorption from aqueous solution by Codium Tomentosum biomass	Anna University, India	2015
15	Flux decline and fouling of nanofiltration membranes during salt reclamation from dye wasterwater	Karunya University Coimbatore, India	2015
16	Analysis of toxic heavy metal contamination in an aquatic system	Sathyabama University, India	2015
17	Design and Experimental studies on variable header solar water heater system	Anna University, India	2017
18	Modeling, Simulation and Optimization of the Removal of Volatile Organic Compounds from Aqueous Solutions Pervaporation: Influence of permeate side pressure build-up	Jawaharlal Nehru Technological University Anantapur, India	2017
19	Phytofabrication of silver nanoparticles with modified clay nanocomposites for dye adsorption from aqueous solution: Equilibrium modeling and kinetic studies	Manonmaniam Sundaranar University, India	2017

20	Synthesis and Investigation on Effect of Mn Substitution Cobalt Ferrites Ferrofluids and its Applications	Anna University, India	2018
21	Studies on bio-oil from microalgae and cashew nut shell	Pondicherry University, India	2018
22	Investigations on ZnO-Graphene Oxide Nanomaterials and Nanocomposites: Synthesis, Functional Properties and Applications	Cochin university of science and technology, India	2019
23	Facile synthesis and characterization of compositionally modified Titania based nano materials to enhance sunlight photocatalytic activity	Anna University, India	2020
24	Experimental study on biodegradation of dairywastewater using upflow anaerobic sludge fixed film reactor	Annamalai University, India	2020
25	Adsorption of methylene blue from aqueous solution using polyacrylonitrile based nanofibrous composites	Anna University, India	2021