<table>
<tr><td>Name:
Dr. S. Neelakandan</td><td colspan="4">Photo
  </td></tr>
<tr><td>Designation:</td><td colspan="4">Associate Professor</td></tr>
<tr><td>Qualification:</td><td colspan="4">MSc. B.Ed, M.Phil, Ph.D, Post Doc</td></tr>
<tr><td>Area of specialization:</td><td colspan="4">Polymer Materials</td></tr>
<tr><td rowspan="2">Experience:</td><td colspan="2">Industrial Experience</td><td colspan="2">Teaching Experience</td></tr>
<tr><td colspan="2">3.4 Years</td><td colspan="2">3.4 years</td></tr>
<tr><td rowspan="2">Number of workshops / FDP attended:</td><td colspan="2">Number of Workshops</td><td colspan="2">Number of FDPs</td></tr>
<tr><td colspan="2">5</td><td colspan="2">5</td></tr>
<tr><td rowspan="3">Publications:</td><td colspan="2">Conference</td><td colspan="2">Journal</td></tr>
<tr><td>National</td><td>International</td><td>National</td><td>International</td></tr>
<tr><td></td><td></td><td></td><td>25</td></tr>
<tr><td>Books / Book Chapters</td><td colspan="4">-</td></tr>
<tr><td rowspan="2">Patents:</td><td colspan="2">National</td><td colspan="2">International</td></tr>
<tr><td colspan="2">1</td><td colspan="2"></td></tr>
<tr><td>Professional Body Membership</td><td colspan="4">IEEE, American Chemical Society</td></tr>
<tr><td>Staff Achievements</td><td colspan="4">Skill Rack appreciation Award for Two Years (2022-2023, 2024-2025)</td></tr>
</table>

Educational Qualifications:

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks / Grades obtained	Class obtained
UG	B.Sc	Chemistry	2008	Khadir Mohideen College, Adirampatinam	Bharathidasan University	70.7	I
	B.Ed	Education	2011	Alagappa University College of Education	Alagappa University	76	I
PG	M.Sc	Chemistry	2010	Khadir Mohideen College, Adirampatinam	Bharathidasan University	70	I
	M.Phil	Chemistry	2012	Alagappa Govt Arts College	Alagappa University	73.5	*I*
PhD	PhD	Chemistry	2016		Alagappa University		

Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Sri SaiRam Institute of Technology	**Associate Professor**	01.07.2022	30.06.2025	3	0	0
Sri SaiRam Engineering College	**Associate Professor**	01.07.2025	Till Date		4	

Workshops/Seminars attended:

1. **S. Neelakandan**, K. Malaivizhi, A. Nagendran. Preparation, characterization and performance of Cellulose acetate/Pvdf-Hfp blend ultrafiltration membranes. "International Conference on Recent advances in textile and electrochemical sciences-2013" (RATES-2013), 21-23 March, Karaikudi, India.
2. **S. Neelakandan,** A. Nagendran. Poly (ether sulfone)/sulfonated poly (ether imide) blend UF membranes: Preparation, characterization, performance and anti-fouling properties, National seminar on "Advances in membrane process & materials" (AMPM-13), 6th April-2013, Baroda, India.

3. **S. Neelakandan,** A. Nagendran. Development of surface-modified PEM blends on SPEES/cSMM for H_2/O_2 fuel cell application. National conference on "Emerging trends in electrochemical engineering, science and technology" (NCE-18), 23-24 July 2014, Madurai, India.
4. **S. Neelakandan**, M. Kavitha rani, A. Nagendran, Polymer electrolyte based on sulfonated poly(1,4-phenylene ether ether sulfone)/cSMM for H_2/O_2 application. National seminar "Frontier areas in chemical technologies-2015" (FACTs-2015), 6-7March 2015, Karaikudi, India.
5. **S.Neelakandan,** A. Nagendran. Effect of PPy layer on SPEES/HPA composite membranes for DMFC application. International conference on "Membrane-based separations" (MEMSEP 2015), 21-23 March 2015, Baroda, India.

FDP/STTP Attended:

1. **Essential industrial chemistry for engineers** *Conducted by* Applied Science Department from 05/09/2022 to 09/09/2022 (One Week) at Sathyabama Institute of Science and Technology, deemed to be University, Chennai (Tamil Nadu)
2. **Recent research in Material Physics, Conducted by Department of Physics and IQAC** from 21/11/2022 to 25/11/2022, at Rajapalayam Raju's College.
3. **2D Nanomaterials: Potential & Applications through ICT,** conducted by Applied Science Department from *17.10.2022* to *21.10.2022* (One Week) at Sathyabama Institute of Science and Technology (Deemed to be University), Chennai (Tamil Nadu)
4. **Spectroscopy and chromatographic Techniques,** Conducted by Shri Vaishnav institute of Science **from 24/04/2023 to 28/04/2023 at Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indoor**
5. **Energy Storage Systems**, Department of ECE**, Sri SaiRam Engineering College, 05.02.2024 to 10.02.2024**

Symposium Attended:

-

Conference Attended:

Completed / Ongoing Projects:

Patent:

Journal Publications:

List of Publications:

1. **S. Neelakandan**, S. R. Srither, N. R. Dhineshbabu, Suman Maloji, Oscar Dahlsten, Ramachandran Balaji, and Ragini Singh. "Recent advances in wearable textile-based triboelectric nanogenerators." **Nanomaterials** 14, no. 18 (2024): 1500. **Impact factor** : 4.3
2. **S. Neelakandan**, Li Wang, Meishao Hu; Lei Wang et al, Branched polymer materials as proton exchange membranes for fuel cell applications, **Polymer Reviews**, 2021, 3: 1-35, **Impact factor: 11.9**

3. **S. Neelakandan**, Dong Liu, Li Wang, Meishao Hu; Lei Wang, Highly branched poly(arylene ether)/surface fictionalized fullerene based composite membrane electrolyte for DMFC applications- "**International Journal of Energy Research**" 43(8), 2019: 3756-3767, **Impact factor: 4.3**
4. **S. Neelakandan,** Ramachandran, R., Fang, M. and Wang, L., 2020. Improving the performance of sulfonated polymer membrane by using sulfonic acid functionalized hetero-metallic metal-organic framework for DMFC applications. **International Journal of Energy Research**, 44(3), 2020; 1673-1684. **Impact factor: 4.3**
5. **S. Neelakandan**, A. Muthumeenal, D. Rana, NJ. Kaleekkal, A. Nagendran, Sulfonated poly(phenylene ether ether sulfone) membrane tailored with layer-by-layer self-assembly of poly(diallyldimethylammonium chloride) and phosphotungstic acid for DMFC applications. **Journal of Applied Polymer Science**, 136 (16), 2019: 47344, **Impact factor: 2.8**
6. **S. Neelakandan**, P. Kanagaraj, A. Nagendran, D. Rana, T. Matsuura, A. Muthumeenal. Enhancing proton conduction of sulfonated poly (phenylene ether ether sulfone) membrane by charged surface modifying macromolecules for H_2/O_2 fuel cells. **Renewable Energy** 78 (2015) 306-313. **Impact factor: 9.1**
7. **S. Neelakandan**, P. Kanagaraj, RM. Sabarathinam, A. Nagendran. Polypyrrole layered SPEES/TPA proton exchange membrane for direct methanol fuel cells. **Applied Surface Science** 359 (2015) 272-279. **Impact factor: 6.9**
8. **S. Neelakandan**, N.J. Kaleekkal, P. Kanagaraj, RM. Sabarathinam, A. Muthumeenal, A. Nagendran. Effect of sulfonated graphene oxide on the performance enhancement of acid-base composite membranes for direct methanol fuel cells. **RSC Advances** 6 (2016) 51599-51608. **Impact factor: 4.6**
9. **S. Neelakandan**, D. Rana, T. Matsuura, A. Muthumeenal, P. Kanagaraj, A. Nagendran. Fabrication and electrochemical properties of surface modified sulfonated poly (vinylidenefluoride-co-hexafluoropropylene) membranes for DMFC application. **Solid State Ionics** 268 (2014) 35-41, **Impact factor: 3.3**
10. **S. Neelakandan**, P. Kanagaraj, RM. Sabarathinam, A. Muthumeenal, A. Nagendran. SPEES/PEI-based highly selective polymer electrolyte membranes for DMFC application. **Journal of Solid State Electrochemistry** 19 (6) (2015) 1755-1764. **Impact factor: 2.6**
11. M. Hu, J. Ni, B. Zhang, **S. Neelakandan,** L. Wang, Crosslinked polybenzimidazoles containing branching structure as membrane materials with excellent cell performance and durability for fuel cell applications. **Journal of Power Sources** 389 (2018) 222-229. **Impact factor: 7.9**
12. Hu, M., Li, T., **Neelakandan, S**., Wang, L., & Chen, Y. (2020). Cross-linked polybenzimidazoles containing hyperbranched cross-linkers and quaternary ammoniums as high-temperature proton exchange membranes: Enhanced stability and conductivity. **Journal of Membrane Science**, 593, 117435. **Impact factor**: **9.0**
13. H. Li, B. Zhang, W. Liu, B. Lin, Q. Ou, H. Wang, M. Fang, D. Liu, **S. Neelakandan**, L. Wang, Effects of an electrospun fluorinated poly(ether ether ketone) separator on the enhanced safety and electrochemical properties of lithium ion batteries. **Electrochemica Acta** 290 (2018) 150-164. **Impact factor: 5.6**
14. Fang, M., Liu, D., **Neelakandan, S**., Xu, M., Liu, D., & Wang, L. (2019). Side-chain effects on the properties of highly branched imidazolium-functionalized copolymer anion exchange membranes. **Applied Surface Science**, 493, 1306-1316. **Impact factor: 6.9**
15. A. Muthumeenal, **S. Neelakandan**, P. Kanagaraj, A. Nagendran. Synthesis and properties of novel proton exchange membranes based on sulfonated polyethersulfone and N-phthaloyl chitosan blends for DMFC applications. **Renewable Energy** 86 (2016) 922-929, **Impact factor: 9.1**
16. A. Muthumeenal, **S. Neelakandan**, D. Rana, T. Matsuura, P. Kanagaraj, A. Nagendran. Sulfonated Polyethersulfone (SPES)–Charged Surface Modifying Macromolecules (cSMMs) Blends as a Cation Selective Membrane for Fuel Cells. **Fuel Cells** 14 (6) (2014) 853-861. **Impact factor: 3.1**

17. A. Uma Devi, **S. Neelakandan,** A. Nagendran, Highly selective sulfonated poly (vinylidene fluoride-cohexafluoropropylene)/poly (ether sulfone) blend proton exchange membranes for direct methanol fuel cells. **Journal of Applied Polymer Science** 133 (36) 2016. **Impact factor: 2.8**
18. P. Kanagaraj, **S. Neelakandan**, A. Nagendran, Preparation, characterization and performance of cellulose acetate ultrafiltration membranes modified by charged surface modifying macromolecule, **Korean Journal of Chemical Engineering** 31(2014) 1057-1064. **Impact factor: 3.2**
19. P. Kanagaraj, **S. Neelakandan** and A. Nagendran, Poly (ether imide) membranes modified with charged surface modifying macromolecule-Its performance characteristics as ultrafiltration membranes. **Journal of Applied Polymer Science** 131 (2014) 40320. **Impact factor: 2.8**
20. P. Kanagaraj, A. Nagendran, D. Rana, T. Matsuura and **S. Neelakandan**, Separation of macromolecular proteins and rejection of toxic heavy metal ions by PEI/cSMM blend UF membranes. **International Journal of Biological Macromolecules** 72 (2015) 223-229. **Impact factor: 8.5**
21. P. Kanagaraj, A. Nagendran, D. Rana, T. Matsuura, **S. Neelakandan**, T. Karthikkumar, A. Muthumeenal. Influence of N-phthaloyl chitosan on poly (ether imide) ultrafiltration membranes and its application in biomolecules and toxic heavy metal ion separation and their antifouling properties. **Applied Surface Science** 329 (2015) 165-173. **Impact factor: 6.9**
22. P. Kanagaraj, **S. Neelakandan,** A. Nagendran, D. Rana, T. Matsuura, A. Muthumeenal. Performance studies of PEI/SPEI blend ultra-filtration membranes via surface modification using cSMM additives. **RSC Advances** 5 (35) (2015) 27594-27602. **Impact factor: 4.6**
23. P. Kanagaraj, A. Nagendran, D. Rana, T. Matsuura, **S. Neelakandan,** K. Malarvizhi. Effects of Poly (Vinyl Pyrrolidone) on the Permeation and Fouling-Resistance Properties of Poly (Ether Imide) Ultra-Filtration Membranes. **Industrial & Engineering Chemistry Research** 54 (2015) 4832-4838. **Impact factor: 3.9**
24. P. Kanagaraj, A. Nagendran, D. Rana, T. Matsuura, **S. Neelakandan**, R. Revathi, N. Pandiyarajan. Performances of poly (vinylidene fluoride-co-hexafluoropropylene) ultrafiltration membranes modified with poly (vinyl pyrrolidone). **Polymer Engineering & Science** 55 (11) (2015) 2482-2492. **Impact factor: 2.573**
25. P. Kanagaraj, **S. Neelakandan**, A. Nagendran, D. Rana, T. Matsurra, M. Shalini. Removal of BSA and HA Contaminants from Aqueous Solution Using Amphiphilic Tri-block Copolymer Modified Polyetherimide UF Membrane and Their Fouling Behaviors. **Industrial & Engineering Chemistry Research** 54 (2015) 11628-11634. **Impact factor: 3.9**

Books / Book Chapters:
-

Awards:
Skill Rack appreciation Award for Two Years (2022-2023, 2024-2025)

Startup: -

Webinar: -

Resource Person:-

Online Courses:

1. NPTEL: Air pollution and Control
2. NPTEL: Sustainable Engineering Concepts and Life Cycle Analysis
3. NPTEL: Applied Environmental Microbiology
4. NPTEL: Integrated waste management for Smart Cities