# **IRUDAYA JOTHI A**

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**Objective:** To participate in the noble profession of creating men and women for others with innovative teaching.

**Qualified Exams** 

UGC-CSIR-NET- December 2003

GATE- January 2004 with 96.25 percentile and 120 rank

#### **Educational Qualification**

Ph.D.	Chemistry	Thesis submitted on May 09, 2018 to the University of Madras Research carried out at Department of Chemistry, Loyola College, Chennai-600034 under the Guidance of Dr V Alexander (Retd. Professor)
M Phil	Chemistry	Annamalai University, Chidambaram, 2008
M Sc	Chemistry	Loyola College (Autonomous), Chennai-600034
B Sc	Chemistry	83%, <b>Gold Medal</b> , 2004 Loyola College (Autonomous), Chennai-600034 79%, <b>Gold Medal</b> , 2002

#### **Professional Experience**

- 1 Assistant Professor (Aided), Dept. of Chemistry, St. Joseph's College, Trichy, from 20-09-2006.
- 2 **Lecturer** (FIP Substitute), Department of Chemistry, Loyola College, Chennai from 25-01-2005 to 19-09-2006.
- 3 **Research Associate** in Shasun Chemicals and Pharmaceuticals Research and Development Lab. Chennai, 2004.

Research

#### **Papers published**

 A. Irudaya Jothi and V. Alexander, Organic NLO material with H-bonded 1D helical selfassembly: synthesis, X-ray crystal structure, DFT calculations, SHG measurements and thermal studies of (5Z,6E)-1,10-phenanthroline-5,6-dione dioxime, CrystEngComm, 19, 2017, 5251-5255.

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 A. Irudaya Jothi, and V. Alexander, A comparative study of the RHF and DFT computed dipole moments, polarizabilities, and hyperpolarizabilities of the ortho bridged dibenzaldehydes towards their second order NLO behavior, National conference on Emerging Materials for sustainable Future, PSG College of Technology, Coimbatore, February 9-10, 2018. (Best Paper award) and published in the Conference Proceedings (ISBN: 9788193469187).

## Papers presented in conferences/seminar

- 1. A. Irudaya Jothi, and V. Alexander, Synthesis, Characterization and in-vitro antibacterial activities of 15- and 17-membered dioxadiaza macrocycles, National conference on Advanced Materials in Chemistry, St. Joseph's College, Trichy-2, February 8, 2018.
- A. Irudaya Jothi, and V. Alexande, Highly Efficient organic NLO material with H-bonded 1D helical self-assembly: synthesis, crystal growth, single crystal X-ray diffraction studies, DFT calculations, and thermal studies of 1,10-phenanthroline-5,6-dione dioxime, TEQIP - II Sponsored National Conference on Advanced Materials: Processing and Characterization, National Institute of Technology, Trichy-2, 27-28 February, 2017.
- A. Irudaya Jothi, and V. Alexander, A Comparative Study of Structural, Electronic, and Optical Features of Dibenzaldehydes with A-π-D-π-A System Towards their Second Order NLO Behavior, National Conference on Recent Advances in Chemistry Research and its Applications (NCACRIA-17), St. Joseph's College (Autonomous), Tiruchirappalli-620002, January 19, 2017 (Best Paper award).

## **Title of Thesis**

- **Ph D:** Synthesis, Characterization, and Photophysical Studies of Lead(II), Cadmium(II), and Mercury(II) Complexes of Dioxadiaza Macrocycles
- M Phil: Measurement of Surface Tension and Interfacial Tension of organic solvents used for solvent Extraction Process at Fuel Chemistry Division, Chemistry Group, IGCAR Kalpakkam from 13-04- 2007 to 15-01-2007.
- **M Sc:** Synthesis and characterization of trinuclear ruthenium(III) complex bridged by bipyridine appended triazine chromophore.

### Conferences/Workshops/seminars organized

1. State level preparative workshop in Chemistry for the UGC-CSIR-NET/GATE aspirants, 07-09 Dec. 2017.

## Conferences/ Workshops/Seminars/Workshops attended

- Academies sponsored Two-Day Lecture Workshop on FRONTIERS in Chemistry, School of Chemistry, Bharathidasan University, Tiruchirappalli-620024, 22-24 Mar. 2018.
- 2. National conference on Emerging Materials for sustainable Future, PSG College of Technology, Coimbatore, February 9-10, 2018.

- 3. National conference on Advanced Materials in Chemistry, St. Joseph's College, Trichy-2, February 8, 2018.
- 4. TEQIP II Sponsored National Conference on Advanced Materials: Processing and Characterization, National Institute of Technology, Trichy-2, 27-28 February, 2017.
- National Conference on Recent Advances in Chemistry Research and its Applications (NCACRIA-17), St. Joseph's College (Autonomous), Tiruchirappalli-620002, January 19, 2017.
- 6. Green Experimental Techniques in Chemistry, Department of Chemistry, St. Joseph's College, Tiruchirappalli-620002, 5 Dec. 2014.
- 7. National Conference on Valluvathil Vaazhviyal, Department of Tamil, KCS Kasi Nadar Arts and Science College R. K. Chennai-21, 11 Mar. 2014
- 8. Science Conclave: A congregation of Noble Laureates and Eminent Scientists, an MHRD-DST initiative at IIIT-Allahabad, 26 Nov. 2011- 02 Dec. 2011.
- UGC sponsored National Conference on The Role of ICT in Higher Education: Quality, Accessibility and Security, St. Joseph's College, Tiruchirappalli-620002, 29-30 Jan. 2010.
- Academies sponsored Two-Day Lecture Workshop on FRONTIERS in Chemistry organized by Department of Chemistry, National College, Tiruchirappalli-620001, 13-14 Mar. 2009.
- 11. UGC sponsored National Seminar on Emerging Trends in Medicinal and Analytical Chemistry (MEDIAN '09), Department of Chemistry, St. Joseph's College, Tiruchirappalli-620002, 06-07 Mar. 2009.
- UGC sponsored National Conference on Higher Education and National Development: The Challenge of Expansion, Quality and Inclusion, organized by St. Joseph's College, Tiruchirappalli-620002, 30-31 Jan. 2009.
- NAAC Sponsored National Conference on Quality Enhancement and Sustenance in Higher Educational Institutions through Six Sigma Strategy, Internal Quality Assurance Cell, St. Joseph's College, Tiruchirappalli-620002, 23-24 Oct. 2008.
- 14. UGC Sponsored National Conference on Human Excellence through Ethics and Value Education, NGM College, Pollachi-642001, 3 & 4 Oct. 2008.
- 15. Workshop on Microreaction technology for Process Intensification organized by Department of Chemical Engineering & Chemistry, National institute of Technology, Tiruchirappalli, 11 Jan. 2008.
- 16. National Seminar on Recent Trends in Chemistry, Department of Chemistry, Jayaraj Annapakkiam College for Women, Periakulam-625601, 27-28 Sep. 2006.
- 17. Workshop on Communication Skills & Teaching Methods for Junior Teaching Staff, Organized by Loyola College, Chennai-6000034, 5–9 Jun. 2006.
- 18. Seminar on Future Trends in Materials and Characterization, Department of Physics,

Loyola College, Chennai-600034, 28 Feb. 2006.

- 19. International Symposium on chemical Education and Research, Department of Chemistry, Loyola College, Chennai-34, 4-7 Jan. 2004.
- 20. Intercollegiate symposium on ID & 2D NMR and its application, Department of Chemistry, Guru Nanak College Chennai, 13 Feb. 2004.
- 21. National Level symposium on catalytic Advancements, Department of Chemistry, IIT Madras, Chennai, 11-12 Sept. 2002.
- 22. National Level symposium on crystal growth and characterization, Department of Physics, Loyola College, Chennai-34, Jan. 2006.
- 23. National Seminar on Campus 2010 Information and Communication Technologies with Human Face, 6-7 Feb. 2006, Loyola College, Chennai-34.

### **Career Development programs participated**

- 1. UGC sponsored Refresher course-summer school Nanoscience, HRDC University of Madras, 4-24 July, 2018.
- 2. UGC sponsored Refresher Course in Chemistry, UGC-Academic Staff College, Bharathidasan University, Trichy-24, 28.01.2018 17.02.2015.
- 3. Workshop for the Program officers of Red Ribbon Club, Bharathidasan University, Tiruchirappalli-620024, 2 Jul. 2013.
- 4. UGC sponsored Refresher Course in Chemistry, UGC-Academic Staff College, Bharathidasan University, 16.12.2008-12.01.2009.
- 5. Orientation Course, UGC-Academic Staff College, Bharathidasan University, Dec. 2008.
- 6. Orientation for the Freshers, organized by the Training and Placement Cell, St. Joseph's College, Tiruchirappalli-620002, 4-5 Feb. 2008.
- 7. Workshop on Interpersonal Skills for Staff Members organized by St. Joseph's College, Tiruchirappalli-620002, 3-4 Mar. 2007.
- 8. A short-term Course on Fundamentals of Computers organized by St. Joseph's College, Tiruchirappalli-620002, 31.01.2007- 6.02.2007.
- 9. Orientation Program for Recruited Staff of Loyola College 6-10 Jun. 2005, Loyola College, Chennai-34.
- 10. Orientation Program for Staff of Loyola College 13-15 Jun. 2005, Loyola College, Chennai-34.
- 11. Orientation Program for Junior Staff of Loyola College 5-9 Jun. 2006, Loyola College, Chennai-34.
- 12. Orientation Program for Staff of Loyola College 12-13 Jun. 2005, Loyola College, Chennai-34.

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#### **Resource person in Conferences/ Workshops/Seminars**

- 1. English for Self enhancement Training for teaching staff, Loyola HSS Kuppayanallur, Kanchipuram-603406, 14 May 2018.
- 2. Quiz Master, State level intercollegiate extravaganza, Symphoria-18, Department of Chemistry, Jamal Mohammed College, Trichy-20, 20 Feb. 2018.
- 3. RMSA District level science exhibition, ER Higher Secondary School organized by District Education Department, Trichy, 28 Nov. 2017
- 4. Two days preparatory workshop for the NET faculty aspirants, Gnanam School of Business, Sengipatti, Tanjore, 27-28 Oct. 2017.
- 5. CSIR/NET coaching classes, Department of Chemistry, Holy Cross College, Trichy-2, 4 and 25 Sep. 2017 and 23 Oct. 2017.
- 6. Lecture on Reading Books, Department of Chemistry, Holy Cross College, Trichy-2, 17 July 2017.
- 7. Quiz Master, C. Kandasamy Naidu College for Women, Intercollegiate Quiz Competition on Nobel Laureates in Chemistry, 07 Oct. 2016.
- 8. Tips to face competitive examinations, Department of Chemistry, Jamal Mohammed College, Trichy-20, 30 Sep. 2014.
- 9. Quiz Mater, Intercollegiate quiz competition, Department of Chemistry, Bishop Heber College, Trichy-17, 12 Sep. 2014.
- 10. One day seminar on Enhancing employability skills, Department of Commerce, Holy Cross College, 10 Feb. 2014.
- 11. One day aptitude training for NET/SLET Faculty aspirants, Gnanam School of Business, Sengipatti, Tanjore, 29 Nov. 2013.
- 12. Proliferation of Nanotechnology, MAM School of Engineering, Trichy, 19 Sep. 2013.
- 13. Student development program on aptitude training, Gnanam School of Business, Sengipatti, Tanjore, 18 Sep. 2013.
- 14. The Six Pillars of Organic Chemistry, Special Lecture, Selvamm Arts and Science College (Autonomous), Namakkal-637003, 07 Aug. 2013.
- 15. NET/SET Coaching, Holy Cross College, Trichy-2, 11 Feb. 2012.
- NET/SET Coaching, Chemistry Association, Holy Cross College, Trichy-2, 14-15 Sep. 2012.
- 17. Six Pillars of Organic Chemistry, Chemistry Association, Holy Cross College, Trichy-2, 20 Sep. 2011.
- 18. Cracking UGC-CSIR-NET/GATE Exams for PG Chemistry Students, Alumni Association, Holy Cross College, Trichy-2, 19 Sep. 2011.
- 19. SLET/NET Coaching for chemistry students, KN Govt. Arts College for Women, Tanjore-623007, 2 Mar. 2011.

- 20. UGC-CSIR-NET crash Course, Organized by Department of Chemistry, Jamal Mohammed College, Tiruchirappalli 12, 17 & 18 Nov. 2009.
- 21. Intercollegiate Workshop for UGC-NET, Department of Commerce, St. Joseph's College, Tiruchirappalli-620002, 20.09.2008.
- 22. Orientation Programme for Matriculation teachers organized by Associations of Matriculations Schools in Tamil Nadu & Pondicherry at St. Joseph's College, Tiruchirappalli-620002 on 18.09.2008.

### **Curriculum Designing**

- 1. Designed syllabus on Natural Products, Organometallics and Stereoselective reactions in cyclic compounds for II PG Chemistry Students, 2012.
- 2. Introduced green chemistry and nano-chemistry for M. Phil., PG and UG core subjects in 2008.
- 3. Designed syllabus for Chemistry of Biomolecules for III UG Chemistry Students, 2008.
- 4. Designed syllabus for the UG botany students named Allied Chemistry for Biologists, 2007.

## Initiatives

- 1. NET Coaching for Chemistry Students of nearby college students from 2009 onwards.
- 2. NET- Coaching for Paper I for Arts Students from 2008-2012.
- TANCET Coaching for MCA/MBA aspirants in St. Joseph's IAS Academy, St. Joseph's College, Tiruchirappall-620002, 2012.

## **Extension and Community Service**

- 1. Committee coordinator, National conference on Youth-Hope of India, AICUF, St. Joseph's College, Tiruchirappall-620002, 6-7 Mar. 2015.
- 2. Certificate of Appreciation, AICUF-National Secretariate, Chennai-34, 2014-15.
- 3. Programme officer, National Service Scheme, St. Joseph's College, Tiruchirappall-620002, 2011-14.
- 4. Programme officer, Red Ribbon Club, St. Joseph's College, Tiruchirappall-620002, 2013-14.
- 5. Organizing Secretary, Champfest-14, NSS, St. Joseph's College, Tiruchirappall-620002, 13 Mar. 2014.
- 6. Organizing Secretary, Green Campus-Project, NSS, St. Joseph's College, Tiruchirappall-620002, Sep. to Apr. 2014.

- 7. Organizing Secretary, One day medical camp at Alathur, NSS, St. Joseph's College, Tiruchirappall-620002, 19 Feb. 2014.
- 8. One day workshop on HIV awareness, NSS, St. Joseph's College, Tiruchirappall-620002, 11 Feb. 2014.
- 9. NSS Orientation Course, Empanelled Training Institution, Madras School of Social Work, Chennai-8, 29.01.02014 -04.02.2014.
- 10. NSS Coordinator, Student Development Programme on Self- Motivation, Servant Leadership and Team Work for NSS Volunteers, Gnanam School of Business, Thanjavur-613402, 23 Nov. 2013.
- 11. RRC program officers meeting and RRC Pear educators training programme, Red Ribbon Club, Bharathidasan University, Trichy-24, 01 July 2013.
- 12. Programme officer, Desilting of the Mavadikulam lake, Trichy, Thanneer, 28 Jul. 2013.
- 13. Assistant Director, New Hostel, St. Joseph's College, Trichy-2, 2007-2009.
- 14. Faculty Adviser Loyola Extension Awareness Program (LEAP) 2005-2006.

### Awards and Medal Received for Academic Excellence

- 1. Special Award and Medal for First Rank in M Sc., Chemistry, 2002-2004.
- 2. **Prof. S Govindarajan Medal and Prize** for the Highest Aggregate marks in all Organic Theory and Practical Courses of M Sc., 2002-2004
- 3. Mary Appoline Medal and Prize for First Rank in I M Sc., Chemistry, 2002-2003.
- 4. **Dr M R Gopalan Memorial Medal and Prize** for First Rank in I B Sc., Chemistry 1999-2002.
- 5. **Prof. S Govindarajan Medal and Prize** for the Highest Aggregate marks in all Organic Theory and Practical Courses of B.Sc, 1999-2002.
- 6. **Prof. E V Srinivasan Medal** for First Rank in III B Sc, Part III, Chemistry for 2001-02.
- 7. **Raja Sir Annamalai Chettiar Medal** for First Rank in Part III, B Sc., Chemistry for the 1999-2000.
- 8. **R. S. Jahavaher Memorial Medal Medal** for First Rank in Part III, III B Sc., Chemistry 2001-2002.
- 9. Sundara Ramaiyer Medal for First Rank in Part III, B.Sc, Chemistry, 1999-2002.
- 10. The Best Outgoing U.G Student Award, 2002.

### Awards and Medal Received for Co & Extra Curricular Excellence

- 1. **Star of Loyola** for the academic year 1999-2000.
- Second Prize in Prof. Dr. K. K. B. Intercollegiate Written Quiz Competition held on 2<sup>nd</sup> Feb 2002 held at Loyola College, Chennai-34.

- 3. **First Prize** in Tamil Essay Writing Competition held during NEST 2004 at Loyola College Hostel, Chennai-34.
- 4. **Second Prize** in Tamil Essay Writing Competition held during NEST 2002 at Loyola College, Chennai-34.
- 5. **Second Prize** in Tamil Debate Competition held during Ovations 2001 at Loyola College, Chennai-34.
- 6. Certificate for Dynamic Leadership Qualities for NSS for organizing inspired activities in Yellagiri Hills tribal villages, 2000.
- 7. Prize for hundred percent attendances as a faculty of Loyola College, 2005.
- 8. Prize for 100 % attendance, St. Joseph's College, Tiruchirappalli-6210002, 2007.

#### Responsibilities

- 1. Coordinator, UGC-CSIR-NET/GATE Coaching, Department of Chemistry, St. Joseph's College, Trichy-2, 2017-18 onwards.
- 2. Coordinator, St. Joseph's IAS Academy, Department of Chemistry, St. Joseph's College, Trichy-2, 2012 onwards.
- 3. Coordinator, UGC-CSIR-NET/GATE Coaching, Department of Chemistry, St. Joseph's College, Trichy-2, 2009-13.
- 4. Programme Officer, National Service Scheme, St. Joseph's College, Trichy-2, 2011 onwards.
- 5. Coordinator, UGC-CSIR-NET/GATE Coaching, Department of Chemistry, St. Joseph's College, Trichy-2, 2009-13.
- 6. President Chemistry Association, St. Joseph's College, Trichy-2, 2007-2008.