

Personal Information

Name	Dr. Thotakura Ramesh
Years of Experience	Teaching: 09 years Research: 4 years
Email Id	ramesh.t@bvrithyderabad.edu.in
Areas of Specialization	Material Science



Educational Qualifications

Doctoral Degree	Ph.D.	Physics-Material Science
PG Degree	M.Sc	Physics-Material Science
UG Degree	BSc	MPCs

Papers Published

International Journal Publications

1. Low temperature sintering YIG using microwave sintering method.
T. Ramesh, R.S. Shinde and S.R. Murthy (Integrated ferroelectrics, 118, 67-75, 2010)
2. Synthesis and Characterization of $\text{NiCoMnCuFe}_{1.96}\text{O}_4$ for circulator application.
T. Ramesh, R.S. Shinde and S.R. Murthy (J. Magn.Magn.Mater. 323(2011) 1593-1598)
3. Nanocrystalline Gadolinium Iron garnet for circulator applications.
T. Ramesh, R.S. Shinde and S.R. Murthy (J. Magn.Magn.Mater. 324 (2012) 3668-3673)
4. Electrical and Dielectric properties of $X \text{Ni}_{0.53}\text{Cu}_{0.12}\text{Zn}_{0.35}\text{Fe}_{1.88}\text{O}_4 + (1-x) \text{BaTiO}_3$ nanocomposites.
S.Bharadwaj, T.Ramesh, K.Sadhana and S.R.Murthy; Proceedings of ICONSET 2011 organized by Satyabhama University & IGCAR
5. Nanocrystalline Ni-Al ferrites for high frequency applications
T. Ramesh, S. Bharadwaj R.S. Shinde and S.R. Murthy AIP Conf. Proc. 1512, 408 (2013);
6. Fabrication of micro inductor using Nanocrystalline NiCuZn ferrites
S. Bharadwaj, T. Ramesh and S.R. Murthy (J Electroceram (2013) 31:81-87)
7. Synthesis and characterization of nanocrystalline $\text{Ni}_{0.94}\text{Co}_{0.03}\text{Mn}_{0.04}\text{Cu}_{0.03}\text{Fe}_{1.96-x}\text{Al}_x\text{O}_4$ ferrites for microwave device applications
T. Ramesh, R.S. Shinde and S.R. Murthy (J. Magn.Magn.Mater. 345 (2013) 276–281)
8. Microwave Hydrothermal Synthesis and Electromagnetic properties of Nanocrystalline $\text{Y}_{3-x}\text{Dy}_x\text{Fe}_5\text{O}_{12}$ garnets for microwave antenna applications
T. Ramesh, P.Raju, R.S.Shinde and S.R.Murthy (International Journal of Chem Tech Research; Vol.7, No.2, pp 539-546, 2015)
9. Ferrite + Polymer nanocomposites for EMI applications

- P. Raju, T. Ramesh and S.R. Murthy*(International Journal of Chem Tech Research; Vol.7, No.2, pp 1343-1350, 2015)
10. Effect of aluminum substitution on structural and electromagnetic properties of nanocrystalline MgCuMn ferrites
T. Ramesh, S. Senthil Kumar, R. S. Shinde, and S. R. Murthy; AIP Conference Proceedings 1665, 130046 (2015);
 11. Electromagnetic Properties of Nanocrystalline Al³⁺ Substituted MgCuMn Ferrites Synthesized by Microwave Hydrothermal Method, T. Ramesh and S.R. Murthy, Bull Mater Sci (2016) 39: 1593
 12. “CoFe₂O₄-SiO₂ Composites: Preparation and Magnetodielectric Properties,”
T. Ramesh, S. Bharadwaj, and S. R. Murthy, Journal of Materials, vol. 2016, Article ID 7518468, 7 pages, 2016.
 13. “CoFe₂O₄-BaTiO₃ Multiferroic composites: Role of Ferrite and Ferroelectric Phases on the structural, magneto dielectric properties” T. Ramesh, V. Rajendar and S.R. Murthy, (J Mater Sci: Mater Electron 28, 11779–11788 (2017)).
 14. Y_{3-x}Gd_xFe₅O₁₂: Controlled Synthesis, Characterization and Investigation of its Magnetic Properties, T. Ramesh, S. Senthil Kumar, R. S. Shinde, and S. R. Murthy, (Mater Sci: Mater Electron 28, 14138–14148 (2017))
 15. Preparation and characterization of (100-x) TiO₂+ (x)ZnO nanocomposites for dye-sensitized solar cells using Beta vulgaris and Syzygium cumini natural dye extract, S. Kiran, T. Ramesh and S.R. Murthy (J Mater Sci: Mater Electron 29, 11712–11718 (2018)).
 16. Microwave-Hydrothermal Synthesis of Y₃Fe₅O₁₂ Nanoparticles: Sintering Temperature Effect on Structural, Magnetic and Dielectric Properties, T. Ramesh · G. Narayana Rao · T. Suneetha · R. S. Shinde · V. Rajendar · S. R. Murthy · S. Arun Kumar, *J Supercond Nov Magn* **31**, 1899–1908 (2018)
 17. Investigation of Superparamagnetism in Microwave and Conventional Processed Mn_{0.5}Zn_{0.5}Fe₂O₄ Nanoparticles, Narayana Rao Gurram · Ramesh T · Suneetha T · T. K. Nath, *J Supercond Nov Magn* **31**, 815–820 (2018)
 18. Structural and Microwave Behavior of Dy³⁺ substituted Ni_{0.5}Zn_{0.5}Dy_xFe_{2-x}O₄ Ferrites, S. Neelima, T. Ramesh, P.Raju and S.R.Murthy, *J Mater Sci: Mater Electron* **32**, 1729–1740 (2021).
 19. Structural, vibrational and magnetic properties of Cu-substituted Mn_{0.5}Zn_{0.5}Fe₂O₄ nanoparticles, T. Suneetha, G. NarayanaRao and T. Ramesh, *J Mater Sci: Mater Electron* **32**, 14420–14436 (2021).
 20. Crystal chemistry, Rietveld analysis, magnetic and microwave properties of Cu-doped strontium hexaferrites, N. Maramu, G. Sriramulu, T. Ramesh, D. Ravinder, S. Katlakunta, T. Anil Babu & N. V. Krishna Prasad, *J Mater Sci: Mater Electron* **32**, 10376–10387 (2021).

21. Effect of sintering temperature on the magnetodielectric performance of nickel ferrite, T Ramesh, V Madhavi, P Neelima, KN Kumar, NB Reddy, GV Zyryanov, AIP Conference Proceedings 2390 (1), 020064, 2022.
22. Nanocomposite hydrogels for wastewater treatment, V Madhavi, T Ramesh, NB Reddy, GV Zyryanov, AIP Conference Proceedings 2390 (1), 020043, 2022.
23. Preparation and Characterization of ZnO - ZnFe₂O₄ Nanocomposites, S. Kiran, T. Ramesh, K. Ashok, P. Anji Reddy (In press macromolecular symposia)
24. Magnetodielectric Comparison Study Between Microwave and Conventional Sintered NiCuZn Ferrites, T.Ramesh, A.Bhaskar, K.Ashok, P.Anjireddy (In press macromolecular symposia)

Workshops, Seminars and Conferences Attended & Presented Papers

1. Presented a paper with the title “The structural and magnetodielectric properties of Dy substituted YIG “in Material TECH 2022 (Online Second International Conference on Materials and Technologies)” organized by National Institute of Technology Raipur 492010, Chhattisgarh, India, 28th-29th January 2022.
2. Participated and completed the One-week international workshop on “Advanced materials in Innovative technology “organized by BVRIT HYDERABAD College of Engineering for women, 14-18, Dec, 2021.
3. Participated and successfully completed the One-week Online STC on "Principles, Synthesis and Characterization of Nanomaterials - Current and Future Approaches" organized by UGC-HRDC, JNTUH, 22-27, November, 2021.
4. Attended and successfully completed the AICTE-sponsored AQIS Short Term Training Programme (STTP) on “Design and Structural Evolution of Advanced Functional Materials Suitable for Engineering Applications” conducted online by VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, India, 15–20, February, 2021.
5. Participated in the UGC-HRDC Online Short-Term Workshop on E-Content Development and online Pedagogy organized by Osmania University, 18-23, January, 2021.
6. Attended and successfully completed the workshop on Rietveld refinement method, organized by UGC-DAE consortium for scientific research, Indore, 22-24, September, 2020
7. participated and successfully completed the online workshop on Universal Human Value on the theme “Inculcating Universal Human Values in Technical Education” during 24-28 August, 2020 as organized by All India Council for Technical Education (AICTE).
8. Participated in a one week faculty development program on “Emerging trends in sciences-Usage of research tools and techniques” organized by Vardhaman Engineering college-Hyderabad, 15-20 June, 2020.

9. Attended One Week Online FDP on Materials: Recent Trends & Engineering Applications organized by Gokaraju Rangaraju institute of Engineering and Technology, Hyderabad, 02 - 07 June 2020.
10. Attended 2 week faculty development program organized by centre for entrepreneurship development (CED), Hyderabad, 18-30, March, 2019.
11. Attended the workshop on 'Scientific Educational practices' organized by VEDIC, 2-4 November, 2016.
12. Accepted for publication and presentation of paper titled "Preparation of $(\text{Ni}_{0.8}\text{Zn}_{0.2}\text{Fe}_2\text{O}_4)_x-(\text{BaFe}_{12}\text{O}_{19})_{1-x}$ nano composites and their Magneto dielectric Properties" for a two-day national Conference on Materials for specific applications in Gokaraju Rangaraju institute of Engineering and Technology, Hyderabad, 29-30th March 2016.
13. Participated in two-day National Workshop on Recent Trends in X-ray Diffraction Techniques (NWRTRD-2015) at Department of Physics, Osmania University, Hyderabad on 29-30th May 2015.
14. Presented paper titled "Preparation of (Ni-Zn Ferrite) -(Ba-Ferrite) nano composites and Study of their Structural, Dielectric and Magnetic Properties" in National Conference on Engineering Materials, Energy and Environment (EMEE-15) at Chaitanya Bharathi Institute of Technology, Hyderabad on April 24-25th, 2015.
15. Presented and accepted for publishing paper "Microwave Hydrothermal Synthesis and Electromagnetic properties of nano crystalline $\text{Y}_{3-x}\text{Dy}_x\text{Fe}_5\text{O}_{12}$ garnets for microwave antenna applications" in a 3rd International Conference on nano science and Nanotechnology at SRM University, Tamilnadu, Feb 4-6th, 2015.
16. Presented a paper titled "Development of Nanocrystalline Ba Hexa Ferrites for Next Generation Microwave Device Applications" in Recent advances in material science & manufacturing engineering at Gethanjali College of engineering & technology, Hyderabad, during Jan 30-31st, 2015.
17. Presented and accepted for publishing paper "Effect of Aluminum Substitution on Structural and Electromagnetic Properties of Nanocrystalline MgCuMn Ferrites" in an 59th DAE-SSPS in the symposium which will be held at VIT University, Vellore, Tamilnadu, on December 16-20, 2014.
18. Presented a paper titled "Development of high performance garnet materials for Microwave Circulator Applications" in National conference on Nano science and technology (NCNN-2014), by Department of Chemistry, Mahatma Gandhi University, Nalgonda, Feb -21, 2014.
19. Presented a paper titled "Development of nano crystalline NiCoCuMnAl ferrites for microwave circulator applications" in a National Conference on Advanced Materials for Energy Applications (NCAMEA-2014), by Department of Physics, Osmania University, Hyderabad, 31Jan- 1Feb, 2014.

20. Presented a paper titled "Preparation and characterization of nano crystalline $Y_{3-x}Gd_xFe_5O_{12}$ garnets for microwave device applications" in workshop on recent advances in materials synthesis and characterization, Department of physics, Osmania University, Hyderabad, 31st Aug 2013.
21. Presented a paper titled "Synthesis and characterization of nano crystalline Dysprosium Iron Garnet" in National seminar on Advanced Materials and their Applications (NSAM-2013) organized by Department of Physics, Osmania University, Hyderabad, 27-28th Feb, 2013.
22. Presented a paper titled "Microwave behavior of nano crystalline Al substituted MgCuMn ferrites" in 2nd International conference on Nanotechnology (Nanocon 012) by Bharathi Vidyapeeth University, Pune (India), 18,19th Oct 2012.
23. Presented a paper titled "Study on the Dysprosium Substituted Yttrium Iron Garnet and its applications" in International Conference and Workshop on nano structured Ceramics and other Nano materials (ICWNCN)" on 13-15th March 2012 Delhi University, DELHI.
24. Presented a Paper on "Microwave-Hydrothermal synthesis of Nanophase MgCuMn ferrites" in international conference on Nano Science and Technology (ICONSAT-2012) during Jan 20-23, 2012, Hyderabad, India,
25. Presented a Paper entitled "Microwave Hydrothermal Synthesis of Gadolinium iron garnet nano particles" in International Conference on Nanotechnology and Functional Materials (NANOTECH-2012), during Jan 4-7, 2012 in SNIST, Hyderabad.
26. Presented a paper titled "Magnetic and dielectric properties of microwave hydrothermal synthesized Gd substituted YIG nano particles" in International Conference on nano materials & Nanotechnology (ICNANO-2011) during 18-21 Dec, 2011, University of Delhi, Delhi, India.
27. Presented and accepted for publishing paper titled "Electrical and dielectric properties of $xNi_{0.53}Cu_{0.12}Zn_{0.35}Fe_{1.88}O_4 + (1-x) BaTiO_3$ nano composites" in International Conference on Nano science, Engineering and Technology (ICONSET- 2011) during 28-30 Nov, 2011, Sathyabama University, Chennai, India.
28. Presented a paper titled "Magneto dielectric comparison studies of microwave and conventional processed Cr-Substituted MgCuMn ferrites" in National Conference on Nano science and Nanotechnology (NCNN-2011) conducted by Madras university, Chennai during Aug 25-27, 2011.
29. Presented a paper titled "Complex permittivity and permeability studies on microwave sintered nano crystalline MgCuMn ferrites" in National symposium on Microwave processing of materials (NSMWP-2010) during Nov 28, 2010, IIT New Delhi, India.
30. Participated and Presented a Paper titled "Thermal investigation of Acoustic emission in nanocrystalline Mn-Zn ferrites" in National symposium on Acoustics (NSA-2009) during 26-28th Nov 2009, RCI, Hyderabad.

31. Presented a paper titled “Microwave hydrothermal synthesis of yttrium iron garnet nano powders” in International conference on Recent trends in Nano structured Materials and their Applications (ICRNM-2008) during Dec 19 - 20th, 2008, Dept of Physics, OU, Hyderabad.

Seminars/ Conferences/Meeting Organised

1. Organized DST brain storming meeting on “University to Industry Technology transfers in the Indian Context” 17-18, Feb, 2017.
2. Organized DST-SERB 12th Expert committee meeting of Start Up research Grant (Young Scientist) in the domain area of Electrical, Electronics and Computer Science Engineering. 22-23, August, 2017.