

# Profile M. Antony Arockiaraj

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# **Objective:**

To became a successful professional in the field of teaching and research and to work for in an innovative and competitive world.

# Academic Details:

Examination/	University/Institution	Academic
Designation	Name	Year
Assistant Professor	St.Joseph's college, Trichy.	2015
Assistant Professor	St.Joseph's college, Trichy.	2014
<b>Ph.D</b> - Physics (Material Science)	University of Madras- Loyola College, Chennai-34	2010-2013
<b>M. Phil</b> (Physics)	Bharathidasan University- St.Joseph's college, Trichy.	2008-2009
<b>M.Sc</b> (Physics)	Bharathidasan University- St.Joseph's college, Trichy.	2006-2008

	Bharathidasan University-	
<b>B.Sc</b> (Physics)	St.Joseph's college,	2003-2006
	Trichy.	

## Ph.D Dissertation Title:

"STUDIES ON THE GROWTH AND CHARACTERIZATION OF STILBAZOLIUM FAMILY CRYSTALS OF DAST, DSSS AND DSTMS WITH POTENTIAL TERAHERTZ PROPERTIES"

## **Working Research Area:**

- **4** Development of organic crystals for Terahertz emission.
- ↓ Synthesis and growth of materials suitable for photonics device fabrication.
- ♣ Growth of bulk Nonlinear optical organo-metallic crystals with potential application in acousto-optics and laserindustry.
- Development of laser materials suitable for various applications including optical waveguides, optical switches, optical data storage devices, color displays and optical computing.
- Synthesis and characterization of II-VI semiconductor nanoparticles for solar cell/photocatalysis/photonics applications.

# List of major equipment handled:

- ✓ Spectrophotometer SHIMADZU UV-2450 model
- ✓ Constant temperature bath with refrigeration (Gemeni scientific)
- ✓ Melting point apparatus (Inlab Equipment (Madras) Pvt.Ltd.)
- ✓ Millipore India (Servell Engineers)
- ✓ PVD coating Unit (Thin film)

# **Computational skills:**

- ♦ Working experience with operating system WINDOWS 2000//XP
- ♦ Packages: MS Office, Adobe Photoshop, Origin

## **Others skills:**

- Developed interpersonal, team work and time management skills.
- Social work trained by SHEPHERD (Extension depatment)from St Joseph's College, Trichy.
- Presented research findings at conferences in written, poster and oral form
- Active participation in arranging the national and international conferences
- Technical and patent literature searching and analyzing using various search engines such as web of science, Scopus etc.
- Excellent analytical skills, oral and written communication skills.

## **Research Cum-Administration Experience:**

- Document penetrating for getting financial assistance from University Grand Commission- Central for Potential Excellence (UGC-CPE) for Selected Colleges under Phase-1 during XI<sup>th</sup> Plan Period.
- Application Performa for fresh recognition of DST-SIROs technology management programme Department of Scientific and Industrial Research Organization (DSIR), Govt of India.
- Proposal for Financial Assistance from UGC-PG Grant for Development of Postgraduate Courses in the College during Eleventh Plan period (2010-2012).

## **Personal Details:**

Age & Date of Birth	:	28 years, 24-07-1986
Father's Name	:	A. MichaelJayaraj
Sex	:	Male

:	Christian
:	Single
:	Indian
	: : :

### List of publications:

No. of International Journals	: 08
No. of International Conference	: 02
No. of national Conference	: 15
No of Orientation programme	01

#### **List of Research Publications**

#### International Journals:

- Growth, thermal, dielectric and mechanical properties of L-Phenylalanine-Benzoic acid: A nonlinear optical single crystal, S. Tamilselvan, M. Vimalan, I. Vetha Potheher, S. Rajasekar, R. Jeyasekaran, M. Antony Arockiaraj and J. Madhavan, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 114 (2013) 19-26.
- Investigation on physico-chemical properties of semiorganic nonlinear optical L-Lysine sulphate single crystal, J. Suja Rani, M. Meena, C. K. Mahadevan, M. Antony Arockiaraj, S. Rajasekar, M. Vimalan and K. Jaya Kumari, Advances in Applied Science Research, 4 (2) (2013) 286-297.
- 3. Growth and characterization of semiorganic nonlinear optical LHHCl-LHB mixed crystals, J. Suja Rani, C. K. Mahadevan, M. Antony Arockiaraj, S. Rajasekar, M. Vimalan and K. Jaya Kumari, Archives of Applied Science Research, 5 (2) (2013) 213-221.

- 4. Growth, thermal and optical properties of L-Asparagine Monohydrate NLO single crystal, F. Yogam, M. Antony Arockiaraj, R. Jeyasekaran, M. Vimalan,
  I. Vetha Potheher and P. Sagayaraj, Journal of Thermal Analysis and Calorimetry, (2013) DOI 10.1007/s10973-013-3138-8.
- Growth, structural, optical and thermal properties of potential THz material:
  N, N-dimethylamino-N'-methylstilbazolium 4-styrenesulphonate, R. Jerald
  Vijay, N. Melikechi, Tina Thomas, R. Gunaseelan, M. Antony Arockiaraj and
  P. Sagayaraj, Journal of Crystal Growth, 338 (2012) 170-176.
- 6. Investigation on the growth of DAST crystals of large surface area for THz applications, R. Jerald Vijay, N. Melikechi, Tina Thomas, R. Gunaseelan, M. Antony Arockiaraj and P. Sagayaraj, Material Chemistry and Physics, 132 (2012) 610-617.
- 7. Growth, linear and nonlinear optical and, laser damage threshold studies of organometallic crystal of MnHg(SCN)<sub>4</sub>, T. Rajesh Kumar, R. Jerald Vijay, R. Jeyasekaran, S. Selvakumar, M. Antony Arockiaraj, P. Sagayaraj, Optical Materials 33 (2011) 1654-1660.
- Growth, structural and thermal analysis of DSSS single crystals, M. Antony Arockiaraj, Tina Thomas, R. Jerald Vijay and P. Sagayaraj, American Institute of Physics, Conf. Proc. 1447, (2011) 1293-1294.

#### **Declaration**

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

Yours faithfully,

#### (M.ANTONY AROCKIARAJ)