BIO-DATA

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Date of Joining : 10. 12. 2015

CategoryGen/SC/ST/OBC: OBC

Academic Qualification (UndergraduateOnwards):

	Degree	Year	Subject	University/Institution	% ofmarks
1.	B.Sc.,	Jul. 2004	Physics	Periyar University, Salem-11, Tamilnadu.	72.5
2.	M.Sc.,	Nov. 2006	Physics	Periyar University, Salem-11, Tamilnadu.	70.6
3.	M.Phil.,	Jan. 2008	Physics	Periyar University, Salem-11, Tamilnadu.	69.0
4.	Ph.D.,	Jul. 2012	Physics	SRM University, Kattankulathur, Kanchipuram, Tamilnadu.	By Thesis

ProfessionalRecognition/Award/Prize/Certificate,Fellowshipreceived:

S.No.	Name ofAward	AwardingAgency	Year
1.	Young Talent Researcher	CAPES-CNPQ, Brazil	2013
2.	M.Phil. University Rank Holder	Periyar University, Salem, Tamilnadu	2008

Major Research Projects:

S.No.	Project Title	Duration in Year	Funding Agency	Amount in lakhs
1.	Preparation of Nanostructured Hematite Photoanode for Efficient Photoelectrochemical Hydrogen Production	3Years (2016-2019)	UGC	10.00

Work experience: 3 Years

1. Postdoctoral Research Fellow, Solar Energy Research Institute (SERI),University Kebansaan Malaysia, Malaysia
2. Postdoctoral Research Fellow, Department of Chemical and Process Engineering, University Kebansaan Malaysia, Malaysia
3. Postdoctoral Research Fellow, Department of Biomedical Science, CHA University, South Korea

Publications *(List of papers published in SCI Journals, in year wise descendingorder).*

1. Sunlight Active Photoelectrowater splitting performance of WO_3Nanostructures for Solar Hydrogen Production, Sohila, S.; Ramesh, R.; Yaakob, Z.; Teridi, M. A. A.; Kamaruzzaman, Applied Surface Science (under Review)

2. Synthesis and Characterization of the Superparamagnetic Fe_3O_4/Ag Nanocomposites, Ramesh, R.;Geerthana, M.; S. Prabhu, S.; Sohila, S,; J. Clust. Sci. (Article in Press, doi:10.1007/s10876-016-1093-9)

3. Photoelectrochemical water splitting performance of flower like ZnO nanostructures synthesized by a novel chemical method. Sohila, S.; Ramesh, R.; Yaakob, Z.; Teridi, M. A. A.; Kamaruzzaman, S. J. Mater. Sci. Mater. Electron. 2016, 27, 2846-2851.

4. Preparation of nanostructured p-NiO/n-$_{Fe2O3}$ heterojunction and study of their enhanced photoelectrochemical water splitting performance. Ramesh, R.; Yaakob, Z.; Teridi, M. A. A.; Muhammad, S. A. R.; Kamaruzzaman, S. Mate. Lett. 2014, 133, pp. 123-126.

5. Photodegradation of methylene blue over novel 3D ZnOmicroflowers with hexagonal pyramid-like petals. Pudukudy, M.; Yaakob, Z.; Ramesh, R.; Kandaramath, T. React. Kinet. Mech. Cat., 2014, 527-542.

6. Photoelectrochemical water splitting performance of vertically aligned hematite nanoflakes deposited on FTO by a hydrothermal method. Ramesh, R.; Yaakob, Z.; Pudukudy, M.; Rahaman, M. S. A.; Sopian, K. J. Alloy. Compd., 2014, 608, 207-212.

7. One-pot microwave synthesis of fluorescent carbogenic nanoparticles from triton X-100 for cell imaging. Ramesh, R.; Sohila, S.; Muralidharan, R.; Muthamizhchelvan, C.; Ponnusamy, S. Eur. J. Inorg. Chem. 2014, 2, 392-396.

8. Facile preparation of Ag_3PO_4 rhombic dodecahedron microcrystals with enhanced catalytic activities under visible light irradiation. Ramesh, R.; Pudukudy, M.; Yaakob, Z.; Rahaman, M. S. A.; Sopian, J. Mater. Sci: Mater. Electron, 2014, 25:4755-4759.

9. Synthesis of dumbbell shaped ZnO crystals using one-pot hydrothermal method and their characterizations. Ramu, P.; Anbarasan, P. M.; Ramesh, R.; Aravindan, S.; Ponnusamy, S.; Muthamizhchelvan, C.; Yaakob, Z. Mate. Lett. 2014, 122, 230-233.

10. One pot facile hydrothermal synthesis of superparamagnetic $ZnFe_2O_4$ nanoparticles and their properties. Rameshbabu, R.; Ramesh, R.; Kanagesan, S.; Karthigeyan, A.; Ponnusamy, S. J. Sol -Gel Sci. Technol. 2014, 71, 147-151.

11. Synthesis and study of structural, morphological and magnetic properties of $ZnFe_2O_4$ nanoparticles. Rameshbabu, R.; Ramesh, R.; Kanagesan, S.; Karthigeyan, A.; Ponnusamy, S. J. Supercond. Nov. Magn. 2014, 27 (6), 1499-1502.

12. Structural, morphological and magnetic properties of hydrothermally synthesized $ZnFe_2O_4$ nanoparticles. Rameshbabu, R.; Ramesh, R.; Kanagesan, S.; Karthigeyan, A.; Ponnusamy, S. J. Mater. Sci. Mater. Electron. 2014, 25 (6), 2583-2588.

13. Synthesis and characterization of SnS/ZnO nanocomposite by chemical method. Sohila, S.; Ramesh, R.; Ramya, S.; Ponnusamy, S.; Muthamizhchelvan, C. J. Mater. Sci. Mater. Electron. 2013, 24 (12), 4807-4811.

14. Bioimaging of targeting cancers using aptamer-conjugated carbon nanodots. Lee, C. H.; Ramesh, R.; Jeong, M.-S.; Ko, H. Y.; Joo, J. Y.; Cho, S.; Chang, Y. W.; Kim, S. Chem. Commun. 2013, 49 (58), 6543-6545.

15. Synthesis of superparamagnetic $ZnFe_2O_4$ nanoparticle by surfactant assisted hydrothermal method. Rameshbabu, R.; Ramesh, R.; Kanagesan, S.; Karthigeyan, A.; Ponnusamy, S. J. Mater. Sci. Mater. Electron. 2013, 24 (11), 4279--4283.

16. Properties and heating characteristics of bovine serum albumin coated Fe_3O_4 magnetic fluid for magnetic fluid hyperthermia application. Ramesh, R.; Ponnusamy, S.; Muthamizhchelvan, C. Sci. Adv. Mater. 2013, 5 (9), 1250-1255.

17. Synthesis and characterization of $NiFe_2O_4$ nanoparticles and nanorods. Sivakumar, P.; Ramesh, R.; Ramanand, A.; Ponnusamy, S.; Muthamizhchelvan, C. J. Alloy. Compd. 2013, 563, 6-11.

18. Synthesis and properties of $ZnFe_2O_4$ nanoparticles by combustion method. Rameshbabu, R.; Ramesh, R.; Karthigeyan, A.; Ponnusamy, S. Asian J. Chem. 2013, 25, S136-S138.

19. Controllable synthesis and characterization of SnS nanostructures. Sohila, S.; Ramesh, R.; Muthamizhchelvan, C.; Ponnusamy, S. Asian J. Chem. 2013, 25, pp. S166-S168.

20. Surfactant free synthesis of Ag^+ additive added ZnO nanostructures. Ramu, P.; Anbarasan, P.M.; Aravindan, S.; Ramesh, R.; Ponnusamy, S.; Muthamizhchelvan, C. Asian J. Chem. 2013, 25, S147-S149.

21. Synthesis of ZnOnanoflakes by the wet chemical method in the presence of Pb^{2+} alien cation and their structural and morphological properties. Ramu, P.; Anbarasan, P.M.; Ramesh, R.; Ponnusamy, S.; Muthamizhchelvan, C. Mate.Lett. 106, pp. 59-62.

22. Structural, thermal, dielectric and magnetic properties of $NiFe_2O_4$nanoleaf. Sivakumar, P.; Ramesh, R.; Ramanand, A.; Ponnusamy, S.; Muthamizhchelvan, C. J Alloy. Compd., 2012537, 203-207.

23. Enhancement of photoluminescence in ZnS/ZnO quantum dots interfacial heterostructures. Rajalakshmi, M.; Sohila, S.; Ramesh, R.; Bhalerao, G. M. Mater. Res. Bull. 2012, 47 (9), 2668-2672.

24. Synthesis, studies and growth mechanism of ferromagnetic $NiFe_2O_4$nanosheet. Sivakumar, P.; Ramesh, R.; Ramanand, A.; Ponnusamy, S.; Muthamizhchelvan, C. Appl. Surf. Sci. 2012, 258 (17), 6648-6652.

25. A simple wet chemical route to synthesize ferromagnetic nickel ferrite nanoparticles in the presence of oleic acid as a surfactant. Sivakumar, P.; Ramesh, R.; Ramanand, A.; Ponnusamy, S.; Muthamizhchelvan, C. J. Mater. Sci. Mater.Electron. 2012, 23 (5), 1041-1044.

26. Synthesis and study of magnetic properties of $NiFe_2O_4$ nanoparticles by PVA assisted auto-combustion method. Sivakumar, P.; Ramesh, R.; Ramanand, A.; Ponnusamy, S.; Muthamizhchelvan, C. J. Mater. Sci. Mater. Electron. 2012, 23, 1011-1015.

27. Synthesis of Fe_3O_4nanoflowers by one pot surfactant assisted hydrothermal method and its properties. Ramesh, R.; Rajalakshmi, M.; Muthamizhchelvan, C.; Ponnusamy, S. Mater. Lett. 2012, 70, 73-75.

28. Preparation and properties of $NiFe_2O_4$ nanowires. Sivakumar, P.; Ramesh, R.; Ramanand, A.; Ponnusamy, S.; Muthamizhchelvan, C. Mater. Lett. 2012, 66 (1), 314-317.

29. Preparation and properties of nickel ferrite ($NiFe_2O_4$) nanoparticles via sol-gel auto-combustion method. Sivakumar, P.; Ramesh, R.; Ramanand, A.; Ponnusamy, S.; Muthamizhchelvan, C. Mater. Res. Bull. 2011, 46 (12), 2204-2207.

30. Synthesis and characterization of nickel ferrite magnetic nanoparticles. Sivakumar, P.; Ramesh, R.; Ramanand, A.; Ponnusamy, S.; Muthamizhchelvan, C. Mater. Res. Bull. 2011, 46 (12), 2208-2211.

31. Synthesis and vibrational properties of hematite (α- Fe_2O_3) nanoparticles. Ramesh, R.; Sohila, S.; Muthamizhchelvan, C.; Rajalakshmi, M.; Ramya, S.; Ponnusamy, S. J. Mater. Sci. Mater. Electron. 2011, 22 (9), 1357-1360.

32. Controllable synthesis of single-crystalline Fe_3O_4nanorice by a one-pot, surfactant-assisted hydrothermal method and its properties. Ramesh, R.; Muralidharan, R.; SanthanaGopalakrishnan, R.; Chellamuthu, M.; Ponnusamy, S. U.; Manikandan, E. Eur J Inorg Chem. 2011, 35, 5384-5389 .

33. Preparation of sheet like polycrystalline $NiFe_2O_4$ nanostructure with PVA matrices and their properties. Sivakumar, P.; Ramesh, R.; Ramanand, A.; Ponnusamy, S.; Muthamizhchelvan, C. Mater. Lett. 2011, 65 (9), 1438-1440.

34. Synthesis and characterization of $NiFe_2O_4$nanosheet via polymer assisted co-precipitation method. Sivakumar, P.; Ramesh, R.; Ramanand, A.; Ponnusamy, S.; Muthamizhchelvan, C. Mater. Lett. 65 (3), 483-485.

35. Preparation and characterization of $NiFe_2O_4$ nanoparticles. Sivakumar, P.; Ramesh, R.; Ramanand, A.; Ponnusamy, S.; Muthamizhchelvan, C. T.Indian I.Metals. 2011, 64 (1-2), 233-234.

36. Synthesis and properties of α-Fe_2O_3nanorods. Ramesh, R.; Ashok, K.; Bhalero, G.M.; Ponnusamy, S.; Muthamizhchelvan, C. Cryst. Res. Technol. 2010, 45 (9), 965- 968.

Books/Reports/Chapters/Generalarticlesetc.

1. Potential role of bromelain in clinical and therapeutic applications. An update, R. Vidya, K. Tamilselvan, S. Sohila, S. Kanagesan, R. Ramesh, Biomedical Reports (Review Article). 2016, 3(5), 283-288.

2. In vitro and In vivo Toxicity Screening: Nanocomposites for Biomedical Application, K. Kavitha, D. Navaneethan, R. Ramesh, R. Balagurunathan, Elsevier, Accepted.

Conference Proceedings:

1. Ramesh, R., Rajalakshmi, M., Muthamizhchelvan, C., Ponnusamy, S. Growth and magnetic properties of prism like triangular Fe_3O_4 nanoparticles (2012) AIP Conference Proceedings, 1447 (1), pp. 299-300.

2. R. Ramesh, R., Ponnusamy, S., Muthamizhchelvan, C. Synthesis and characteraization of Fe_3O_4 nanoparticles for magnetic hyperthermia application (2011) AIP Conference Proceedings, 1347, pp. 19-22.

3. Sivakumar, P., Ramesh, R., Ramanand, A., Ponnusamy, S., Muthamilchelvan, C. A comparative study on PVA and PVP capped $NiFe_2O_4$ nanoparticles (2011) AIP Conference Proceedings, 1347, pp. 297-300.

Conference Presentations:

1. Nityanath, R. Ramesh, National Conference On Frontier Areas In Applied Physics, Synthesis and Characterization of pure and EDTA capped ZnO nanoparticles, Department of Engineering Physics, Annamalai University, 27th April 2016.

2. Rameshbabu, R., Ramesh, R., Karthigeyan, A., and Ponnusamy, S., "Synthesis and Properties of $ZnFe_2O_4$ Nanoparticles by Combustion Method," International Conference on Nanoscience and Nanotechnology, SRM University, March 18-20, 2013.

3. Sohila, S., Ramesh, R., Muthamizhchelvan, C., Ponnusamy, S., "Controllable Synthesis and Characterization of SnS Nanostructures", International Conference on Nanoscience and Nanotechnology, SRM University, March 18-20, 2013.

4. Ramu, P., Anbarasan, P.M., Aravindan, S., Ramesh, R., Muthamizhchelvan, C., Ponnusamy, S., "Surfactant Free Synthesis of Ag+ Additive Added ZnO Nanostructures", International Conference on Nanoscience and Nanotechnology, SRM University, March 18-20, 2013.

5. Ramesh, R., Rajalakshmi, S., Muthamizhchelvan, C., S.,Ponnusamy., "Synthesis and its properties of prism like triangular Fe_3O_4 nanoparticles", Solid State Physics Symposium (DAE-SSPS-2011), SRM University, Chennai, India. December 19- 23, 2011.

6. Sivakumar, P., Ramesh, R., Ramanand, A., and Ponnusamy., Muthamizhchelvan, C., "A simple wet chemical route to synthesize ferromagnetic nickel ferrite nanoparticles in the presence of olic acid as a surfactant", The First International Conference on Nanoscience and Nanotechnology (ICNN 2011), Coimbatore Institute of Technology, Coimbatore, Tamilnadu, India. July 6-8, 2011.

7. Ramesh, R., S.,Ponnusamy., Muthamizhchelvan, C., "Adsorption and denaturation properties of bovine serum albumin with ultra-small glycine capped magnetite nanoparticles", First International Conference on Composites and Nanocomposites, Mahatma Gandhi institute, Kottayam, Kerala, India. Januray 7-9, 2011.

8. Sivakumar, P., Ramesh, R., Ramanand, A., and Ponnusamy.,Muthamizhchelvan, C., Metallurgy, "Structure-controlled synthesis and characterization of superparamagnetic propertie of $NiFe_2O_4$nanoflower via polymer assisted sol-gel route", The First International Conference on Composites and Nanocomposites (ICNC – 2011), Institute of Macromolecular Science and Engineering (IMSE), Kottayam, Kerala, India. January 7-9, 2011.

9. Ramesh, R., Rajalakshmi, M., Ramya, S., Muthamizhchelvan, C., S.,Ponnusamy., "Synthessis and vibrational properties of α-Fe_2O_3 nanoparticles", International symposium on Advances in Nanomaterials (ANM-2010), CGCRI-Kolkata, India. Dec 6-7, 2010.

10. Ramesh, R., S.,Ponnusamy., Muthamizhchelvan, C., "Synthesis and characteraization of Fe_3O_4 nanoparticles for magnetic hyperthermia application", Saha Institute of Nuclear Physics, Kolkata, India. October 25-29, 2010.

11. Sivakumar, P., Ramesh, R., Ramanand, A., and Ponnusamy., "A comparative study of synthesis of $NiFe_2O_4$ nanoparticle using PVA and PVP as a surfactant", International Conference on Magnetic Materials (ICMM-2010), Experimental Condensed Matter Physics Division, Saha Institute of Nuclear Physics, Kolkata, West Bengal, India. October 25-29, 2010.

12. Sivakumar, P., Ramesh, R., Ramanand, A., and Ponnusamy., "Structural, morphological and magnetic properties of $NiFe_2O_4$ nanoparticles", International Conference on synthesis, charactrization, consolidation and modelling of Nanomaterials" (ICON-2010), Department of metrallurgical engineering, PSG College of Technology, Coimbatore, Tamilnadu, India. March 5-6, 2010.

13. Ramesh, R., Muthamizhchelvan, C., S.,Ponnusamy., " Synthesis and Characterization of Ag coated Fe_3O_4nanowires"International Conference on Nanoscience and Nanotechnology (ICONN-10), SRM University, Tamilnadu, India. Feb 24-26, 2010.

Seminar/Conference/ Workshop Organized:

1. Chairing person: National Conference on Advanced Materials (NCAM – 2016) Organized by Department of Physics, School of Physical Sciences, Periyar University (Re- Accredited with 'A' Grade by NAAC) Periyar Palkalai Nagar, Salem - 636 011, Tamilnadu held on 25-26th February, 2016.

2. Chaired Presentation – III, in the National Conference on Energy, Environment & Ethics (E3 - 2016) organized by Department of Engery Studies, Periyar University, Salem – 636 011, Tamilnadu& jointly organized by Centre for New and Renewable Energy Studies (CNRES), Periyar University, Salem – 636 011, Tamilnadu, during 28-29, March, 2016.

3. Organising Secretory: E=MC2 (EVRA Mass Competitive Champions) organized by the Department of Physics, Periyar University, Salem-11, held on the occasion of Einstein's Birthday, 14th March 2016.

Reviewer to International Journals:

1. ACS Applied Materials & Interfaces (ACS Publications)
2. Chemistry of Materials, ACS Publication
3. Environmental Science & Technology, ACS Publication
4. Engineering Science and Technology, an International Journal, Elsevier
5. Applied Catalysis B: Environmental, Elsevier
6. Journal of Cluster Science, Springer
7. Journal of Magnetism and Magnetic Materials, Elsevier
8. Results in Physics, Elsevier