

## CURRICULUM VITAE

**P. CHRISTURAJ Ph.D**

**Associate Professor**

**Department of Physics**

**St. Joseph's College (Autonomous)**

**Tiruchirapalli, Tamil Nadu, India -620 002.**

Email: christy18\_sjc@yahoo.co.in

Christuraj\_ph1@mail.sjctni.edu

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### **Areas of Research Interest:**

Synthesis , growth and characterization of single crystals, and nano materials and their applications

### **Personal:**

- Name : P. Christuraj
- Date of Birth : 18. 12.1972
- Nationality : Indian
- Sex : Male
- Marital Status : Married

### **Education:**

- Ph.D. from Bharathidasan University. February 2016
- M.Phil, M.Sc.,PGDCSA and B.Sc., from St. Joseph's College (Autonomous), Trichy 620 002.
- B.Ed., from Annamalai University, 1996.

### **Employment Record:**

- Assistant Professor Aided: Department of Physics, St. Joseph's College, Trichy from 19.10.2017 onwards
- Lecturer(Selffinance): Department of Physics, St. Joseph's College, Trichy from 16.06.1998 to 18.10.2017

### **Administrative Experience:**

- President of Physics Association, 2016-17
- Additional Chief superintendent for semester examinations 2004
- Member of Board of studies, Department of Physics, St. Joseph's college
- Purchase officer, Department of Physics from June 2017 to till date
- Fine arts incharge for the department for many years
- Astronomical club member, St. Joseph's College 2015-17
- Youth Red Cross programme officer for Shift I, St. Joseph's college from June 2017 to till date

### **Publications:**

#### **Journal Publications**

- Effect of sintering temperature on redistribution of cation, electronic structure and tuning of optical bandgap and ferromagnetism in  $Mn_{0.1}Co_{0.9}Fe_2O_4$  spinel ferrites, De Gruyter, 2022
- Effect of mediator on the auto combustion synthesis, magnetic properties and electron density distribution of spinel Ferrite  $Mn_{0.005}Zn_{0.95}Fe_2O_4$ , Brazilian Journal of Physics, 2022
- Synthesis of Mn doped CdO nanoparticles by co-precipitation method for supercapacitor applications, Materials Today: Proceedings, 2021
- Enhanced the electrochemical properties of Ni doped  $V_2O_5$  as an electrode material for supercapacitor applications, Materials Today: Proceedings, 2021
- Synthesis and characterization of Zn doped CdS nanoparticles as electrode material for supercapacitor application, Materials Today: Proceedings, 2021
- Linear and nonlinear optical properties of L-proline potassium bromide, Materials Today: Proceedings, 2021
- Optical, spectral and NLO properties of L-Leucine potassium chloride crystals, Materials Today: Proceedings, 2021
- Investigation on structural, optical and thermal properties of L-asparagine monohydrate potassium iodide (LAMPI) NLO crystals, Materials Today: Proceedings, 2021
- Spectroscopic, Mechanical and Optical Properties of L-Serine Ammonium Carbonate (LSAC) Single crystal, International Research Journal of Engineering and Technology, 2019

- **P. Christuraj**, M. Dinesh Raja, J. Madhavan, International Research Journal of Engineering and Technology, Spectroscopic , mechanical and optical properties of L-Serine Ammonium Carbonate (LSAC) single crystal,49(113-115) 2017
- M. Dinesh Raja, **P. Christuraj**, J. Madhavan International Research Journal of Engineering and Technology, Linear and Non linear optical properties of metal incorporated L-Serine crystals4(73-77)2017
- **P. Christuraj**, M. Dinesh Raja, J. Madhavan, International Journal of Scientific, Research in Science and Technology, Spectroscopic, mechanical and optical studies of L-Valine picrate single crystal, 3(49)2017
- **P. Christuraj**, M. Dinesh Raja, J. Madhavan, International Journal of Scientific, Research in Science and Technology, Spectroscopic, mechanical, and optical studies of L-Valine picrate single crystal3(49)2017
- M. Dinesh Raja, **P. Christuraj**, J. Madhavan, International Journal of Scientific, Research in Science and Technology, Spectroscopic, hyper polarizability and optical properties of N-Benzyl-2-Methyl-4-nitro aniline single crystal, 3(15)2017

- Jain John, **P.Christuraj**, K. Anitha, T. Balasubramanian,(2009) Growth and characterization of cobalt chelated glycine single crystals for opto electronics applications, Materials chemistry and physics, 118(2009)284-287
- **P. Christuraj**, K.Kaviyarasu, s. Anbarasu, P.S. Joseph, Prem Anand Devarajan, Photoconductivity, spectral and electrical conductivity studies of Zinc boro – d- (1-malate) NLO single crystals, Der Pharama Chemica 2011, 3(6):521-527
- **P. Christuraj**, M. Lalitha, S. Anbarasu, P.S. Joseph, A. Jestin Lenus, T. Kishore Kumar, and D. Prem Anand, Studies on the growth and characterization of a new non linear optical Copper Guanidinium Sulphate single crystals, Scinencia Acta Xaveriana vol.3, (2012) 11-25
- **Christuraj** Paul Chinnappan, Anbarasu Selvaraj, Joseph Pitchamuthu Stalin, Prem Anand Devarajan, Optik, Growth and characterization of l-Histidinium chloroacetate (LHCA): A new nonlineaar optical material, 127(2016)110-115
- **Christuraj** Paul Chinnappan, Anbarasu Selvaraj, Joseph Pitchamuthu Stalin, Prem Anand Devarajan, Optik, Growth and characterization studies of l-threonine phosphate (LTP) a new semiorganic NLO crystal, 126(2015)5517-5521

#### **Courses Taught:**

- Mechanics and properties of matter
- Mathematical physics
- Sound thermal and statistical physics
- Electricity and magnetism
- Programming in C
- Digital Electronics
- Analog Electronics
- Electromagnetic theory

- Modern Photography
- Atomic, and nuclearphysics
- Classical mechanics
- Optics and Spectroscopy
- Numerical methods

### M.Phil Projects Guided: 25

| Scholar Code | Scholar Name          | Date of ViVa | Title   |
|--------------|-----------------------|--------------|---|
| 15MPH109     | B. Priyadarshini      | 2016         | Growth and characterization of Throenine sodium nitrate single crystals   |
| 15MPH118     | S. Vijaya             | 2016         | Growth and characterization of Trifluoroacetyl single crystals  |
| P18HP0033    | A. Backiaraj          | 2020         | A review on synthesis, Growth and characterization of L-Arginine family single crystals   |
| 06CD30936    | K. JHANANY            | 2007         | Growth of LADP and LAHCIBrP single crystals and their characterizatoin  |
| 06CD30954    | N. Kavitha            | 2007         | Growth and characterizatoin of Mg <sub>3</sub> (PO <sub>3</sub> ) <sub>2</sub> doped ADP, KDP and FeSO <sub>4</sub> single crystals |
| 07MPH106     | K. Anitha             | 2007         | Growth and characterizatoin of diaqua Bisglycine cobaltous chloride crystals  |
| 08MPH121     | R. Geetha             | 2008         | Growth and characterizatoin of semiorganic material - Di thiourea zinc acetate  |
| 08MPH120     | S. Vaikunth           | 2008         | Growth and characterizatin of D-Alanine single crystals   |
| 09MPH104     | K. Madhuri            | 2009         | Growth and characterization of Glycine Trifluoroacetic acid single crystal  |
| 09MPH102     | K. Bairavi            | 2009         | Growth and characterization of urea copper acetate single crystal   |
| 10MPH111     | P. Ponmalar           | 2010         | Growth and characterizatoin of Pure Guanidinium carbonate single crystals   |
| 10MPH110     | M. Lalitha            | 2010         | Growth and characaterization of copper quanidinium sulphate single crystals   |
| 12MPH128     | H. Jude Lenard Hilary | 2012         | Growth and characterization of L-Histidinium trichloroacetate single crystals   |
| 16MPH108     | P. Annie Therese      | 2017         | Growth and characterizatoin of L-Serine Potassium carbonate single crystals   |
| 16MPH114     | R. Esther Getsy       | 2017         | Growth and characterization of L-Serine Cupric Chloride dihydrate single crystals   |
| 16MPH119     | R. Daisy Prasanna     | 2017         | Growth and characterization of L-Serine ammonium Carbonate single crystals  |
| 17MPH101     | N. Sellam             | 2018         | synthesis and characterization of undoped and Mn doped CdO nano particles   |
| 17MPH121     | A.Varalashmi          | 2018         | synthesis and characterization of undoped and Zn  |

|           |                |      |  |
|-----------|----------------|------|--|
|           |                |      | doped CdS nano particles   |
| 18MPH118  | K.DIVYA        | 2019 | Synthesis and characterization of Titanium Dioxide (TiO <sub>2</sub> ) Nano particles              |
| 18MPH121  | S. Soundarya   | 2019 | Synthesis and characterization of Europium doped Tin oxide Nanoparticle                            |
| 19MPH101  | M. Bebiliya    | 2020 | A Review on various preparation method assisted Copper Oxide nano particles                        |
| P18HP0036 | M.Dheivendran  | 2020 | A review on synthesis, Growth and characterization of L- Alanine family single crystals            |
| 13MPH107  | R. David Prabu | 2014 | Synthesis, growth and characterization of pure and doped L-Glutamine oxalate (LGO) single crystals |
| 14MPH107  | A. Arulvalan   | 2015 | Growth and characterization of O-Anisic salicylate single crystal                                  |