

CURRICULUM VITAE

Dr. R. VIJAYA KUMAR

Assistant professor

Department of Pure & Applied Physics
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Ph.D:

Ph.D., awarded from Department of Physics, Osmania University, on “**Spectroscopic and Transport properties of Boro-Bismuthate glasses containing CdO and Li₂O**”, on **June 2013.**

Research Experience:

1. Dr. D. S. Kothari fellowship at School of Physics, UGC-New Delhi, University of Hyderabad, Hyderabad, India, from Sep 2013 to Sep 2016.
2. UGC-Postdoctoral fellowship for Sc/St students, UGC-New Delhi, Materials Research Centre, IISc-Bangalore, Bangalore, Karnataka-560012, from Sep 2016 to Nov 2019.

Research Interests:

Glasses, Bio-active glasses, Solar cells, Magnetic Materials, Thin films, Gas sensing, Luminescence studies, Energy materials, TiO₂ nanotubes.

Academics:

Post Graduation: (M.Sc.) in Physics from Nizam Collge
Osmania University, Hyderabad, Telangana, India (2005).

B.Ed: with Maths, Physics,
NSR college of Education, V.V. Campus, Jambagh
Osmania University, Hyderabad, Telangana, India (2003)

Graduation: (B.Sc.) with Mathematics, Physics, Computers
Osmania University, Nalgonda, Telanagana, India (2002).

List of Publications:- 30

International Journals:- 16

Conference Proceedings:- 14

International Journals:

1. Optical absorption and IR studies on $25\text{Bi}_2\text{O}_3-(75-x)\text{B}_2\text{O}_3-x\text{BaO}$ ($0 \leq x \leq 25$) glasses
Journal of Alloys and Compounds, Volume 490, Issues 1–2, 4 February 2010, Pages 1-4.
R. Vijaya Kumar, Shashidhar Bale, Ch Srinivasu, M.A. Samee, K. Siva Kumar and Syed Rahman
2. MDSC, electrical conductivity and optical absorption studies of $40\text{B}_2\text{O}_3-20\text{CdO}-(40-x)\text{Bi}_2\text{O}_3-x\text{Li}_2\text{O}$ glasses
Solid State Sciences, Volume 13, Issue 2, February 2011, Pages 379-383.
R. Vijaya Kumar, Ch. Srinivasu, K. Siva Kumar
3. Structural studies of $40\text{B}_2\text{O}_3-20\text{CdO}-(40-x)\text{Bi}_2\text{O}_3-x\text{Li}_2\text{O}$ glasses
Optical Materials, Volume 35, Issue 12, October 2013, Pages 2267-2274.
R. Vijaya Kumar, P. Gayathri Pavani, B. Ramesh, Md. Shareefuddin, K. Siva Kumar
4. EPR and optical absorption studies of Cu^{2+} ion doped in $x\text{Li}_2\text{O}-(40-x)\text{Bi}_2\text{O}_3-20\text{CdO}-40\text{B}_2\text{O}_3$ glasses
Physics and Chemistry of Glasses: (European Journal of Glass Science and Technology Part-B), October 2016, 57 (5), 223–226.
R. Vijaya Kumar, Ashok Bhogi, Md. Shareefuddin, K. Siva Kumar, M. Ghanashyam Krishna and C. S. Sunandana
5. Cation distributions and magnetism of Al-substituted $\text{CoFe}_2\text{O}_4 - \text{NiFe}_2\text{O}_4$ solid solutions synthesized by sol-gel auto-combustion method.
Ceramics International, Volume 44, Issue 17-2018, Pages 20708-20715.
R. VijayaKumar, A.V.Anupama, R.Kumar, H.K.Choudhary, G.Aravind, B.Sahoo

Conference Proceedings:

1. Spectroscopic studies of $x\text{Li}_2\text{O}-(40-x)\text{Bi}_2\text{O}_3-20\text{CdO}-40\text{B}_2\text{O}_3$ Glasses
R. Vijaya Kumar, A. Edukondalu, P. Muralimohan, M. Srinivas, K. Siva Kumar
International Conference on Materials Science and Technology (ICMST 2012),
IOP Conf. Series: Materials Science and Engineering 73 (2015) 012008.
10-14th June 2012, Kottayam, Pala, Kerala, India
2. Physical and optical absorption studies on $x\text{Na}_2\text{O}-(40-x)\text{Bi}_2\text{O}_3-20\text{CdO}-40\text{B}_2\text{O}_3$ glasses
R. Vijaya Kumar, V. Rajashekar Reddy, S. Srinu Naik, and K. Siva Kumar
58th DAE Conference, AIP conference Proceedings 1591, Pages 762-764
17–21st December 2013, Thapar University, Patiala, Punjab, India
doi: 10.1063/1.4872747
3. FTIR and Raman studies on $25\text{Bi}_2\text{O}_3-(75-x)\text{B}_2\text{O}_3-x\text{BaO}$ glasses
R. Vijaya Kumar, A. Edukondalu, B. Srinivas, G. Sriramulu, M. Ghanashyam Krishna, K. Siva Kumar
59th DAE Conference, AIP conference Proceedings, 1665, 070038 (2015).
16-20th December, 2014, VIT University, Vellore, Tamilnadu.

4. Physical and Optical Absorption Studies of Fe³⁺ - ions doped Lithium Borate glasses containing Alkaline earths

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AIP conference Proceedings, 1731, 070038 (2016); doi: 10.1063/1.4947870.

60th DAE Solid State Physics Symposium, on 21- 25 Dec 2015, conducted by Amity University, Noida, Uttar Pradesh, India.

5. Optical absorption and FTIR studies of Cu²⁺ ion doped in 25Li₂O-15BaO-(60-x) B₂O₃ glasses
IOP Conf. Series: Materials Science and Engineering, 360 (2018) 012018.

<https://iopscience.iop.org/article/10.1088/1757-899X/360/1/012018>

Ashok Bhogi, R. Vijaya Kumar, P. Kistaiah

Second International Conference on Materials Science and Technology (ICMST-2016)