



# SRM Valliammai Engineering College


(An Autonomous Institution)

SRM Nagar, Kattankulathur-603203, Kancheepuram District, Tamil Nadu

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## Department of Chemistry

### Personal Details

<b>Name :</b>	Dr. P. Maheswari		
<b>Designation :</b>	Assistant Professor (O.G)		
<b>Educational Qualification :</b>	M.Sc., Ph.D.		
<b>Experience:</b>	8 Years		
<b>Area of Specialization :</b>	Membrane Science, Polymers, Waste Water Treatment, biofouling Nanomaterials, Environmental studies and applications		
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### Educational Details

S.No	Degree	Branch/Specialization	Institution / University	Year
1	B.Sc.,	Chemistry	Seethalakshmi Ramaswami College, Trichirapalli, Tamilnadu, India.	2007
2	M.Sc.,	Chemistry	Madras Christian College (Autonomous), University of Madras	2009
3	Ph.D.	Chemistry	Anna University, Chennai, India	2013

### Professional Society Memberships

1. The Indian Society for Technical Education: Life Member
2. Indian Society of Systems for Science & Engineering: Life Member
3. International Society for Development and Sustainability : Associate Member
4. International Association of Engineers: Life Member

### Publication Details

#### Journals:

1. **Purushothaman Maheswari**, Doraiswamy Raju Mohan, Adikesavan HariKrishnan, Ramachandran Sivaramakrishnan, Arivalagan Pugazhendhi, Impact of nano-ZnO consolidated poly (ether ether sulfone) nano filtration membrane for evacuation of hazardous metal particles, [Chemosphere](#), Available online 25 February 2022, 134024. **(Impact Factor: 7.086)**
2. **Maheswari Purushothaman**, Varshni Arvind, Kongkona Saikia, Vinoth Kumar Vaidyanathan, Fabrication of highly permeable and anti-fouling performance of Poly(ether ether sulfone) nanofiltration membranes modified with zinc oxide nanoparticles, [chemosphere](#), 286(2022) <https://doi.org/10.1016/j.chemosphere.2021.131616> **(Impact Factor: 7.086)**

3. Jenet George , **Maheswari Purushothaman** , Isita Singh , Ishani Singh , Vinoth Kumar Vaidyanathan, Performance study of fouling resistant novel ultrafiltration membranes based on the blends of poly(ether ether sulfone)/poly (vinyl pyrrolidone)/nano-titania for separation of humic acid, dyes and biological macromolecular proteins from aqueous solutions, 10 (424) 2021. DOI: [10.1016/j.jhazmat.2021.127467](https://doi.org/10.1016/j.jhazmat.2021.127467). **(Impact Factor: 10.588)**
4. Abiram Karanam Rathankumar, Kongkona Saikia, Maria H. Ribeiro Chin Kui Cheng, **Maheswari Purushothaman**, Vinoth kumar Vaidyanathan, Application of statistical modeling for the production of highly pure rhamnolipids using magnetic biocatalysts: Evaluating its efficiency as a bioremediation agent, Journal of Hazardous Materials, 412, 2021. <https://doi.org/10.1016/j.jhazmat.2021.125323>**(Impact Factor: 10.588)**
5. **Maheswari P.**, Gunasekaran S. G., Devaraj Stephen L. Removal of Arsenic, nitrate and fluoride by PEES/Nano- Silver Hybrid Membranes, Research Journal of Chemistry and environment, 25 (9); 107-112. DOI:[10.25303/259rjce107112](https://doi.org/10.25303/259rjce107112)**(Impact Factor: 0.46)**
6. **P.Maheswari** and Dharshiha.G Removal of Pathogens From Waste Water By Membrane Technique: A Review, International Journal of Science, Engineering and Technology, 7:3 ISSN (Online): 2348-4098 ISSN (Print): 2395-4752.
7. **P. Maheswari** and Poornima, REMOVAL OF BORON BY DESALINATION PROCESS – A REVIEW, International Journal of Scientific & Engineering Research Volume 10, Issue 7, July-2019 ISSN 2229-5518 791.
8. G. Kalaiselvi , **P. Maheswari** , S. Balasubramanian , D. Mohan Synthesis and characterization of poly 3-methyl 2-vinyl pyridinium nitrate incorporated polyvinylidene fluoride ultrafiltration membrane for metal ion removal, Separation and Purification Technology 143, 2015, 105-114. <https://doi.org/10.1016/j.seppur.2015.01.034> **(Impact Factor: 7.312)**
9. G. Kalaiselvi , **P. Maheswari** , S. Balasubramanian , D. Mohan Synthesis, characterization of polyelectrolyte and performance evaluation 2 of polyelectrolyte incorporated polysulfone ultrafiltration membrane for metal ion removal, Desalination 325 (2013) 65–75. <https://doi.org/10.1016/j.desal.2013.06.023>**(Impact Factor: 9.55)**
10. **Maheswari.P.**, Barghava.P Mohan.D, Preparation, morphology,hydrophilicity and performance of poly(ether-ether-sulfone) incorporated cellulose acetate ultrafiltration membranes, Journal of Polymer research, 20(74), 2013 [DOI 10.1007/s10965-013-0074-z](https://doi.org/10.1007/s10965-013-0074-z) **(Impact Factor: 3.097)**
11. **Maheswari, P.** and Mohan, D. “Effect of poly (ether-ether-sulfone) concentration on the Morphology, Performance, Thermal stability, Mechanical strength and Antifouling of Asymmetric Cellulose acetate Ultrafiltration membranes”, High Performance Polymers, September 2013; vol. 25, 6: pp. 641-651. <https://doi.org/10.1177/0954008313477877> **(Impact Factor: 1.09)**
12. **Maheswari, P.**, Prasannadevi, D. and Mohan, D. “Preparation and performance of silver nanoparticles (Ag-Np)incorporated polyetherethersulfone nanofiltration membranes” High Performance Polymers, March 2013; vol. 25, 2: pp. 174-187. <https://doi.org/10.1177/0954008312459865> **(Impact Factor: 1.09)**
13. Rajesh, S., **Maheswari, P.**, Senthilkumar, S., Jayalakshmi, A. and Mohan, D “Preparation and characterisation of poly (amide-imide) incorporated cellulose acetate membranes for polymer enhanced ultrafiltration of metal ions”, Chemical Engineering journal, Vol. 171, pp.33–44, 2011 **(Impact Factor: 13.273)**

## Book Chapter

**Title of the Book :** Biosorption for Waste water Contaminants

**Topic:** Application of Electrospun Membranes Immobilized with Biosorbents for the removal of contaminants , 2021.

**Publisher:** Wiley Online Library Publications.

**Conferences: 25**

### **Research and Development Details**

1. No. of Research Projects Completed: NIL
2. No. of Patents Filed: 01
3. No. of Ph.D candidates guided/guiding: 01
4. No of Conferences Convened: Nil

### **Other Particulars**

1. No. of STTP/FDP Attended: 25
2. Guest Lecture Organised: 03
3. Research Recognition: Anna University Recognized Supervisor
4. Others:

#### **ATAL- FDP**

1. I was participated & completed successfully ATAL-FDP on “**Desalination by Using Green Technology**” from 09/08/2021 to 13/08/2021 at National Institute of Foundry and Forge Technology.
2. I was participated & completed successfully ATAL-FDP on “**Weste Technology**” from 02/08/2021 to 06/08/2021 at National Power Training INstituute -Shivpuri
3. I was participated & completed successfully ATAL-FDP on “**Electrospinning Nanofibers Science, Technology and Applications**” from 07/12/2021 to 16/07/2021 at National Power Training Instituute -Shivpuri
4. I was participated & completed successfully ATAL-FDP on “**Energy Storage**” from 10/05/2020 to 09/10/2020 at Bharthiyar University.

#### **NPTEL/NITTR Online Course:**

1. I was successfully completed Module1: Orientation Towards Technical Education and Curriculum Aspects.
2. I was completed the NPTEL course Titled “Nanotechnology in Agriculture” and received Elite Certificate.

#### **Honours and Awards**

- ❖ Young Scientists Award
- ❖ Participated in 59 th meeting of Nobel Laureates to be held at 2009 Lindau in Germany
- ❖ National Youth leadership Award, NCC Directorate Rajasthan
- ❖ Best outgoing NCC cadet
- ❖ Secured I st Rank M.Sc
- ❖ Best Paper Award