

Profile

Name with Designation and Department

Dr. M. Jaipal Reddy
Associate Professor
Physics

Personal Details:

Full Name : Madi Reddy Jaipal Reddy
Father's Name : Late M Yadi Reddy
Date of Birth : 16 August 1965
Place of Birth : Bommaramaram Mandal, Yadadri District
Social Status : General
Marital Status : Married
Nationality : Indian
Languages known : Telugu, Hindi, English
Email id : mjaipalreddy@gmail.com
Mobile : 9848818809
Permanent Address : 1 - 7 - 50/1/A, JSN Colony, Street No. 8,
Habsiguda, Hyderabad - 500007
Medchal District

Address for

Communication : 1 - 7 - 50/1/A, JSN Colony, Street No. 8,
Habsiguda, Hyderabad - 500007
Medchal District

1. Educational Qualifications (starting with highest degree obtained) :

Sl. No.	Examination/ Degree	Name of Board/University	Percentage of marks/Grade	Discipline/Subject(s)	Year of Passing
1	Ph. D.	Osmania	--	Physics	1997
2	M. Sc.	Osmania	60%, First Division	Physics	1988
3	B. Sc.	Osmania	65%, First Division	Maths, Physics, Chemistry	1986

2. Title of Ph.D. Thesis: PEO based polymer electrolytes – Application to batteries

(i) Date & Year of award October & 1997 University Osmania University

3. Experience:

(i) Teaching 13 Years

(ii) Research (Excluding M. Phil. /Ph.D. Research) 20 Years

(iii) Total: 20 Years

4. Details of Employment (in chronological order starting with most recent)

Sl. No.	Name of the Employer	Status of the Institute/University (Govt./Quasi Govt./Autonomous/Private)	Post held/Designation	Period of Employment	Pay band/ Scale and Grade Pay
1	Palamuru University	Govt.	Associate Professor	9 th May 2017 to till the date	37,400 – 67,000 with AGP 9,000
2	MGIT	Private	DO	31 st Aug 2013 to 8 th May 2017	DO
3	SNIST	Private	DO	1 st Dec. 2012 to Aug 2013	DO
4	SNIST	Private	DO	11 th Aug 2008 to 30 th Nov 2012	12,000 – DA Merged 5 th Pay Scale of Associate Prof.
5	Osmania Univ.	Govt.	Senior Research Associate Under Pool Scientists Scheme, CSIR	4 th May 2005 to	8,000 – 5 th Pay Scale of Assistant Prof
6	National Central University	Govt.	Postdoctoral Fellow	Oct 2000 to Aug 2004	57,000 NT\$
7	Osmania University	Govt.	Part Time Lecturer	Dec 1997 to April 2000	---

6. Invited Talks in Conference / Seminar / Workshop:

Sl. No.	Details	Name of the Organization	Level (State/National/International)
1	Polymer Processing Society 2002 Asia/Australia Meeting, November 4-8, Taipei, Taiwan, ROC.	International Polymer Processing Society	International
2	International Conference on Materials for Environmental	Hong Kong Educational Society and Trans Tech Publications	International

	Protection and Energy Application (MEPEA 2011) , Kuala Lumpur, Malaysia, Sept. 27 – 28, 2011. (Travel (First class Air Fare) and accommodation expenses paid by the Organizers)	Inc.	
--	--	-------------	--

7. Publications: Type of Publication (Books/Book Chapters // Research Article)

Sl. No.	Details	Authorship (first/ corresponding)	ISSN/ ISSB
1	A new Na ⁺ ion conducting polymer electrolyte based on (PEO + NaYF ₄) and its use as an electrochemical cell, Solid State Ionics 74 (1994) 225	Co - author	
2	New PEO - based thin film polymer electrolyte complexed with KYF ₄ and its application as an electrochemical cell. J. Mat. Sci. Letters 18 (1995) 1129	First Author	
3	Study of a thin film electrochemical cell based on (PVP+AgNO ₃) electrolyte. Solid State Ionics 80 (1995) 93	First Author	
4	Development of electrochemical cells base on (PEO + NaYF ₄) and (PEO + KYF ₄) Polymer electrolytes, Materials Science & Engg. B 33 (1995) 173	Co - author	
5	Ionic transport and electrochemical cell characteristic studies of a new polymer electrolyte (PEO + Glass) System, Materials Letters 23 (1995) 129	First Author	
6	Study of a new polymer electrolyte (PVP+KYF ₄) for solid – state electrochemical cells, Power Sources 55 (1995) 255	Co - Author	
7	Conductivity and discharge characteristics studies of novel polymer electrolyte based on PEO complexed with Mg(NO ₃) ₂ . Materials Letters 29 (1996) 285	Co - Author	
8	Transport studies of Poly (ethylene oxide) – based polymer electrolyte complexed with sodium yttrium fluoride, J. Mat. Sci. Lett. 17 (1998) 1613	First Author	
9	Conductivity and parametric studies of a (PEO+(glass) (15Na ₂ O-15NaF-70 B ₂ O ₃) cell Power Sources 76 (1998) 30	First Author	
10	PEO based polymer electrolytes complexed with NaNO ₃ and KNO ₃ salt.	Co - Author	

	Solid State Ionics: Science and Tech. Eds. By B.V.R.Chowdari et al. (World Scientific Pub. Co., 1998) 223		
11	Ion conducting polymer electrolyte films based on (PEO+KNO ₃) system and its application as an electrochemical cell. Materials Science & Engg "B" 64 (1999) 107	Co - Author	
12	Ion – conducting polymer electrolyte based on Poly (ethylene oxide) complexed with NaNO ₃ salt – application as an electrochemical cell. Power Sources 79 (1999) 105.	Co - Author	
13	Study of the plasticizer effect on a (PEO+NaYF ₄) polymer electrolyte and its use in an electrochemical cell. Solid State Ionics 126 (1999) 55.	First Author	
14	Ion transport and electrochemical cell characteristic studies of a new (PVP+NaNO ₃) polymer electrolyte system. J. Materials Science 35 (2000) 2841.	First Author	
15	Proton conductor based on poly (ethylene oxide) complexed with tetra-methyle-ammonium bromide, Materials Science & Engg "B" 78 (2000) 59	Co - Author	
16	Polymer electrolyte system based on (PEO:KBrO ₃) – its application as an electrochemical cell, Power Sources 93 (2001) 268.	Co - Author	
17	Study of transport and electrochemical cell characteristics of PVP:NaClO ₃ polymer electrolyte system., Power Sources 101 (2001) 130	Co - Author	
18	PEO:KIO ₃ polymer electrolyte system – its application to solid state electrochemical cell, J. Materials Science in Electronics, 12 (2001) 153	First Author	
19	Optical microscopy and conductivity of poly (ethylene oxide) complexed with KI salt., Electrochimica Acta 47 (2002) 1189	First Author	
20	Effect of Mg ²⁺ on PEO morphology and conductivity Solid State Ionics 149 (2002) 115	First Author	

21	Ion pair formation and its effect in PEO:Mg solid polymer electrolyte system., Power Sources 109 (2002) 340.	First Author	
22	Mesoporous composite solid polymer electrolyte, Solid State Ionics: Trends in the new millennium, World Scientific Pub. Co., (2002), 393	First Author	
23	Novel composite polymer electrolyte comprising mesoporous structured SiO ₂ and PEO/Li Solid State Ionics, 156 (2003) 141.	Co - Author	
24	Sm ₂ O ₃ Composite PEO Solid Polymer Electrolyte., Power Sources, 115 (2003) 288.	Co - Author	
25	Complexation of poly(vinylidene fluoride): LiPF ₆ solid polymer electrolyte with enhanced conduction in 'wet' form., Power Sources, 123 (2003) 222.	Co - Author	
26	Porous PVDF with LiClO ₄ Complex as 'Solid' and 'Wet' Polymer Electrolyte Solid State Ionics, 175 (2004) 747.	Co - Author	
27	Nano-tube TiO ₂ composite PVdF: LiPF ₆ solid membranes, Solid State Ionics, 175 (2004)	Co - Author	
28	⁷ Li NMR spectroscopy and ion conduction mechanism in mesoporous silica (SBA – 15) composite PEO electrolyte, Power Sources, 135 (2004) 1 .	First Author	
29	Structural and transport characteristics of PEO/Phenolic blend solid polymer electrolyte , Polymer Science, Part-B: Polymer Physics, 42 (2004) 3866.	First Author	
30	Sm ₂ O ₃ – Polymer PEO Hybrid Solid polymer electrolyte, Inorganic Materials: Recent Advances; D. Bahadur et. al. (ed.'s); Narosa Publishing House, New Delhi, India (2004) 278.	First Author	
31	Nano Composite of polymer PEO and Li ⁺ with mesoporous structured SiO ₂ , Inorganic Materials: Recent Advances; D. Bahadur et. al. (ed.'s); Narosa Publ. House, New Delhi, India (2004) 282.	Co - Author	
32	Structural and Ionic Conductivity of PEO blend PEG Solid Polymer electrolyte., Solid State Ionics, 177 (2006) 253 .	First Author	
33	Study of multiple interactions in mesoporous composite PEO electrolyte, Power Sources, 158 (2006) 614	First Author	
34	Ion Transport and Battery Studies of a new (PVP + KIO ₃) Polymer Electrolyte System., J. Materials Science	Co - Author	
35	Inhibited crystallization and its effect on conductivity in nano Fe composite PEO solid electrolytes, J. Power Sources, 161 (2006) 53	First Author	
36	Preparation and Study of Properties of Polymer	Co - Author	

	electrolyte system (PEO + NaClO ₃), Materials Letters, 60 (2006)3346		
37	Conductivity study of Polyethylene oxide (PEO) complexed with Sodium bicarbonate, J. Materials Science, 42 (2007) 5752	Co - Author	
38	Dielectric properties of Poly Vinyl Pyrrolidone (PVP) polymer films., J. of Pure and Applied Physics, Vol. 19, No. 4, (2007) 237	Co - Author	
39	Conductivity and electrochemical cell characteristic studies of PEO based Mg ²⁺ ion solid polymer electrolyte, J. of Pure and Applied Physics, Vol. 19, No.4, (2007) 293	Co - Author	
40	The effect of Fe ₃ O ₄ nanoparticles in PEO: Mg(ClO ₄) ₂ solid polymer electrolyte, IUP Journal of Physics, 5 (2010) 25 -32.	First Author, Corresponding Author	
41	Ionic transport study of PEO: Mg(ClO ₄) ₂ electrolyte and its application to electrochemical cell, International Journal of Materials Science, 5, (2010) 825-829.	First Author, Corresponding Author	
42	Lewis acid – base interactions Fe ₃ O ₄ nanocomposite PEO solid polymer electrolyte Nano Technology and Applications, Acta Press, NANA(2010)523	First Author, Corresponding Author	
43	X-RD, IR and Conductivity studies of PVC-PEG blend solid polymer Electrolyte, International J. Advanced Materials Science, 2 (2011) 207	Co – Author, Corresponding Author	
45	Proton conducting solid polymer electrolyte of PEO complexed with Tetra methyl ammonium chloride, IUP J. Physics, 4 (2011) 16	Co – Author, Corresponding Author	
46	Conductivity study of PEO complexed with Mg ²⁺ borate glass polymer electrolyte – its application as electrochemical cell Int. J. Applied Eng. Research, 2 (2011)147	First Author, Corresponding Author	
47	FTIR, DSC, and Optical studies of PVA doped with GdF ₃ solid polymer films , IUP J. Physics, 1 (2012) 48	Co – Author, Corresponding Author	
48	CuO nanocomposite PEO: LiClO ₄ Solid Polymer electrolyte, Accad. Journal of Science; 1(2)(2012) 525	First Author, Corresponding Author	
49	Structural , Morphological and FTIR of PVDF – HFP and Lithium Tetrafluoroborate Salt as polymer Electrolyte membrane in Lithium Batteries, International Journal of ChemTech Research, Vol. 8 (2015) 319, ISSN: 0974-4290	Corresponding Author	
50	Structural Studies of Polymer blend thin films of	Corresponding	

	PMMA and PEO, International Journal of SSRG, (2016) P. 40, ISSN: 2349-9362	Author	
51	X-RD, SEM, FTIR, DSC studies of polymer blend films of PMMA and PEO, Materials Today 3 (2017) 3713.	Corresponding Author	
52	SEM, XRD and Electrical conductivity studies of PVDF – LiBF ₄ - EC Plasticized gel polymer electrolytes, AIP Conf. Proc. 1859 (2017)	Corresponding Author	
53	Optical and conductivity studies of polymer blend films of PMMA and PEO, Int. J. of Emerging Technology and Advanced Engineering, 7 (2017) 175	Corresponding Author	
54	Electrical and FTIR studies of plasticized polymer salt electrolyte membranes and application to lithium batteries, Int. J. of Applied Chemistry 13 (2017) 197	Corresponding Author	
55	Structural, Morphological and electrical studies of plasticized polymer – salt electrolyte membrane and application to lithium batteries, Int. J. of Applied Chemistry, 13 (2017) 477	Corresponding Author	
56	Dielectric Studies and AC Conductivity of PVDF-HFP: LiBF ₄ : EC Polymer-Salt-Plasticizer Electrolyte , J. Materials Science (2017), submitted	Corresponding Author	

8. Paper Presentations in Conference / Seminar / Workshops:

Sl. No.	Details of the Conference / Seminar/Workshop	Type of Presentation (Oral/Poster)
1	National Seminar on Recent Advances in Polymers , Govt. Girls P G College, Moti Tabela, Indore, 6 th and 7 th Feb. 1995	Oral
2	Symposium on current topics in physics of Materials, 27 th to 29 th March, 1996 at School of Physics, Univ. of Hyderabad.	poster
3	Second National Conference on solid state ionics, at Indian Institute of Technology, Madras, 15 th to 17 th Feb. 1996	oral
4	International symposium on Recent Advances in Inorganic Materials (RAIM 2002), 11 th to 13 th Dec. 2002	Poster (First prize)
5	AP Science congress 2008, AP Akademi of Sciences and Osmania University, 14 th to 16 th Nov. 2008	oral
6	National Seminar on Recent trends in Multifunctional Oxide Materials, Department of Physics, O. U., 17 th and 18 th Dec. 2009	participated
7	National Conference on Advanced Materials and Technology, at Sreenidhi Institute of Science and Technology, 13 th and 14 th July 2009	Oral
8	Workshop on Introduction to nano Science , nano Technology & Applications, Department of Physics, JNTUH, Hyd., 3 rd and 4 th Sept. 2010	Participated
9	International conference on applications of Renewable and Sustainable energy for industry and society, at Department of Physics, O. U., 16 th to 18 th Dec. 2010	Participated
10	International conference on Recent Trends in Nano and Bio – Sciences (ICORTNBS – 2010), at Department of Physics, P G College of Science, Saifabad, 24 th – 26 th Feb. 2010	Poster (First prize)

11	International conference on Materials for Environmental protection and energy application (MEPEA 2011), at Kuala Lumpur, Malaysia, 27th and 28th Sept. 2011	Oral
12	40th National Seminar on Crystallography, at Department of physics, O. U., 26th 28th Nov. 2011	Poster
13	International IJAS conference for Academic Disciplines, at University of Las Vegas, U S A, 13th to 16th March 2012)	Oral
14	Seminar on Economic Growth & National Integration, New Delhi, 27 th March 2012	Participated
15	FDP on Latest Trends in Materials, at VidYa Jyothi Institute of Technology, Hyd., 24 th and 25 th August 2012	Participated
16	UGC – SAP sponsored National seminar on Advanced Materials and their applications, at Department of Physics, O. U., 27 th and 28 th Feb 2013	Poster (Won the second Prize)
17	Two day National conference on applied physics and Materials Science (APMS – 2013), at Department of Physics, Vasavi College of Engineering, Hyd., 19 th and 20 th July 2013	Poster
18	One Day national Workshop on Advanced in Light Emitting Diodes, Department of Physics, Vasavi College of Engineering, 9 th Nov. 2013	Participated
19	Workshop on Engineering Materials, Department of Physics, Vasavi College of Engineering, 25 th Jan 2014	Participated
20	National Conference on Advanced Materials for energy applications – NCAMEA 2014, 31 st Jan and 1 st Feb. 2014	Poster
21	National conference on Nanoscience and Nanotechnology (NCNN 2014), at Department of Physics, Mahatma Gandhi University, Nalgonda, 21 st Feb. 2014	Poster
22	58 th DAE – Solid State Physics Symposium, at Thapar University, Patiala, 17 th to 21 st 2013	Poster
23	International conference on nano, Bio & Materials Sciences (ICONBMS – 2014), at Department of Physics, Nizam College, O. U., 8 th to 10 th Jan 2014	Participated
24	FDP on Project management from an Industry Perspective, Mahatma Gandhi Institute of Technology, Hyd., 8 th March 2014	Participated
25	DST – Sponsored National Conference on Sustainability through Chemical and Biological Sciences (NCSCB – 2015), at Department of Physics and Chemistry, M G I T, 19th and 20th March 2015	Oral
26	National Conference on Engineering Materials, Energy and Environment (EMEE – 15), Department of Physics, Chaitanya Bharathi Institute of Technology, Hyd., 24th and 25th April 2015	Oral
27	Third Two day National conference on Applied Physics and Advanced Materials Science (APMS – 2015), Department of Physics, Vasavi College of Engineering, Hyd., 7th and 8th August 2015	Oral
28	International Conference on Exploration and Innptions in Engineering & Technology (ICEIET – 2016), 18th and 19th March 2016	Oral

9. Full Length Papers in proceedings of Conference/Seminar (National / International)

Sl. No.	Paper Title	Details of the Conference / Seminar
1	Synthesis of Silver nano particles from Ipomoea Aquatic,	Proceedings of National Seminar on Shifting Paradigms on New Chemical Entities in India-Role of Process Chemistry, February 22-23, 2014, 285-290
2	Structural and Transport Properties of PVC blend PEG doped with Mg(ClO ₄) ₂ solid polymer electrolyte	Solid State Physics, AIP Conf. Proc., 1591 (2014) 1389
3	Structural, Optical and Transport Characterization of Polymer blend (PVC/ PEG) electrolyte system	Proc. Second National Conference on Applied Physics and Materials Science, (2014) 38
4	SEM and FT-IR studies to characterize the polymer blend films of PMMA and PEO.	Proc. of the Third National Conference on Applied Physics and Materials Science, (2015) 137

10. Details of travel(s) abroad:

(i) Countries visited :USA, Malaysia, Taiwan

(iii) Purpose : For Postdoctoral work and to Present Research Paper in Conferences

11. Details of Editorial Board Membership in Journals:

S. No.	Details
	Regional Editor for International Journals (2012 – 2015) Asian Journal of Materials Science Research Journal of Physics Research Journal of Nano Science & Nano Technology Current Research in Physics
	International Journal of Applied Engineering Research, Integrated Publishing Association.
	Journal of Chemical Engineering and Materials Science.
	International Journal of Applied Physics (IJAP)
	International Journal of Nanotechnology and Applications (IJNA)

12. Details of Membership in Professional/Academic bodies/Societies:

S. No.	Details
	<ul style="list-style-type: none"> Life member Indian Science Congress.
	<ul style="list-style-type: none"> Life member Indian Physics Association.
	<ul style="list-style-type: none"> Life member Materials Research Society of India.

	<ul style="list-style-type: none">• Life member Society for Advancement of Solid State Sciences.
	<ul style="list-style-type: none">• Life member Osmania University Alumni Association
	<ul style="list-style-type: none">• Member International Association of Engineers (IAENG), Hang Kong
	<ul style="list-style-type: none">• Member International Association of Computer Science and Information Technology IACSIT, Singapore.
	<ul style="list-style-type: none">• Member Asia – Pacific Chemical, Biological & environmental engineering Society (APCBEEES).

Declaration:

I hereby declare that the above information given by me is true, complete and correct to the best of my knowledge and belief and that nothing has been concealed or distorted thereof.

Dr. M. Jaipal Reddy