

Resume



Name : Dr. P.Manohar

Designation : Professor of Eminence

Date of Birth : 17.11.1955

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Academic Qualification:

Course	Educational Institution	Class	Year of Passing
Ph. D (Nuclear Physics)	College of Engineering, Anna University	-	1988
M.Sc. (Applied Science)	Regional Engineering College, Trichy.	First Class	1978
B.Sc. (Applied Science)	Thiyagaraja Engineering College, Madurai.	First Class	1976

Areas of Interest/Research:

- Material Science and Composites
- Electronic Ceramics
- Nuclear Physics

Funded Research Projects:

S.No.	Title of the Project	Amount	Ongoing/ Completed
1.	Development of Reaction Bonded Silicon	12 Lakh	Completed
2.	Process development of gamma ferric oxide from industrial waste pickle liquor	5 Lakh	Completed
3	Studies on the effect of ball milling and additives on the properties of certain Mn-Zn Ferrites	3.32 Lakh	Completed

4.	Processing of ultrafine advanced ceramic powders by spray pyrolysis	10 Lakh	Completed
5.	Invitro corrosion behaviour of chemically and thermally treated titanium alloys for	9.10 lakh	Completed
6.	Development of high temperature and High	39 Lakh	Completed

Countries visited:

Name of the country	Duration	Purpose of visit
Nagoya Institute of Technology, Japan	12-Jul-2000 to 13-Jul-2000	Participated Indo-Japan conference on Ceramics.
Nagoya Institute of Technology, Japan	27-Jan-2003 to 31-Mar-2003	Visiting Professor.

Publication Details:

Category	Conferences	Journals
National	44	8
International	21	31

Paper Published in Journals :

1. P. Manohar, G.N.S. Prasad, " Electromagnetic form factors for deuteron", J.CSIO Comm., Vol. 10, (1983).
2. M. Alagar, P. Manohar, " Studies on heat transfer characteristics of different series of alkoxy silanes", Hung.J.of Ind.Che., Vol. 21, (1993).
3. M. Alagar, Amsavel and P. Manohar, " Thermal properties of silicate esters", J.Chem.Tech and Bio Tech., Vol. 59, (1994).
4. B.R.V. Narasimhan, R. Srinivasan, P. Manohar and F.D. Gnanam, " Synthesis and Gamma Ferric Oxide by Sol-Gel technique", Trans.Ind.Cer.Soc., Vol. 58, pp. 110-111 (1999).
5. R.V.Mangalaraja, S.Ananthakumar,P.Manohar and F.D.Gnanam, "Synthesis and characterisation of Ni-Zn ferrite derived through flash combustion technique", Proc.of ICF8, pp. 313-315 (2000).
6. P.Manohar, "Processing and characterisation of ultrafine ferric oxides", Proc. Japan- India Seminar, pp. 39-44 (2000).
7. R.V.Mangalaraja, S.Ananthakumar,P.Manohar and F.D.Gnanam, "Powder characteristics,sintering behaviour and microstructure of Ni-Zn Ferrite derived through Citrate-gel decomposition technique", Proc.of ICF8, pp. 521-523 (2000).
8. B.R.V. Narasimhan, S. Prabhakar, P. Manohar and F.D. Gnanam, " Utilisation of ferrous leach liquor to synthesise gamma ferric oxide", Journal of Metallurgy, Vol. 31, pp. 201-205 (2002).
9. B.R.V. Narasimhan, S. Prabhakar, P. Manohar, F.D. Gnanam, " Synthesis of

gamma ferric oxide by direct thermal decomposition of ferrous carbonate", *Materials Letters*, Vol. 52, pp. 295-300 (2002).

10. R.V. Mangalaraja, S. Ananthakumar, P. Manohar, F.D. Gnanam, " Magnetic, Electrical and Dielectric behaviour of Ni_{0.8}Zn_{0.2}Fe₂O₄ prepared through flash combustion technique", *Journal of Magnetism and Magnetic Materials*, Vol. 253, Issue 1, (2002).
11. R.V. Mangalaraja, S. Ananthakumar, P. Manohar, F.D. Gnanam, " Effect of composition on AC electrical resistivity of Ni-Zn ferrites prepared by flash combustion technique", *Trans.Ind.Cer.Soc.*, Vol. 61, pp. 17-19 (2002).
12. R.V. Mangalaraja, S. Ananthakumar, P. Manohar and F.D. Gnanam, " Magnetic Hysteresis Studies of Ni_{1-x}Zn_xFe₂O₄ Prepared by Non-Conventional techniques", *Mater. Lett.*, Vol. 57, Issue 18, pp. 2666-2669 (2003).
13. R.V. Mangalaraja, S. Ananthakumar, P. Manohar and F.D. Gnanam, " Direct Current Resistivity Studies of Ni_{1-x}Zn_xFe₂O₄ Prepared Through Flash Combustion and Citrate- gel Decomposition Methods", *Mater. Lett.*, Vol. 57, Issue 18, pp. 2662-2665 (2003).
14. R.V. Mangalaraja, S. Ananthakumar, P. Manohar and F.D. Gnanam, " Dielectric Behaviour of Ni_{1-x}Zn_xFe₂O₄ Prepared by Flash Combustion Technique", *Mater. Lett.*, Vol. 57, Issue 5, pp. 1151-1155 (2003).
15. R.V. Mangalaraja, P. Manohar, B.K. Chandrasekhar, " Effect of Ceria on Physical, Mechanical and Thermal Properties of Ytria Stabilized Zirconia Toughened Alumina", *Mater.Sci Engg. A*, Issue 1, pp. 71-75 (2003).
16. R.V. Mangalaraja, S. Ananthakumar, P. Manohar and F.D. Gnanam, " Initial Permeability studies of Ni-Zn ferrites prepared by flash combustion technique", *J. Mater.Sci & Engg. A*, Issue 355, pp. 320-324 (2003).
17. R.V. Mangalaraja, S. Ananthakumar, P. Manohar, F.D. Gnanam, M. Awano, " Characterisation of Mn_{0.8}Zn_{0.8}Fe₂O₄ Synthesized Through Flash Combustion Technique", *Mater.Sci & Engg.A*, Vol. 367, pp. 301-305 (2004).
18. R.V. Mangalaraja, S. Ananthakumar, P. Manohar, F.D. Gnanam, M. Awano, " Electrical and Magnetic Properties of Ni_{0.8}Zn_{0.2}Fe₂O₄/Silica Composite Prepared by Sol-gel Method", *J. Mater.Sci.*, Vol. 39, pp. 2037-2042 (2004).
19. S Ananthakumar, P Manohar, K G K Warrie, " Effect of Boehmite and Organic Binders on Extrusion of Alumina", *Ceramics International*, published by 842. Vol. 30, Issue 6, pp. 837 (2004).
20. S Ananthakumar, K Prabhakaran, P Manohar, K G K Warriar, " Gel Casting process for Al₂O₃ - SiC nanocomposites and its creep characteristics", *Materials Chemistry and Physics*, Vol. 85, Issue 1, pp. 151-157 (2004).
21. R.V. Mangalaraja, S. Ananthakumar, P. Manohar, F.D. Gnanam, M. Awano, " Microwave-Flash Combustion Synthesis of Ni_{0.8}Zn_{0.2}Fe₂O₄ and its dielectric characterization", *Mater. Lett.*, Vol. 58, pp. 1593-1596 (2004).
22. R.V. Mangalaraja, S. Ananthakumar, P. Manohar, " Synthesis and Characterisation of nanocrystalline Ce_{0.9}Gd_{0.1}O_{1.95} by Citrate-Gel Decomposition technique", *Trans.Inc.Cer.Soc.*, Vol. 64, Issue 4, pp. 193-196 (2005).

23. S. Sakthivelu, P. Manohar, V. Ramamurthi and M. Balasubramanian, " Effect of Grinding on de-hydroxylation behaviour of Diaspore", Trans.Inc.Cer.Soc., Vol. 65, Issue 4, pp. 211-214 (2006).
24. S. Sakthivelu, P. Manohar, V. Ramamurthi and M. Balasubramanian, " Deflocculating effect of sodium polymethacrylates on aqueous clay suspensions", Trans.Inc.Cer.Soc., Vol. 65, pp. 165-167 (2006).
25. R. Amirthalingam, H. Shaik, T. Anitha, A. Poonguzhali, P. Manohar and H.S. Khatak, " Effect of high temperature ageing on the corrosion behaviour of nitrogen-added AISI type 316L stainless steel", IIM Transactions, Vol. 9, pp. 271-282 (2006).
26. H. Shaikh, R. Amirthalingam, T. Anitha, N. Sivaibharasi, T. Jayakumar, P. Manohar and H.S. Khatak, " Evaluation of stress corrosion cracking phenomenon in an AISI type 316 LN stainless steel using acoustic emission technique", Corrosion Science, Vol. 49, pp. 740-742 (2007).
27. C. Kumar, P. Manohar, " Conductivity and dielectric properties of sol-gel derived porous zirconia", Ionics, Vol. 13, pp. 333-335 (2007).
28. R.V. Mangalaraja, S. Thomas Lee, K.V.S. Ramam, S. Ananthakumar and P. Manohar, " Mechanical characterization of $\text{Ni}_{1-x}\text{Zn}_x\text{Fe}_2\text{O}_4$ prepared by non-conventional methods", Mat.Sci. and Engg. A, pp. 266-270 (2008).
29. R.V. Mangalaraja, S. Thomas Lee, P. Manohar and Carlos P. Camurri, " Effect of composition on initial permeability of $\text{Ni}_{1-x}\text{Zn}_x\text{Fe}_2\text{O}_4$ prepared by flash combustion technique", Mat.Sci. and Engg. A, Vol. 476, pp. 234-239 (2008).
30. T. Sundararajan, s. Abirami, P. Manohar, S.T. Aruna, " Preparation and properties of water repellent polystyrene TiO_2 Coatings", Trans.Ind.Cer.Soc., Vol. 71, pp. 25-30 (2012).
31. R. Saranya, G. Arthanareeswaran, S. Sakthivelu, P. Manohar, " Preparation and performance evaluation of nanokaolinite particle based polyacrylonitrile mixed matrix membranes", Ind. Eng. Chem. Res, Vol. 51, pp. 4942-4951 (2012).
32. Ramesh G, Mangalaraja R V, Ananthakumar S, Manohar P, "Influence of fuel in the microwave assisted combustion synthesis of nano alpha alumina powder", International Journal of physical sciences, Vol. 8, Issue 34, pp. 1729-1737 (2013).
33. P Ganesh Babu, K. Ravichandran, P. Manohar, "Electrical conductivity of sol-gel derived nano-8 mol% yttria stabilized zirconia", Optoelectronics and Advanced materials - Rapid Communications, published by 658. Vol. 7, Issue 9, pp. 654 (2013).
34. S. Sakthivelu, S Manisha Vidyavathy, P Manohar, "Effect of polyvinyl Alcohol on Stability and Rheology of Nano Kaolinite Suspensions", Transactions of Indian Ceramic Society, published by Taylor & Francis. Vol. 71, Issue 4, pp. 175-180 (2013).
35. G Ramesh, R V Mangalaraja, S Ananthakumar, P Manohar, " Sintering, microstructure and dielectric properties of MgO doped alumina ceramics co-doped with Gd_2O_3 and Pr_6O_2 ", Optoelectronics and Advanced Materials-Rapid Communications, Vol. 7, Issue 11, pp. 965-975 (2013).
36. P Ganesh Babu, C Kumar, K. Ravichandran, P. Manohar, " Synthesis and characterization of Zirconium tin titanate ($\text{Zr}_{0.8}\text{Sn}_{0.2}\text{Ti}_{0.4}$)", International

Journal of ChemTech Research, published by ChemTech Research. Vol. 5, Issue 5, pp. 2122-2129 (2013).

37. K Ilango, P Prabunathan, E Satheeshkumar, and P Manohar, "Design of low dielectric constant polybenzoxazine nanocomposite using mesoporous mullite", High Performance Polymers, published by SAGE Publications. (2016).
38. N. Kavitha and P. Manohar, "Magnetic and Electrical Properties of Magnesium-Substituted Ni-Zn Ferrites", Journal of Superconductivity and Novel Magnetism, published by Springer. Vol. 29, Issue 5, (2016).
39. E. Srinivasa Rao and P. Manohar, "Effect of particle size on high purity Cordierite for kiln furniture applications", Journal of Ceramic Processing Research, published by Hanyang University Press, Korea. Vol. 17, (2016).
40. Srinivasa Rao, E., Manohar, P, Effect of microwave sintering on the hot modulus of rupture and thermal shock resistance of zirconia doped cordierite, Journal of Ceramic Processing Research, 17(11), pp. 1164-1170. (2016)
41. Satheeshkumar, E., Anbarasi, P., Ilango, K., Prabunathan, P., Manohar, P., Studies on electrical properties of microwave assisted synthesis of NiO/YSZ composites for high - performance anode in solid oxide fuel cell, Materials Technology 32(10), pp. 638-645. (2017)
42. Ilango, K., Prabunathan, P., Satheeshkumar, E., Manohar, P. Design of low dielectric constant polybenzoxazine nanocomposite using mesoporous mullite, High Performance Polymers 29(2), pp. 141-150. (2017)
43. Aarthy, S., Thenmuhil, D., Dharunya, G., Manohar, P. Exploring the effect of sintering temperature on naturally derived hydroxyapatite for bio-medical applications, Journal of Materials Science: Materials in Medicine 30(2), 21. (2019)
44. Nanthini A, Thenmuhil D and Manohar P, Mechano chemical synthesis of hydroxyapatite using dolomite, Materials Letters, Volume 254, 1 November 2019, Pages 379-382. (2019)

Ph D / MS / M Tech / B. Tech Guidance:

Category	Completed
Ph. D	14
M. Tech	81
B. Tech	86

Academic Responsibilities:

- Head of the Department, Department of Ceramic Technology, Anna University, Chennai during April-2010 and April-2012.
- Director, AU-KBC Research Centre, Anna University, Chennai during November-2007 and February-2011.
- Professor In-charge Mit Library, Library MIT, Anna University, Chennai during November-2005 and July-2011.

Workshops / Seminar / Short term Courses / FDP Organized:

Role	Name of the Programme	Duration
Coordinator	National level seminar on "National Seminar on Library Users' expectations in Information and Communication Technology (ICT) Environment	07-Sep-2007 to 08-Sep-2007.
Coordinator	National level seminar on "Recent Trends in Advanced Ceramics	27-Sep-2007 to 28-Sep-2007
Convenor	National Level Technical Symposium (ConCerT'11)	09-Mar-2011 to 11-Mar-2011
Convenor	National Level Technical Symposium (ConCerT'12)	21-Mar-2012 to 23-Mar-2012
Convenor	National Level Technical Symposium (ConCerT'13)	13-Mar-2013 to 15-Mar-2013
Convenor	National Level Technical Symposium (ConCerT'14)	12-Mar-2014 to 14-Mar-2014
Coordinator	One day seminar on career challenges in ceramics	15-Sep-2014
Convenor	Two Day Workshop on High Temperature Ceramics	19-Mar-2015 to 20-Mar-2015