



About myself

Dr P. Ramesh Babu is an Associate Professor of Physics in the Department of Humanities and Sciences, GRIET, Hyderabad. He completed his Ph.D., in Physics from Acharya Nagarjuna University, Guntur and M.Sc. (Condensed Matter Physics) from Acharya Nagarjuna University, Guntur in 2004.

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CURRICULAUM VITAE

Educational Details:

- Ph.D., (Physics), ANU, Guntur.
- M.Phil (Material Science) from Acharya Nagarjuna University, Guntur, Andhra Pradesh.
- M.Sc. (Condensed Matter Physics) from Acharya Nagarjuna University, Guntur, Andhra Pradesh (2002-2004).
- B.Sc.(MPCS), Acharya Nagarjuna University, Guntur, Andhra Pradesh (1999-2002).

Professional Background:

- ❖ Associate Professor of Physics, Gokaraju Rangaraju Institute of Engineering and Technology, Bachupally, Kukatpally, Hyderabad, Telangana, Dec 2021 to till Date.
- ❖ Associate Professor of Physics, Usharama College of Engineering & Technology, Vijayawada, September 2018 to Nov 2021.
- ❖ Assistant Professor of Physics, Usharama College of Engineering & Technology, Vijayawada, Aug 2014 to Aug 2018.
- ❖ As Worked as a Research Scholar in Acharya Nagarjuna University under guidance's of Prof.D. Krishna Rao from Nov 2010 to July2014.
- ❖ As Worked as an Assistant Professor in K L R College of Engg. & Tech. at Paloncha, Khammam (DT) from Oct 2008 to Oct 2010.
- ❖ As Worked as a Lecture in SRSVRGNR Degree College at Vijayawada (Andhra Pradesh) from July 2004 to Sep 2008.

Administrative Experience:

- Academic In charge in the Department of Science and Humanities
- IQAC Member in the Department of Science and Humanities.
- Exam branch in charge in the Department of Science and Humanities.
- Mentor for I B.Tech ECE-A 2018-19.

Committee Work:

Member (Discipline Committee) Usharama College of Engg. & Tech, Vijayawada 2017- 2021.

Research Interest:

- Materials Synthesis and Characterization
- Spectroscopy(Optical absorption, FTIR, ESR and Luminescence)
- Dielectric Properties of materials
- Laser physics and Applications.

Research Experience:

- I have learned and acquired knowledge in the preparation of Glasses with certain transition materials like CuO, MnO, Fe₂O₃, V₂O₅ etc.,
- Characterization of glass samples by employing various tools such as XRD, FTIR, DSC, Optical Absorption, ESR and Electrical Properties of materials.

Courses Taught:

Applied Physics (T & L), Engineering Physics (T & L)

Electricity & Magnetism, Basic Electronics, Modern Physics, Physics for Engineers

Text Books:

Monograph “**Electrical and Spectroscopic properties of Borosilicate glasses**”

published by Lambert Academic Publications (2017) with ISBN Number 978-3-659-18157-3.

Memberships:

1. International Association of Engineers (**IAENG**)- Member No: 211536
2. InSc Professional Membership Id:2023REA70

Research Publications:

1. Anil Kumar Turaka, **P. Ramesh Babu**, Ch. Bhargavathi, K. Subba Rao, M.V. Basaveswara Rao and Ch. Venktrao “Nickel Catalytic Activities On The Supports of Silica And Activated Carbon Extraction From Local Rice Husk For Nitrobenzene Hydrogenation: A Comparative Study” *Rasayan J. Chem.*, 15(4), 2844-2851(2022) Scopus. <http://doi.org/10.31788/RJC.2022.1547071>
2. Kishor Palle, Shanthi Vunguturi, K. Subba Rao, Sambhani Naga Gayatri, P. Ramesh Babu, Md. Mustaq Ali, Ramesh Kola “Comparative study of adsorption isotherms on activated carbons synthesized from rice husk towards carbon dioxide adsorption” **Chemical Papers (Springer) 2022. [IF:2.146] SCI**
3. Kishor Palle, G. K. Sivasankara Yadav, Sambhani Naga Gayatri, Shanthi Vunguturi, P. Ramesh Babu, K. Subba Rao, Md. Mustaq Ali “Preparation of activated carbon from rice husk for CO₂ adsorption: Isotherm and artificial neural network modelling” **MRS Communications (Springer) 12 (2022) 1 [IF:2.95] [SCI]**
<https://doi.org/10.1557/s43579-022-00262-w>
4. Kishor Palle, Shanthi Vunguturi, Sambhani Naga Gayatri, K. Subba Rao, **P. Ramesh Babu**, R. Vijay “The prediction of CO₂ adsorption on rice husk activated carbons via deep learning neural network” **MRS Communications (Springer) 12 (2022) 1 [IF:2.95] [SCI]**

5. **P. Ramesh Babu**, R. Vijay, S. Brammaiah, G. Naga Raju, D. Krishna Rao
“Electrical and spectroscopic studies on ZnO-As₂O₃-Sb₂O₃ glasses doped with Y₂O₃”
Materialstoday: Proceedings (Elsevier) 5 (2018) 26356. [IF : 1.4].
6. Shaik Meera Saheb, R. Vijay, **P. Ramesh Babu**, G. Naga Raju “Structural and Spectroscopic studies on lead germanate glasses doped with V₂O₅”
Materialstoday: Proceedings (Elsevier) 5 (2018) 26304. [I F : 1.4]
7. Shaik Meera Saheb, P. Venkateswara Rao, R. Vijay, **P. Ramesh Babu**, Ch. Chandrakala, P. Syam Prasad, G. Naga Raju “Spectroscopic and electrical investigations of copper ions in PbO–GeO₂ glasses” **Results in Physics (Elsevier)** 11 (2018) 780. [IF:4.47]
8. R. Vijay, L. Pavić, A.Šantić, A. Moguš-Milanković, **P. Ramesh Babu**, D. Krishna Rao, V. Ravi Kumar, N. Veeraiah “Influence of tungsten ion valence states on electrical characteristics of quaternary lithium-antimony-lead-germanate glasses”, **Journal of Physics and Chemistry of Solids (Elsevier)** 107 (2017) 108. [IF: 3.995]
9. B.J.R.S. Swamy, R.Vijay, **P.Ramesh Babu**, Bhaskar Sanyal, Y. Gandhi, N. Veeraiah “Influence of γ -ray-induced effects on dielectric dispersion of CuO-doped calcium fluoroborophosphate glass system” **Ionics (Springer)** 22 (2016) 1625. [IF: 2.81]
10. R.Vijay, **P.Ramesh Babu**, V.Ravi Kumar, M. Piasecki, D. Krishna Rao, N. Veeraiah “Dielectric dispersion and ac conduction phenomena of Li₂O–Sb₂O₃–PbO–GeO₂: Cr₂O₃ glass system”, **Materials Science in Semiconductor Processing (Elsevier)** 35(2015)96. [IF: 3.92]
11. R. Vijay, **P. Ramesh Babu**, Y. Gandhi, M. Piasecki, D. Krishna Rao, N. Veeraiah “Molybdenum ion –A structural probe in lithium antimony germanate glass system by means of dielectric and spectroscopic studies” **Journal of Materials Science (Springer)** 49 (2014) 6203. [IF: 4.22]
12. P. Srinivasa Rao, **P. Ramesh Babu**, R. Vijay, T. Narendrudu, N. Veeraiah, D. Krishna Rao “Spectroscopic and dielectric response of zinc bismuth phosphate glasses as a function of chromium content” **Materials Research Bulletin, (Elsevier)** 57 (2014) 58. [IF: 4.64]
13. D. Rajeswara Rao, G. Sahaya Baskaran, **P. Ramesh Babu**, Y. Gandhi and N. Veeraiah “Role of sesquioxides on emission characteristics of Pr³⁺ ions in PbO–PbF₂–B₂O₃ glass system” **Journal of Molecular Structure, (Elsevier)** 1073 (2014) 164. [IF: 3.19]
14. R. Vijay, B. Tilak, **P. Ramesh Babu**, D. Krishna Rao “Influence of molybdenum ions on optical absorption, ESR and IR OF A₂O (A=Li, Na, K)-NaF-B₂O₃ glass system” **Optoelectronics and Advanced Materials – Rapid Communications**6 (2012) 703.
15. R. Vijay, **P. Ramesh Babu**, B.V. Raghavaiah, P.M. Vinaya Teja, M. Piasecki N. Veeraiah, D. Krishna Rao “Influence of modifier oxide on dielectric dispersion and a.c. conduction phenomena of Li₂O–Sb₂O₃–GeO₂ glass system” **Journal of Non-Crystalline Solids, (Elsevier)** 386 (2014) 67. [IF: 3.531]
16. P. Srinivasa Rao, S. Bala Murali Krishna, S. Yusub, **P. Ramesh Babu**, Ch. Tirupataiah, D.Krishna Rao “Spectroscopic and dielectric investigations of tungsten ions doped zinc bismuth phosphate glass-ceramics” **Journal of Molecular Structure, (Elsevier)** 1036 (2013) 452. [IF: 3.19]

17. B.J.R.S. Swamy, Bhaskar Sanyal, R. Vijay, **P. Ramesh babu**, D. Krishna Rao, N. Veeraiah "Influence of copper ions on thermo luminescence characteristics of $\text{CaF}_2\text{-B}_2\text{O}_3\text{-P}_2\text{O}_5$ glass system" **Ceramic International, (Elsevier)** 40 (2014) 3707. [IF : 4.527]
18. **P. Ramesh Babu**, R. Vijay, V. Ravi Kumar, N. Veeraiah, D. Krishna Rao "The influence of In_2O_3 on electrical characteristics of iron mixed $\text{Li}_2\text{O-PbO-B}_2\text{O}_3\text{-SiO}_2\text{-Bi}_2\text{O}_3$ multi- component glass system" **Ceramic International**, 40 (2014) 8311. (Elsevier) [IF : 4.527]
19. **P. Ramesh Babu**, R. Vijay, P. Nageswara Rao, N. Veeraiah, D. Krishna Rao "Influence of Ga^{3+} ions on spectroscopic and dielectric features of multi component lithium lead boro bismuth silicate glasses doped with manganese ions" **Materials Research Bulletin, (Elsevier)** 48 (2013) 4618. [IF: 4.64]
20. **P. Ramesh Babu**, R. Vijay, P. Srinivasa Rao, P. Suresh, N. Veeraiah, D. Krishna Rao "Dielectric and Spectroscopic properties of CuO doped multi-component $\text{Li}_2\text{O-PbO-B}_2\text{O}_3\text{-SiO}_2\text{-Bi}_2\text{O}_3\text{-Al}_2\text{O}_3$ glass system" **Journal of Non-Crystalline Solids, (Elsevier)** 370 (2013) 21. [IF: 3.531]
21. P. Naresh, S. Brammaiah, P. Ramesh Babu, K. Naveen Kumar, R. Vijay, "Spectroscopic investigation on lithium yttrium silicate glasses doped with V_2O_5 " **International Journal of Physics and Mathematical Sciences** ISSN: 2277-2111, 2016 Vol. 6 (S1) Oct-Dec, 55.

Papers Presented (Poster)

1. **P. Ramesh Babu**, R. Vijay, Ch. Rajyasree, Ch. Tirapataiah and D. Krishna Rao presented a paper on "The influence of aluminum ion on spectroscopic features of copper ions in the multi component lead boro bismuth silicate glass system" in **A.P Science Congress** during November 14th to 16th 2012.
2. P. Srinivasa Rao, **P. Ramesh babu**, R. Vijay, D. Krishna Rao, presented invited talk entitled "Influence of iron ions on spectroscopic studies of $\text{LiF-SrO-B}_2\text{O}_3$ glasses doped with Cr_2O_3 " at the **UGC sponsored National Seminar** on 'National seminar on Multi functional Materials' organized by Andhra Loyola College, Vijayawada, A.P. during 6th and 8th March 2013.
3. R. Vijay, **P. Ramesh Babu**, V. Ravi Kumar, D. Krishna Rao, presented poster presentation "Electrical Properties of $\text{Li}_2\text{O-Sb}_2\text{O}_3\text{-GeO}_2$ glass system-A potential electrolyte material for solid state batteries" at the **National Conference on "Advance Materials for Energy Applications – NCAMEA-2014"** organized by Dept. of Physics, Osmania University, Hyderabad, A.P. during 31st January and 1st Feb, 2014.
4. **P. Ramesh Babu**, R. Vijay, T. Kalpana, A. Siva Sesha Reddy, N. Veeraiah, D. Krishna Rao presented a paper on "Dielectric and spectroscopic investigations of V_2O_5 doped multi-component $\text{Li}_2\text{O-PbO-B}_2\text{O}_3\text{-SiO}_2\text{-Bi}_2\text{O}_3\text{-TiO}_2$ glass system" in **International Seminar on Glasses and other Functional Materials** during Dec 11th to 13th 2014.

5. P. Srinivasa Rao, **P. Ramesh babu**, R. Vijay, D. Krishna Rao, presented invited talk entitled “Influence of iron ions on spectroscopic studies of $\text{LiF-SrO-B}_2\text{O}_3$ glasses doped with Cr_2O_3 ” at the **UGC sponsored National Seminar on ‘National seminar on Multi functional Materials’** organized by Andhra Loyola College, Vijayawada, A.P. during 6th and 8th March 2013.
6. **P. Ramesh Babu**, R. Vijay, S. Brammaiah, G. Naga Raju, D. Krishna Rao presented a paper on “Electric and spectroscopic Studies on $\text{ZnO-As}_2\text{O}_3\text{-Sb}_2\text{O}_3$ glasses doped with Y_2O_3 ” in **National Seminar on Physics and Chemistry of Non-Crystalline Materials** on Dec 1st and 2nd 2017.

Attended in International & National Conferences

1. I have attended the **One Week National Workshop on “Applications of Radiation and Radioisotopes in Industry and Material Science [ARRIM-2018]”** November 26-30th, 2018, organized by Department of Physics, NIT Warangal, Warangal, A.P., India.
2. I have attended the **Two Days National Workshop on “Advances in Material Processing”** March 28-29th, 2014, organized by the Departments of Nano-Technology, Acharya Nagarjuna University, Guntur, A.P., India.
3. I have attended the **National Seminar on Multi Functional Materials Synthesis and Applications (Sponsored by UGC) MFMSA-2015 on Jan 23-24th, 2015**, organized by The Departments of Physics, The Hindu College, Machilipatnam.
4. I have attended the **UGC sponsored National Seminar on “Renewable Energy for sustainable growth”** on 26th and 27st July, 2013, organized by S.V.R.M.College, Nagaram, A.P., India.
5. I have attended the **Two Days National Workshop on “Fundamentals & Applications of Nano materials”** March 30-31st, 2012, organized by the Departments of Nano-Technology, Acharya Nagarjuna University, Guntur, A.P., India.
6. I have attended the **UGC sponsored National Seminar on “Physics and Chemistry of Materials”** on 30th and 31st July, 2009, organized by S.V.R.M. College, Nagaram, A.P., India.

SEMINARS/WORKSHOPS ORGANIZED

- Five Day Faculty Development Program as a Convener on **“Synthesis of Advanced Materials and Its Applications (SAMA-2020)** from 15-10-2020 to 19-10-2020.

(On the Occasion of the Birth Anniversary of Dr. A P J Abdul Kalam garu.)

- Three day National webinar as a Co-Convener on “**Recent Trends in Materials Science (RTMS-2020)**” from 19-08-2020 to 21-08-2020.
- International webinar as an organizing member on “**Recent Innovations and Concepts in Chemical Science (RICCS-2020)**” from 07-08-2020 to 08-08-2020.
- Two day e-workshop as a Convener on “**Virtual lab in Physics**” from 17-07-2020 to 18-07-2020.
- National Level e-Quiz as a Co-Convener on “**Applications of Physics**” from 25-06-2020 to 28-06-2020.