

## Dr BIJINI B R

**Associate Professor** 

**Department of Physics** 

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### Education

Ph.D (2013), University of Kerala

M.Sc. Physics (2001), University of Kerala

B.Sc. Physics (1999, University of Kerala

## Expertise

Crystal Growth, Material Science

06.07.2021 - Till date

Associate Professor, Department of Physics, VTM NSS College, Dhanuvachapuram

09.08.2018 - 05.07.2021

Associate Professor, Department of Physics, M.G. College, Trivandrum

09.08.2015 - 08.08.2018

Assistant Professor, Department of Physics, M.G. College, Trivandrum

09.08.2010 - 08.08.2015

Assistant Professor, Department of Physics, HHMSPB NSS College, Trivandrum

01.01.2006 - 08.08.2010

Assistant Professor, Department of Physics, PRNSS College, Mattanur

09-08-2004-31.12.2005

Lecturer in Physics, PRNSS College, Mattanur

Work Experience

Council of Scientific and Industrial Research (CSIR)-(NET), December 2000

Period of teaching experience : <u>1</u>9 years Research Experience after acquiring Ph.D degree : 10 years

Number of PhDs produced : 2

Awards and
Achievements

### Research Publications

Growth and characterisation of a novel polymer of manganese
 (II) nicotinate single crystal.

Journal of Crystal Growth, 333(1), August. 2011, pp. 36-39,

Spectral, thermal, dielectric studies and crystal structure of novel nonlinear optical diaquabis(salicylato) zinc.

International Journal of ChemTech Research, 4(2), April-June 2012, pp.739-748.

3. Crystal structure, spectral, thermal and dielectric studies of a new zinc benzoate single crystal.

Spectrochimica Acta Part A:Molecular and Biomolecular Spectroscopy, 97, July 2012, pp.1002–1006.

4. Crystal structure, spectral, thermal and dielectric studies of a new barium complex of benzoic acidsingle crystal.

Solid StateSciences, 20, March 2013, pp.92-96.

Growth and characterisation of crystals of a new organic complex of thiourea with quinine sulphatedihydrate: An NLO material.

Spectroscopy, 120, 2014, pp. 517–523.

6. Growth and characterization of a new polymorph of barium maleate: A metal organic framework.

Spectroscopy, 137, 2015, pp.778-784.

Growth and characterization of a new polymorph of strontium
 L-malate: A metal organic framework.

Journal of Crystal Growth, 426,2015, pp.159-167.

8. Crystal structure, spectral and thermal characterisation of gel grown cobalt (II) nicotinate tetrahydrate.

International Journal of ChemTech Research, Vol. 8, 12, 2015.

#### Research Publications

- 9. Spectral and Thermal studies of gel grown Benzophenone crystal.
  - International Journal of Engineering Research & Technology, IJERT pages 76-78 Jan. 2015. ISSN 2278 0181.
- Growth and characterization of gel grown lead maleate.
   International journal of engineering and technology, April 2015.
- 11. A novel conformation of gel grown biologically active cadmium nicotinate.
  - Journal of Molecular Structure, Vol.1147, 397- 405, June 2017.
- 12. A novel structure of gel grown strontium cyanurate crystal and its structural, optical, electrical characterization.
  - *Physica B: Physics of Condensed Matter*, September, 2017526 (2017) 37–44.
- 13. Gel growth and characterization of nickel nicotinate crystal.
  IJARSE, *International Journal of Advance Research in Science and Engineering*, vol 06, issue 03, sep 2017.
- 14. Growth and characterization of barium complex of 1,3,5-triazinane-2,4,6-trione in gel: a corrosion inhibiting material.Applied Physics A 124 (2017) 399.
- 15. Distribution of Uranium in Drinking water and Associated Age-Dependent Radiation Dose in Porakad, Allapuzha District. *Journal of Ultra Scientist of Physical Sciences*, Vol. 29(11), 337-341 (2017).
- 16. Vibrational spectral and structural studies of nonlinear optical crystal Zinc Salicylate Dihydrate.
  - *JASC: Journal of Applied Science and Computations*, ISSN NO: 1076-5131, UGC list No. 41238, December 2018.

### Research Publications

- 17. Growth and characterization of heterobimetallic coppersodium complex of cyanuric acid: A novel photoluminescent material.
  - Journal of Molecular Structure September 2019 1200(2):127031.
- 18. Growth and Characterisation of Copper Complex of 2, 4, 6-Trioxypyrimidine: A Novel Luminescent and Active Pharmaceutical Material in Metal Organic Framework.
  - Journal of Inorganic and Organometallic Polymers and Materials, ISSN 1574-1443, January 2021 31(7):1-11.
  - 19. Synthesis and crystal structure of a heterobimetallic cadmium—sodium complex of 1,3,5- triazine- 2,4,6- trione, [CdNa2(C3H2N3O3)4(H2O)8].
    - Acta Crystallographic Section E Crystallographic Communications Acta Cryst. (2021). E77.
  - 20. Synthesis and characterization of biologically active novel structured cadmium barbiturate single crystal with good thermal stability.

# **Declaration**

I hereby declare that all the information given above is true to the best of my knowledge.

Dr. Bijini B.R