


Profile

Name of the Faculty	Dr. G. Neeraja Rani	
Designation	Professor & Head	
Department	Freshman Engineering	
Area of Interest	Solid State Physics	
Subjects Taught	All physics subjects related to B.Tech.	
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Educational Qualifications:

S. No.	Degree	Specialization	University/College	Year
1	PhD	Physics	Osmania University	1995
2	M.Sc.	Physics	Osmania University	1990

Paper Publications:

S. No.	Publication details
1	Ultrasonically induced insitu polymerization of PANI-SWCNT nanocomposites for Electromagnetic Shielding Applications, P.Raju, G.Neeraja Rani, Udaya Kumar Susarla, Andrews Joseph, K C James Raju, communicated and submitted revised manuscript to Journal of Materials Science: Materials in Electronics, (Corresponding Author).

2	Enhanced microwave absorption properties of $\text{Ni}_{0.48}\text{Cu}_{0.12}\text{Zn}_{0.4}\text{Fe}_2\text{O}_4$ + polyaniline nanocomposites, P. Raju, P. Neelima, G. Neeraja Rani, M. Kanakadurga, Journal of Physics and Chemistry of Solids, 154(2021) 110048
3	Effect of annealing on photoluminescence of $\text{MgAl}_{1.8}\text{Y}_{0.14}\text{Eu}_{0.06}\text{O}_4$, Kodam Ugendar, G. Neeraja Rani Journal of Chemical Physics, 539, 2020, 110937.
4	Quenching effect of co-dopant Pr^{3+} on red emitting yttrium vanadate phosphor doped with Eu(III) G. Neeraja Rani, J. Shankar, P. Raju, J. Anjaiah, B. Mamatha, and N. H. Ayachit Journal of American Institute of Physics (AIP), 2269, 030063-1-030063- 6(2020).
5	Complex permittivity and permeability properties analysis of NiCuZn Ferrite Polymer nanocomposites for EMI suppressor applications. P.Raju, Ch.Kalyani, J.Shankar, J.Anjaiah, G.Neeraja Rani, Journal of Physics: Conference Series, 1495, 012001(2020)
6	Solid State root preparation, Characterization and Electrical properties of NiCuZn , P.Raju, S.Rajesham, J.Shankar, J.Anjaiah, G.Neeraja Rani Journal of Physics: Conference Series, 1495(2020)012004.
7	Enhanced electrical properties of $\text{Sr}(\text{Bi}_{3.9}\text{La}_{0.1})(\text{Ti}_{3.975}\text{Zr}_{0.025})\text{O}_{15}$ ceramic with doping of Nd, B.Mamatha, K.Ashok, G.Neeraja Rani, A.R.James, Journal of American Institute of Physics (AIP) 2269, 030069-1-030069-4(2020).
8	Study of Microstructure and Thermal Properties of PbTiO_3 based Glass Ceramics, J.Shankar, A.Shiva Kumar, J.Anjaiah, P.Raju, G.Neeraja Rani, V.K Deshpande, Journal of American Institute of Physics (AIP), 2269, 030077-1-030077-4(2020).
9	Preparation and Characterization of Red Emitting Yttrium Vanadate Phosphor Doped with Eu(III) : $\text{Y}_1\text{-XVO}_4$: Eux, G. Neeraja Rani, J. Shankar, J. Anjaiah, B. Mamatha, and N. H. Ayachit Journal of American Institute of Physics (AIP) 2162, 020117, 2019.
10	Study of Microstructure and Dielectric Properties of PbTiO_3 based Glass Ceramics, J. Shankar, G. Neeraja Rani, J. Anjaiah, P. Raju, and V. K. Deshpande Journal of American Institute of Physics (AIP) 2162, 020045 2019.
11	Thermoluminescence Characteristics and dosimetric aspects of $\text{Li}_2\text{O-CaO-B}_2\text{O}_3$ glasses doped with rare earth ions, J. Anjaiah, G. Neeraja Rani, J. Shankar, P.Raju, Journal of American Institute of Physics (AIP), 2162, 020043, 2019.
12	Application of Dielectric Mixtures Formulae to PbTiO_3 Based Glass-Ceramic Systems. J.Shankar, G.Neeraja Rani, and V.K.Deshpande, Journal of American Institute of Physics (AIP), Vol.2100, 020004-1-02000404, Year 2019.

13	Enhanced Electrical Properties of $\text{SrBi}_4\text{Ti}_4\text{O}_{15}$ ceramic with addition of ZrO_2 , B.Mamatha, G.Neeraja Rani and J.Shankar, Journal of American Institute of Physics (AIP), Vol.1942, Pages 120007-1-120007-4, Year 2018.
14	Dielectric and Impedance Properties of $\text{NiFe}_{1.95}\text{R}_{0.05}\text{O}_4$ ($\text{R} = \text{Y}, \text{Yb}$ and Lu), Kodam Ugendar, Hanuma Kumar, G. Markaneyulu, and G. Neeraja Rani, Journal of American Institute of Physics (AIP), Vol.1942, Pages 110004-1-110004-4, Year 2018. Corresponding author
15	Structural, Magnetic and Magnetoreactance Studies In $\text{NiFe}_{2-x}\text{R}_x\text{O}_4$ ($x = 0, 0.05$; $\text{R} = \text{Y}, \text{Yb}$ and Lu), Kodam Ugendar, Venkatrao Chunchu, G. Neeraja Rani, and G. Markaneyulu, Journal of American Institute of Physics (AIP), Vol.1942, Pages 130016-1-130016-4, Year 2018.
16	Crystallization and Dielectric Properties of PbTiO_3 based Glass Ceramics, J.Shankar, V. K. Deshpand and G. Neeraja Rani, Journal of American Institute of Physics (AIP), Vol.1942, Pages 070001-1-070004-4, Year 2018.
17	Synthesis and Characterization of PbTiO_3 based Glass Ceramics, J. Shankar, G.Neeraja Rani, B.Mamatha and V.K.Deshpande, Journal of American Institute of Physics (AIP) 1832, 070016-1-3, Year 2017. Published by American Institute of Physics
18	Low temperature synthesis of MgAl_2O_4 Spinel through sol-gel technique and its characterization, G. Neeraja Rani and N.H. Ayachit vol. 92, 2015, 561-564, Canadian journal of Physics.
19	Excited State Electric dipolemoment of 5-Hydroxy Indole and 5-Hydroxy Indole 3- Acetic Acid through solvatochromic Shifts, G.Neeraja Rani and N.H.Ayachit, Journal of Electron Spectroscopy and Related phenomena, 182(2010)1-3, Elsevier Journal.
20	Density measurements and thermodynamic parameters of 4-4' dibutoxy azoxy benzene, JS Doddamani, SB Kapatkar, Narasimha H Ayachit, G.Neeraja Rani, Molecular Crystals Liquid Crystals, Vol.528;pp.74-80, 2010 Taylor and Francies Journal.
21	Excited state electric dipolemoments of two exalite dyes from solvatochromic shift measurements, N.H.Ayachit and G.Neeraja Rani, Physics and Chemistry of Liquids, Vol. 45, No. 6, December 2007, 615-621.

22	Molecular polarizability of solutions from solvatochromic shift measurements, N.H.Ayachit and G. Neeraja Rani, Physics and Chemistry of Liquids, Vol. 45, No. 1, February 2007, 41–45.
23	Preparation and Characterization of Eu ⁺³ doped powder spinel Phosphorous (MgAl _{11.8} Y _{0.2-x} O ₄), G. Neeraja Rani, N H Ayachit, V J Rao, K Ravindranath J. of Spectrochemica Acta A, Vol.60, Issue 11, 2481-2485, Sept-2004.
24	Structural and Electrical Properties of PANI+SWCNT Nanocomposites prepared by Chemical Mixing Method, P.Raju, A.Geetha, S.Udaya Kumar, G.Neeraja Rani, International Conference on Multifunctional Materials, December19-21, 2019, GCET, Cheeryal, Hyderabad.
25	Enhanced Electrical Properties of Sr (Bi _{3.9} La _{0.1})(Ti _{3.975} Zr _{0.025})O ₁₅ Ceramic with the Substitution of Nd, B.Mamatha, G.Neeraja Rani, J.Shankar and V.Naveen Reddy, presented at International Conference on Advances in Humanities Sciences and Management (ICAHSM), Malla Reddy College of Engineering, Dhulapally, Secunderabad, 25th and 26th Nov, 2016.
26	On Characterization of a liquid Crystal through Acoustic and Thermodynamic parameters” International Conference on Recent Trends in Material Characterization, NITK, Suratkal, Feb.14-15, 2010
27	Excited state electric dipole moment of two substituted indoles through solvatochromic shifts International Conference on Recent Trends in Material Characterization, NITK, Suratkal, Feb.14-15, 2010
28	Thermodynamic functions of a liquid crystal through density measurements, N.H.Ayachit and G.Neeraja Rani, International conference on Condensed Matter Physics, Nov. 25-28, 2007, Jaipur.
29	Excited state electric dipole moment of two substituted indoles through solvatochromic shifts, G.Neeraja Rani and N.H.Ayachit presented at International symposium on Molecular Spectroscopy, Ohio University, Columbus, USA, 18th - 22nd June, 2007

30	On The Orientation of substituents in N-Methyl and N, N-Dimethyl-Anilenes in the excited states, N.H.Ayachit and G.Neeraja Rani, presented at International symposium on Molecular Spectroscopy, Ohio University, Columbus, USA, 18th - 22nd June, 2007.
31	Internal Assessment- its role, Characterization & Problems, G.Neeraja Rani and N H Ayachit, Workshop on Faculty development 26-28 Aug 2004, SDM College of Engineering & Technology.
32	Evaluation through Rationalized Grading System, N H Ayachit and G.Neeraja Rani, Workshop on Faculty development 26-28 Aug 2004, SDM College of Engineering & Technology
33	Preparation and Characterization of Red Emitting Yttrium Van date Phosphor Doped With Eu (III) and Co doped With Pr (III) [Y _{1-x} VO ₄ : Eu _x -y +3:Pr _y +3], G. Neeraja Rani et al, International conference on Luminescence and Applications, Mumbai, Feb 9-12, 2004.
34	Photoluminescence spectra of Spinel MgAl ₂ O ₄ doped with Eu ⁺³ , G. Neeraja Rani et al National Seminar on recent trends in optical materials and Devices, November 21- 22, 2002, Department of Physics, University, Tirupati.
35	Characterization of Phosphors – Photo Acoustic Spectroscopy, G. Neeraja Rani et al, VAGM MRSI Hyderabad 1994.
36	Order – disorder transition in spinel Mg Al ₂ O ₄ , G. Neeraja Rani et al, XXV National Seminar on Crystallography Madras Dec. 1993.
37	Intensity analysis of p-C ₆ H ₄ Cl ₂ , G. Neeraja Rani et al, XIII International Conference on Raman Spectroscopy, Germany, Aug 1992.

Books/Book Chapters Published:

S. No.	Publication details
1	Book of Abstracts: International Conference on Multifunctional Materials (ICMM-2019), December 19-21, 2019. ISBN: 9 789353962067

Experience:

Teaching	28 Years
Industry	Nil
Research	25 Years
Total Experience	28 Years

