Dr. NAGAPURI RAJU

Personal Information

Designation: Assistant Professor (H&S)

Qualification: M.Sc., Ph. D (Physics)

Teaching Experience: 3 Yrs

Specialization: Materials Science

Date of Joining: 01/07/2019

Phone Number: 9959019289

Achievements/Publications/Workshops/Seminar/Guest Lectures

Research Experience/Achievements

10-05- 2018 and 10-11- 2018	Postdoc visiting researcher, University of Hyogo, Japan (HUMAP/HORN fellowship)
09-12-2011 and 08-12-2013	Junior Research Fellowship (JRF): Funded by Department of Science and Technology (DST), India.
09-12-2013 and 31-12-2014	Senior Research Fellowship (SRF): Funded by Department of Science and Technology (DST), India.
05-09-2015 and 07-10-2017	BSR-RFSMS (JRF): funded by University Grants Commission (UGC).

01-08-2015 Qualified State Eligibility Test for Assistant Professor/Lectureship (SET-TS &AP-2014).

Young Scientist Award

1. Young Scientist Award (Runner Up-II) in physics from Dr. K.V. Rao Scientific Society, Hyderabad, India, in 2017.

Best Oral presentation awarded research papers

1. *Research Scholars' Workshop on Physics of Materials, UGC*-DAE Consortium for Scientific Research, University Campus, Khandwa Road, Indore, *December 23-24, 2013. "High Field ^{57}Fe Mössbauer Spectroscopic Study of Multiferroic Y-type Hexaferrites".*
2. Work shop of Research Scholars on Recent Advances in Materials Synthesis and Characterization. Department of Physics, O.U, Hyderabad -500007, August 31, 2013. *"The Mössbauer spectroscopy studies of $La_{0.67-x}Eu_xCa_{0.33}MnO_3$ (x= 0.25, 0.27) perovskite manganites".*

Publications

1. **Nanosize effects on the magnetic field induced transitions in $La_{0.67-x}Eu_xCa_{0.33}MnO_3$ perovskite manganite**

   N. Raju, D. Roja Sree, S. Shravan Kumar Reddy, Ch. Gopal Reddy, P. Yadagiri Reddy, K. Rama Reddy, V. Raghavendra Reddy and Goverdhan Reddy Turpu, *J. Mag. Magn. Mater.* ***368,*** *(2014) 308-311.*

2. **In-field ^{57}Fe Mössbauer study of multiferroic $Ba_{0.5}Sr_{1.5}Zn_2Fe_{12}O_{22}$ Y-type hexaferrite**

   N. Raju, S. Shravan Kumar Reddy, Ch. Gopal Reddy, P. Yadagiri Reddy, K. Rama Reddy and V. Raghavendra Reddy, *J. Mag. Magn. Mater.* ***384,*** *(2015) 27-32.*

3. **Structural, electrical, magnetic and ^{57}Fe Mössbauer study of polycrystalline multiferroic $DyFeO_3$**

   S. Shravan Kumar Reddy, **N. Raju**, Ch. Gopal Reddy, P. Yadagiri Reddy, K. Rama Reddy and V. Raghavendra Reddy, *J. Mag. Magn. Mater.* ***396,*** *(2015) 214-218.*

4. **Magnetic, ferroelectric and spin phonon coupling studies of $Sr_3Co_2Fe_{24}O_{41}$ multiferroic Z- type hexaferrite**

   N. Raju, S. Shravan Kumar Reddy, J. Ramesh, Ch. Gopal Reddy, P. Yadagiri Reddy, K. Rama Reddy, V. G. Sathe and V. Raghavendra Reddy, *J. Appl. Phys* **120,** (2016) 054103.

5. **Study of Mn doped multiferroic $DyFeO_3$ ceramics**

   S. Shravan Kumar Reddy, **N. Raju**, Ch. Gopal Reddy, P. Yadagiri Reddy, K. Rama Reddy and V. Raghavendra Reddy, *Ceram. Int.* **43***, (2017), 6148-6155.*

6. **^{57}Fe Mössbauer study of spin reorientation in polycrystalline $NdFeO_3$**

   J. Ramesh, **N. Raju**, S. Shravan Kumar Reddy, M. Sreenath Reddy, Ch. Gopal Reddy,P. Yadagiri Reddy, K. Rama Reddy and V. Raghavendra Reddy, J. Alloys. Compd. **771**, (2017) 300-304.

7. **Effect of sintering temperature on leakage current of polycrystalline multiferroic $DyFeO_3$ system**

   S. Shravan Kumar Reddy, **N. Raju**, J. Ramesh, Ch. Gopal Reddy, P. Yadagiri Reddy, K. Rama Reddy and V. Raghavendra Reddy, Ferroelectrics, **516**, (2017) 44–50.

8. **The electrical, magnetic and ^{57}Fe Mössbauer studies of Al doped PrFeO3 polycrystalline materials**

   J. Ramesh, S. Shravan Kumar Reddy, **N. Raju**, M. Sreenath Reddy, Ch. Gopal Reddy, P. Yadagiri Reddy, K. Rama Reddy and V. Raghavendra Reddy, *Ceram. Int.* **44** *,(2018) 19314-19318.*

International Workshops

1. International School on Fundamental Crystallography with applications to Electron Crystallography held on 27 June to 2 July, 2016 at Antwerp University, Antwerp, Belgium. *"Magnetic, in-field Mössbauer and Spin phonon coupling studies of* $Sr_3Co_2Fe_{24}O_{41}$ *multiferroic hexaferrite" (Poster Presentation).*
2. International summer school on " Ab initio modeling in solid state Chemistry-2020" held on 21st to 25th September, 2020 at Imperial college London, UK (Virtual edition)

List of Conferences / Seminars attended (National/ International).

1. 24th Congress and General Assembly of the International Union of Crystallography, Hyderabad International Convention Centre, 21-28 August 2017, Hyderabad, India. *"Neutron diffraction studies of Sr doped magneto-electric M-type* $BaFe_{12}O_{19}$ *hexaferrites" (Poster Presentation).*
2. International conference on Environmental Impact of Advanced Materials and Energy Technoogies (EIAMET-2017), Department of Physics (PG), AV college of Arts, Science & Commerce, Hyderabad-29, India, January 19-21, 2017."*Magnetic studies of magneto-electric M-type hexaferrite" (Oral Presentation).*
3. International conference on technologically advanced materials & Asian Meeting on Ferroelectricity, University of Delhi, India, November 7-11, 2016. *"Ferroelectric, spin phonon and spin lattice coupling studies of* $Ba_{0.5}Sr_{1.5}Zn_2Fe_{12}O_{22}$ *multiferroic Y- type hexaferrite" (Poster Presentation).*
4. Thematic workshop on Diffraction Methods For Structural Analysis in Material Science**,** Poornaprajna Institute of Science Research **(***PPISR),* Bengaluru & Department of Physics, Bangalore University, Bengaluru, July 25-27, 2016.

5. International Conference on Materials Science and Ionizing Radiation Safety and Awareness (ICMSIRSA-2016) Department of Physics, Shivaji University, Kolhapur, Maharastra, India, January 28-30, 2016. *"Study of spin phonon coupling in $Sr_3Co_2Fe_{24}O_{41}$ multiferroic hexaferrite"* (Oral Presentation),
6. 60th DAE solid state physics symposium, Amity University, UP, Noida, December 21-25, 2015. *"Low Temperature Ferroelectric Studies of Multiferroic Y- Type Hexaferrite" (Poster Presentation).*
7. National Conference on Environmental Radiation and Functional Materials, Department of Physics, Osmania University, Hyderabad-500007, India, February 28-March 1, 2015. *"Magnetic and In-field ^{57} Fe Mossbauer studies of Multiferroic Z- Type Hexaferrite" (Oral presentation).*
8. International Conference on Magnetic Material and Applications (ICMAGMA-2014), Department of Physics, Pondicherry University, Pondicherry, India, September 15-17, 2014. *"High Field ^{57}Fe Mössbauer Spectroscopic Study of Multiferroic $Ba_{0.5}Sr_{1.5}Zn_2Fe_{12}O_{22}$ Hexaferrites" (Oral presentation).*
9. "CSR Lecture Series" *UGC*-DAE Consortium for Scientific Research, University Campus, Khandwa Road, Indore – 452 001, September1-12, 2014.
10. National seminar on Advanced Materials and their Applications, Department of physics, Osmania University, *February 27-28, 2013. "Electrical transport studies of $La_{0.67-x}Eu_xCa_{0.33}MnO_3$ (x=0.25, 0.27) nano particles" (Poster Presentation).*
11. 57th DAE solid state physics symposium, IIT Bombay, Mumbai, India, December 3-7, 2012.
12. 4th National symposium for materials research scholars MR-12, IIT Bombay, Mumbai, India, May 4-5, 2012.