Dr. M. Ramesh Prabhu
Assistant Professor

Contact

Address : Department of Physics
Science Block
Alagappa University
Karaikudi – 630 004
Tamil Nadu, INDIA
Employee Number : 11407
Date of Birth : 12-12-1983
Contact Phone (Office) : +91 4565 223315
Contact Phone (Mobile) : +91 9688703929
Contact e-mail(s) : mkram83@gmail.com

Academic Qualifications: M.Sc., Ph.D.

Teaching Experience: 04 Years 10 months

Research Experience: 10 Years

Areas of Research

Solid State Ionics, Fuel Cells, Batteries, Nanocomposites.

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	01	08
	M.Phil.	08	04
Project	PG	17	05

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
26	18	5	18	-

Cumulative Impact Factor (as per JCR) : 52.26
h-index : 06
i10 index : 04
Total Citations : 193

Funded Research Projects

Ongoing Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	UGC	2013	2017	Investigations on nanofiller incorporated PEMA composite electrolyte for lithium batteries	9.68

Distinctive Achievements / Awards

1. RFSMS Fellow during 2008 to 2010

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized:

1. National seminar on Advanced Materials Research

Events Participated

Conferences / Seminars / Workshops:

International

1. Eleventh International Symposium on Advances in Electrochemical Science and Technololgy (iSAEST-11, 2016), Society for Advancement of Electrochemical Science and Technology(SAEST) with CSIR-CECRI, Chennai, 8-10 December 2016.

2. Asian Consortium on Computational Materials Science (ACCMS), SRM University, SRM Research Institute and Department of Physics and Nanotechnology, Chennai, 22-24 September 2016.

3. International Seminar on Nanoscience and Technology (ISNST-2016), Department of Physics, Mother Teresa Women's University, Kodaikanal, 20 September 2016.

4. International Seminar on Nanoscience and Technology (ISNST-2016), Department of Physics, Mother Teresa Women's University, Kodaikanal, 20 September 2016.

5. International Conference on Functional Materials (ICFM-2016) Center for Scientific and Applied Research, PSN College of Enginneering and Technology, Tirunelveli, 07-10 September 2016.

6. International conference on materials for sustainable future (ICMSF-2016), Department of Chemistry, Sastra University, Thanjavur, 14&15 July 2016.

7. International conference on Frontier Areas in Chemical Technologies (FACTs-2016), Department of Industrial Chemistry, Bioelectronics & Biosensors, Nanoscience and Technology, Alagappa University, Karaikudi, 06 & 07 March 2016.

8. International Conference on Frontiers in Nanoscience and Nanotechnonology, Sastra University, Thanjavur, 26-28 February 2016.

9. 60th DAE Solid State Physics Symposium, Amity University, Noida, Uttar Pradesh, 21-25 December 2015.

10. International conference on Recent Advances in Materials and Chemical Sciences (ICRAMCS-2015), Department of Chemistry, Gandhigram Rural Institute - Deemed University, Gandhigram, 14-15 December 2015.

11. International Conference on Condensed Matter & Applied Physics (ICC-2015), Government Engineering College, Bikaner, Rajasthan, 30&31 October 2015.

12. International conference on Recent Advances in Materials (ICRAM-2015), Tiruchirapalli, 16 & 17 October 2015.

13. International Conference on Recent Advances in Nano Science and Technology (RAINSAT-2015), Sathyabama University, Chennai, 8-10 July 2015.

14. 2nd International conference on advanced functional materials (ICAFM 2014), CSIR-National Institute for Interdisciplinary Science & Technology, Thiruvananthapuram, 19-21 February 2014.

15. 5th ESIS TC4 conference, Les Diablerets, Switzerland, 7-11 September 2008.

16. Junior EUROMAT, Lausanne, Switzerland, 14-18 July 2008.

17. International conference on Nano science and Technology, IGCAR, Kalpakkam, 27-29 February 2008.

18. International conference on Advancement of nanoscience and nanotechnology (ICOANN-10), Department of Nano Science and Technology, Alagappa University, Karaikudi, 1-3 March 2010

National

1. National Conference on Advanced Materials (NCAM-2016), Department of Physics, St. Joseph's College, Tiruchirappalli, 07 October 2016.

2. 2nd National conference on Nanophotonics (NCNP-2016), School of Physics, Bharathidasan university, Tiruchirappalli, 18&19 March 2016.

3. National Seminar on Frontier Areas in Chemical Technologies (FACTS-2015), Department of Industrial Chemistry, Alagappa University, Karaikudi, 06 & 07 March 2015.

4. National Conference on Advanced Materials (NCAM-2015), Department of Physics & Department of Electronics, St. Joseph's College, Tiruchirappalli, 06 Februauy 2015.

5. 59th DAE Solid State Physics Symposium, VIT University, Vellore, 16-20 December 2014.

6. Department of Physics & Department of Electronics, St. Joseph's College, Tiruchirappalli, 24 February 2014.

7. 3rd National Seminar on Technologically Important Crystalline and Amorphous Solids (TICAS-2014), Department of Physics, Kalasalingam University, Krishnankoil, 28th February & 01st March, 2014.

8. 8th National conference on Solid State Ionics (8NCSSI), Department of Physics, Dr. Hari Singh Gour University, Sagar, Madhya Pradesh, 7-9 December 2009.

9. National Conference on Recent Advances in Textile and Electrochemical Sciences (RATES-2009), Department of Industrial Chemistry, Alagappa University, Karaikudi, 04&05 December 2009.

10. National conference on advanced materials (NCAM- 2009), PSN college of Engineering and Technology, Tirunelveli, 27- 29 August 2009.
11. National conference on Recent Trends in Crystal Growth, Thin Films and Nano-Structured, Materials Department of Physics, Aditanar College of Arts & Science, Tiruchendur, India, 5&6 August 2009.

12. National conference on Advances in Nanomaterials, Devices and Technologies, Department of Physics, S.V. Degree college, Kadapa, 11&12 July 2009.

13. National Conference on Nanomaterials for energy conversion and conservation (NMCEE 09), Department of Physics, Bishop Heber College, Tiruchirapalli, 26 March 2009.

14. National conference on emerging Materials, Devices and Technologies, Sri Venkateswara University, Tirupati, 24&25 February 2009.

15. National Conference on Advanced Materials, Devices and Technologies, Sri Venkateswara University, Tirupati, Andhrapradesh, 20- 22 February 2008.
16. National conference on Emerging materials and Technologies for India-2020, National Institute of Technology, Tiruchirappalli, 24 & 25 January 2008.

17. 7th National Conference on Solid State Ionics, APS University, Rewa, Madhyapradesh, 1-3 November 2007.

18. National conference on Emerging Trends in Physics, Jayaraj Annapackiam College for Women, Periyakulam, Theni, 30&31 August 2007.

Other Training Programs

1. Orientation Programme (Nov 2014 to Dec 2014)
2. Refresher Course (Feb 2016 to Mar 2016)

Membership in

Professional Bodies

1. Life Member: Association of IPA of India
2. Life Member: Society of MRSI, India

Academic Bodies (such as Board of Studies etc.,)

1. Board of Studies Member in Department of Physics, Alagappa University, Karaikudi.

2. DRC Member in St. Joesph College, Tiruchirapalli.

3. DRC Member in Periyar EVR College, Tiruchirapalli

Others

1. CSIR-NET/SET coordinator in Department of Physics, Alagappa University, Karaikudi.

2. Remedial Class in charge in Department of Physics, Alagappa University, Karaikudi.

3. Ambience committee coordinator in Department of Physics, Alagappa University, Karaikudi.

4. Discipline committee coordinator in Department of Physics, Alagappa University, Karaikudi.

Others

1. No. of PhD Public Viva Voce Examination conducted : **1**

Recent Publications

International

1. P.Pradeepa , G.Sowmya, **M. Ramesh Prabhu*** (2016), Influence of barium titanate nanofiller on PEO/PVdF-HFP blend-based polymer electrolyte membrane for Li-battery applications, J.Solid State Electrochemistry, Doi: 10.1007/s10008-016-3477-z (Impact Factor: 2.37).
2. K. Selva kumar S. Rajendran, **M. Ramesh Prabhu*** (2016), A Study of influence on sulfonated TiO_2-Poly (Vinylidene fluoride-co-hexafluoropropylene) nano composite membranes for PEM Fuel cell application, Applied Surface Science, Doi:10.1016/j.apsusc.2016.11.139 (Impact Factor: 3.15).
3. S. Ponmani, N. Anjali priya, P. Pradeepa, **M. Ramesh Prabhu*** (2016), Effects of TiO_2 nanofiller incorporated polymer blend electrolytes for lithium battery applications, International Journal for Research in Science Engineering and Technology-Proceedings, 3, 12-14.
4. G. Sowmya, **M. Ramesh Prabhu*** (2016), A study on the effect of STA/APTEOS in the PVA matrix based organic/inorganic composite membranes, International Journal for Research in Science Engineering and Technology-Proceedings, 3, 15-18.
5. J. Kalaiselvimary, K. Selvakumar, **M. Ramesh Prabhu***(2016), Structural and complex ac impedance studies on proton conducting polymer electrolytes based on Chitosan / H^+-MMT, International Journal for Research in Science Engineering and Technology-Proceedings, 3, 41-47.
6. K. Selvakumar, J. Kalaiselvimary, S. Rajendran, **M. Ramesh Prabhu***(2016), A Novel Proton Conducting Polymer Electrolytes Based on Poly (vinylidene fluoride-co-hexafluoro propylene) - Ammonium thiocyanate, Polymer-Plastics Technology and Engineering, DOI: 10.1080/03602559.2016.1185665. (Impact Factor: 1.51).
7. K. Selvakumar, M. Prabhakaran, S. Edwinraj, **M. Ramesh Prabhu***(2016), Perchloric acid doped fluorinated polymer membranes for fuel cell applications, Materials Today: Proceedings, 3, 1409-1414.
8. P. Pradeepa, G. Sowmya, S. Edwinraj, G. Fareetha Begum, **M. Ramesh Prabhu***(2016), Influence of Al_2O_3 on the structure and electrochemical properties of PVAc / PMMA based blend composite polymer electrolytes, Materials Today: Proceedings, 3, 2187-2196 .
9. P. Pradeepa, S. Edwinraj, J. Kalaiselvimary, G. Sowmya, K. Selvakumar, **M. Ramesh Prabhu***(2016), Structural and electrochemical properties of PEMA with the influence of MWCNT / TiO_2 Filler, AIP Conference Proceedings, 1731, 110037-1 – 110037-3.

10. J. Kalaiselvimary, P. Pradeepa, G. Sowmya, S. Edwinraj, **M. Ramesh Prabhu*** (2016)**,** Electrical characterization of proton conducting polymer electrolyte based on bio polymer with acid dopant, AIP Conference Proceedings, 1728, 020419-1–020419-4.
11. G. Sowmya, P. Pradeepa, J. Kalaiselvimary, S. Edwinraj, **M. Ramesh Prabhu*** (2016)**,** Dielectric behavior of different nanofillers incorporated in PVC-PMMA based polymer electrolyte membranes, AIP Conference Proceedings, 1728, 020413-1 – 020413-4.
12. P. Pradeepa, S. Edwinraj, G. Sowmya, J. Kalaiselvimary, K. Selvakumar, **M. Ramesh Prabhu*** (2016), Composite polymer electrolyte based on PEO/PVdF-HFP with MWCNT for lithium battery applications, AIP Conference Proceedings, 1728, 020397-1 – 020397-4.
13. S. Edwinraj, P. Pradeepa, K. Selvakumar, S. Mekala, **M. Ramesh Prabhu*** (2016)**,** Electrochemical impedance and dielectric studies on PEO/PVA with NH_4Cl based proton conducting polymer electrolyte, Journal of Chemical and Pharmaceutical Sciences, 9(1), 172-174.
14. P. Pradeepa, S. Edwinraj, G. Sowmya, J. Kalaiselvimary, **M. Ramesh Prabhu*** (2016), Optimization of hybrid polymer electrolytes with the effect of lithium salt concentration in PEO/PVdF-HFP blends, Materials Science and Engineering B, 205, 6–17. (Impact Factor: 2.33).
15. P. Pradeepa, **M. Ramesh Prabhu*** (2016), Enhancement of the electrochemical properties with the effect of alkali metal systems on PEO/PVdF-HFP complex polymer electrolytes, Ionics, 22(6), 827-839(Impact Factor: 2.12).
16. P. Pradeepa, S. Edwin Raj, **M. Ramesh Prabhu*** (2015)**,** Effects of ceramic filler in Poly vinyl alcohol / Poly ethyl methacrylate based polymer blend electrolytes, Chinese Chemical Letters, 26(9), 1191-1196. (Impact Factor: 1.95).
17. P. Pradeepa, K. Selvakumar, S. Edwinraj, G. Sowmya, **M. Ramesh Prabhu*** (2015), Preparation and characterization of MWCNT nanofiller incorporated polymer composite for lithium battery applications, AIP Conference Proceedings, 1665, 110011-1 – 110011-3.
18. P.Pradeepa, **M.Ramesh Prabhu***(2015)**,** Investigations on the addition of different plasticizers in (PVdF-HFP) / PEMA polymer blend electrolyte system, International Journal of ChemTech Research, 7 (4), 2077 – 2084. (Impact Factor: 0.34).
19. K.SelvaKumar, **M.Ramesh Prabhu*** (2014), FTIR and ^1H NMR Study on PAN/NH_4SCN Based Fuel cell Applications, International Journal of ChemTech Research, 6(14), 5740- 5744. (Impact Factor: 0.34).
20. **M.Ramesh Prabhu**, S.Rajendran* (2013), Effects of addition of $BaTiO_3$ nano particles on the conductivity of PVdF/PMMA based polymer blend electrolytes, Journal of Engineering Inventions, 2, 49- 53. (Impact Factor: 3.15).
21. S.Rajendran*, V.Shanthi Bama, **M.Ramesh Prabhu** (2013), Preparation and characterization of PVAc-PMMA based solid polymer blend electrolytes, Ionics, 16, 283 -287. (Impact Factor: 2.119).
22. S.Rajendran*, V.Shanthi Bama, **M.RameshPrabhu**(2010), Effect of lithium salt concentration in PVAc/PMMA based gel polymer electrolytes, Ionics, 16, 27-32. (Impact Factor: 2.119).
23. S.Rajendran*, **M.RameshPrabhu** (2010), Effect of different plasticizer on structural and electrical properties of PEMA-based polymer electrolytes, Journal of Applied Electrochemistry, 40, 327-332. (Impact Factor: 2.22).

24. S.Rajendran*, **M.Ramesh Prabhu**, M.Usha Rani (2008), Li ion conduction behaviour of hybrid polymer electrolytes based on PEMA, Journal of Applied Polymer Science, 110, 2802-2806. (Impact Factor: 1.86).
25. S.Rajendran*, **M.Ramesh Prabhu**, M.Usha Rani (2008), Ionic conduction in Poly(vinylchloride)/Poly(ethyl methacrylate) based polymer blend electrolytes complexed with different lithium salts, Journal of Power Sources, 180, 880-883. (Impact Factor: 6.33).
26. S.Rajendran*, **M.Ramesh Prabhu**, M.UshaRani (2008), Characterization of PVC/PEMA based polymer blend electrolytes, International Journal of Electrochemical Science, 3, 282- 290. (**Impact Factor: 1.69**).

National

1. **M.Ramesh Prabhu*,** D.Nagajothi (2014), Studies on electrical conductivity and thermal behaviour of PVAc / PVDF-HFP/ Al_2O_3 polymer blend electrolytes, Research Teaching Learning letters, 14(1), 19-24.
2. **M.Ramesh Prabhu***, G.Sowmya, K.Selvakumar, Effect of Different Nanoparticles in PMMA / PVC Based Composite Polymer Electrolytes, Research Teaching Learning letters, 14 (1), 12-18.
3. P.Pradeepa, M.Priya, **M.Ramesh Prabhu*** (2014), Preparation and Characterisation of TiO_2 Nano filler incorporated Polymer Composite for Li Battery Applications, Research Teaching Learning letters, 14 (1), 6 - 11.
4. S.Edwinraj, S.Benazir, **M. Ramesh Prabhu*** (2014)**,** Investigations of Effect of Double Plasticizers in PEMA-PVC Based Gel Polymer Blend Electrolyte, Research Teaching Learning letters, 14 (1), 1- 5.
5. **M.Ramesh Prabhu**, S.Rajendran* (2013), Investigations on PVC / PMMA blends with various lithium salts, Indian Journal of Research, 2, 307-309. (Impact Factor: 0.565).