

# CURRICULUM VITAE

## Dr. Thirumoorthi Ramalingam (Ph.D),

Assistant Professor  
Central University of Rajasthan  
Bandarsindri, Ajmer-Dt  
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**Date of birth and Gender:** 22-07-1981, Male

## Education and Experience Details

2017 – Till now (Jan-) **Assistant Professor**, Department of Chemistry, Central University of Rajasthan (CURaj) Bandarsindri, Ajmer-Dt.

2016 – 2016 (Mar-Dec) **DST Young Scientist Fellow**, Department of Chemistry, Indian Institute of Technology Madras. Title: *Synthesis, Structure and Optical Properties of Phosphane and/or Chalcogen Stabilized Gold Complex.*

2015 – 2016 (July-Mar) **Assistant Professor (on contract)**, Central University of Tamil Nadu Thiruvavur (CUTN), Department of Chemistry, India.

2014 – 2015 (Dec-May) **Adhoc Faculty**, National Institute of Technology Warangal (NIT W), Department of Chemistry, India.

2013 – 2014 (Dec-Dec) **Adhoc Lecturer**, National Institute of Technology Calicut (NIT C), Department of Chemistry, India.

2012 – 2013 (Nov-Oct) **Research associate**, University of Calgary (U of C), Canada, Department of Chemistry. Title: *Synthesis, Spectroscopic and Structural Characterization of Inorganic Macrocycles Containing Sulphur or Selenium.*

2010 – 2012 (Nov-Oct) **NSERC-Post doctoral fellow**, University of Calgary (U of C), Canada, Department of Chemistry. Title: *Electron-Rich Main Group Methanediides: Structures, Bonding and Insertion Products.*

2010 – 2010 (Jan-Nov) **DARPA-Post doctoral research associate**, University of Massachusetts (UMASS), Amherst, Department of Chemistry. Title: *Polymeric Bulk/Nanogels for Naloxone Delivery.*

2009 – 2009 (Nov-Dec) **DST-Project scientist**, Indian Institute of Technology Kanpur (IITK), Department of Chemistry. Title: *Synthesis and Hydrolysis of Sterically Hindered Diorganotin Compounds.*

2004 – 2009 (July-Oct) **Ph.D-Chemistry**, Indian Institute of Technology Kanpur, Department of Chemistry. Title: *Novel Main Group Macrocycles and Cages Containing Sn-O, Sb-O and Te-O Building Blocks.* Thesis supervisor: Prof. V. Chandrasekhar.

2001 – 2003 **MSc**, General Chemistry, Madurai Kamaraj University, India.

1998 – 2001 **BSc**, General Chemistry, Madurai Kamaraj University, India.

## Fellowships and Awards

2016 **DST Young Scientist Fellow**, IIT Madras, India.

2006 – 2009 **Council of Scientific and Industrial Research (CSIR)-Senior Research Fellowship**, IITK

2006 **Cash award** for journal publication, IITK

2004 – 2006 **Council of Scientific and Industrial Research (CSIR)-Junior Research Fellowship**, IITK

2003 Received a certificate from **CSIR** for secured place among **top 20%** awardees in chemical sciences, examination held in June 2003

2003 Qualified with **91.79** percentile score in **Graduate Aptitude Test in Engineering (GATE)**

2003 Received a merit certificate for university **Second rank** in MSc Chemistry

2000 Won **first prize** for intercollegiate *chem puzz* competition held in VHNSN College

2000 Received a certificate from Madurai Kamaraj University for regular activities as volunteer in **National Service Scheme** for three years

2000 Received a certificate for passed second class **Lower level** type writing exam

## Professional Skills and experiences

- Synthesis, characterization and purification of organometallic, organic and inorganic compounds
- Handling of air and moisture sensitive compounds using the standard Schlenk technique
- Analysis of UV, IR, Mass, Cyclic Voltammetry and Multinuclear NMR ( $^{31}\text{P}$ ,  $^{119}\text{Sn}$ ,  $^{125}\text{Te}$ ,  $^{29}\text{Si}$ ) techniques
- Operation of instruments such as UV, Fluorescence spectroscopy, Cyclic Voltammetry, TGA, DSC, NMR, Combi flash ( $R_f$  200) and X-ray diffraction
- Single crystal X-ray structural solution and analysis using SHELXTL, WINGX, PLATON, DIAMOND and ORTEP.

## Teaching Courses

CHM-401: Chemistry of Main Group Elements  
CHM-610: Analytical Chemistry and Inorganic Spectroscopy  
CHM-615: Supramolecular Chemistry  
CHM-220: Analytical Chemistry Laboratory  
CHM-430: Inorganic Chemistry Laboratory-I  
CHM-530: Inorganic Chemistry Laboratory-III

## List of Students enrolled for PhD

- 1) Mrs. Kisturi Dhanwant (2017PHDCH004), Thesis submitted date: 09<sup>th</sup> March, 2023.
- 2) Mrs. Aarti Saini (2018PHDCH001)
- 3) Mr. Dharmveer (2022PHDCH001)

## List of Students guided for UG Project

- 1) Mr. Dinesh Kumar (2014IMSCH025). 2014-'17
- 2) Mr. Deepak Kumar (2014IMSCH004). 2014-'17
- 3) Ms. Anuradha Dixit (2015IMSCH002). 2015-'18
- 4) Mr. Gyan Chand Bhandari (2015IMSCH008). 2015-'18
- 5) Mr. Sumit (2016IMSCH012). 2016-'21
- 6) Ms. Sarita Bijarniya (2017IMSCH011). 2017-'20
- 7) Ms. Muskan Agarwal (2017IMSCH006). 2018-'21
- 8) Mr. Harish Choudhary (2019IMSCH011). 2019-'22
- 9) Ms. Kalpana Yadav (2019IMSCH012). 2019-'22
- 10) Mr. Kushal Bhuradiya (2019IMSCH013). 2019-'22
- 11) Ms. Palak Solanki (2020IMSCH017). 2020-'23
- 12) Ms. Anshuldeep Yadav (2020IMSCH007). 2020-'23

## List of Students Guided for PG (MSc) Project

- 1) Mr. Iththisham (2015IMSCH005). 2015-'18 (BCHP601)  
Title: Synthesis, Structural Characterization and Fluorescence Study of 1-Naphthyl Substituted Organotin Carboxylates
- 2) Ms. Madhu Bala (2013IMSBCH009). 2014-'17 (ICHP1001)  
Title: Ferric Ion Complexes of Acetoacetyl Ferrocene and 1,1-Bis(acetoacetyl) Ferrocene Derivatives
- 3) Mr. Aravkumar Meena (2014IMSCH002). 2014-'19 (ICHP1001)  
Title: Cyclopentadienyl Substituted Group 16 Elements
- 4) Ms. Mona Kumawat (2014IMSCH014). 2014-'19 (ICHP1001)  
Title: Synthesis, Structure and Photophysical Studies of Naphthyl Substituted Tin Chlorides and Chalcogenides
- 5) Ms. Minakshi Kumari (2016IMSBCH008). 2016-'19 (BCHP601)  
Title: Synthesis of Transition Metal Complexes of Ferrocene Acetylacetonato and Their Derivatives
- 6) Ms. Raja Jogi (2016IMSBCH023). 2016-'19 (BCHP601)

- Title: Stabilization of Reactive Binary Halide SeCl<sub>2</sub> With 4-Methylpyridine-N-Oxide
- 7) Mr. Suman Kumar Saha (2018MSCH002). 2018-20 (CHP401)  
Title: Trapping of 1-Methylnaphthalene Radical by TEMPO
- 8) Ms. Shivani Singh (2015IMSCH020). 2015-'20 (IHP1001)  
Title: Synthesis and Characterization of Organosilicon or Organotin Coordinated Coumarin-3-carboxylates
- 9) Mr. Deepak Kumar (2014IMSCH004). 2014-'20 (IHP1001)  
Title: Synthesis of Pyrene Substituted Titanium(IV) Carboxylates
- 10) Ms. Prerna (2019MSCH015) 2019-'21 (CHM500)  
Title: Synthesis and Characterization of Titanium Complexes of Hydroxymethylferrocene
- 11) Ms. Priyanka Panigrahi (2019MSCH016) 2019-'21 (CHM500)  
Title: Synthesis, Characterization and Application of Ferrocenemethylphosphate
- 12) Ms. Shikha Singh (2019MSCH019) 2019-'21 (CHM500)  
Title: Synthesis and Characterization of 2-(Trimethylsilyl)methylpyridine Ligand and Their Metal Complexes
- 13) Mr. Punit Kumar (2019IMSBCH017) 2019-'22 (CHM500)  
Title: Synthesis of Te(IV) Derivatives of 2-(Trimethylsilyl)methylpyridine.
- 14) Mr. Siddharth Jhingonia (2019IMSBCH027) 2019-'22 (CHM500)  
Title: Application of Organotin Compounds in Organic Synthesis.
- 15) Ms. Shabnam Bano (2017IMSCH012) 2017-'22 (CHM500)  
Title: Synthesis and Characterization of Phosphate Esters of Ferrocene.
- 16) Ms. Shivangi Tiwari (2019IMSBCH024) 2019-'22 (CHM500)  
Title: Synthesis and Characterization of Diorganotin(IV) Dihalides and Diorganotellurium(IV) Dihalides and their Application in C-C Coupling Reactions.
- 17) Mr. Anmol Behera (2020IMSBCH005) 2020-'23 (CHM599)  
Title: A Facile Green Synthetic Route for Cross Coupling of 1-Naphthylmethyl & Ferrocenemethyl Based Alcohols With Various Arenes Mediated By Bi(OTf)<sub>3</sub>.
- 18) Mr. Dinesh Regar (2020IMSBCH008) 2020-'23 (CHM599)  
Title: Synthesis and Characterization of C-C Coupled Products From Reactions of Bis(2,4,6-trimethylbenzyl)tin dibromide with Arenes.
- 19) Mr. Subham Ranjan Sahu (2020IMSBCH024) 2020-'23 (CHM599)  
Title: Synthesis and Characterization of Diorganotin(IV) Dihalides and their Application in C-C Bond Forming Reactions.
- 20) Mr. K. R. S. Lalithananda (2018IMSCH019) 2018-'23 (CHM500)  
Title: Synthesis, Characterization and Application of Multi-Azobenzene Substituted on Cyclophosphazene Core.

## Current Interests

- Main group 14, 15 and 16 complexes
- C–C bond forming reactions
- Inorganic rings and macrocycles
- Electrochemistry of electroactive materials
- Cages containing main-group elements

## Paper Published with CURaj Affiliation

Ashok K Raigar, Kamlesh Saini, Nirmal Jyoti, **Ramalingam Thirumoorthi**, Anjali Guleria. A Green Approach for the Synthesis of 1,4-Diphenylbutadiyne-1,3 via C–H Activated Aerobic C<sub>sp</sub>–C<sub>sp</sub> Homocoupling Catalyzed by CuFe<sub>2</sub>O<sub>4</sub> Nanoparticles. *ChemistrySelect*, **2023**, 8(12), e202300610.

Kisturi Dhanwant, Aarti Saini, Tristram Chivers, **Ramalingam Thirumoorthi**. Temperature-Assisted Generation of Arylmethyl Radicals from Bis(arylmethyl)tin Dichlorides: Efficient Reagents for C<sub>sp</sub><sup>3</sup>–C<sub>sp</sub><sup>2</sup> Bond-Forming Reactions. *Chemistry A European Journal*, **2023**, e202202844.

Aarti Saini, Kisturi Dhanwant, Khemchand Dewangan, **Ramalingam Thirumoorthi**, Adhish Jaiswal, Indra Bahadur, Faruq Mohammad, Ahmed Abdullah Soleiman. Flower-like morphological trigonal tellurium (*t*-te): A simple Wet-Chemical preparation approach to obtain semiconducting material. *Results in Materials*, **2023**, 18, 100397.

Aarti Saini, Kisturi Dhanwant, **Ramalingam Thirumoorthi**. 1-Hydroxy-4-methylpyridinium chloride. *IUCrData*, **2022**, 7, Pt 10.

Vadapalli Chandrasekhar, **Ramalingam Thirumoorthi**, Kisturi Dhanwant, Aarti Saini. Photophysical Studies of Organostannoxane Supported Hexafluorophore Assemblies. *Inorganica Chimica Acta*, **2021**, 522, 120378. Citation: 0. Impact factor: 2.433.

Kisturi Dhanwant, Tristram Chivers, M Bhanuchandra, **Ramalingam Thirumoorthi**. X-ray structures and photophysical properties of Tris (1-naphthyl) silicon (IV) derivatives. *Journal of Molecular Structure*, **2020**, 1219, 128650. Citation: 0. Impact factor: 2.12.

Satyajit Panda, Ram Singh Jat, Amir Fayaz, Jony Saha, **Ramalingam Thirumoorthi**, Tapta Kanchan Roy, M Bhanuchandra. Conjugated small organic molecules: synthesis and characterization of 4-arylpyrazole-decorated dibenzothiophenes. *New Journal of Chemistry*, **2020**, 44(21), 8944-8951. Citation: 0. Impact factor: 3.069.

Tanveer A Khan, Kishalay Bhar, **Ramalingam Thirumoorthi**, Tapta Kanchan Roy, Anuj K Sharma. Design, synthesis, characterization and evaluation of the anticancer activity of water-soluble half-sandwich ruthenium (II) arene halido complexes. *New Journal of Chemistry*, **2020**, 44(1), 239-257. Citation: 0. Impact factor: 3.069.

**Ramalingam Thirumoorthi**, Vadapalli Chandrasekhar. Fluorophore-tagged organotellurium and -antimony assemblies. *Inorganica Chimica Acta*, **2019**, 497, 119092. Citation: 0. Impact factor: 2.433.

Tristram Chivers, **Ramalingam Thirumoorthi**. s-Block metal complexes of PC(H)P-bridged chalcogen-centred methanides: comparisons with isoelectronic PNP-bridged monoanions. *Dalton Transactions*, **2018**, 47, 12493-12505. Citation: 0. Impact factor: 4.177.

**Ramalingam Thirumoorthi**, Tristram Chivers. Structural Comparison Of Lithium Iodide Complexes Of Symmetrical And Unsymmetrical Ligands [CH<sub>2</sub>(PPh<sub>2</sub>NSiMe<sub>3</sub>)(PPh<sub>2</sub>NR)] (R = SiMe<sub>3</sub>, H). *Journal of Structural Chemistry*, **2018**, 59, 1260-1266. Citation: 0. Impact factor: 0.472.

#### Articles Published in Outside of Ph.D. Work

**Ramalingam Thirumoorthi**, Tristram Chivers, Susanna Häggman, Akseli Mansikkamäki, Ian Morgan, Heikki M. Tuononen, Manu Lahtinen, Jari Konu. Synthesis of a Labile Sulfur-Centred Ligand, [S(H)C(PPh<sub>2</sub>S)<sub>2</sub>]<sup>-</sup>: Structural Diversity in Lithium(I), Zinc(II) and Nickel(II) Complexes. *Dalton Transactions*, **2016**, 45 (32), 12691-12701. Citation: 0. Impact factor: 4.177.

**Ramalingam Thirumoorthi**, J. Mikko Rautiainen, Risto S. Laitinen, Tristram Chivers. A Ten-membered Dimetallacycle with an Ag<sub>2</sub><sup>2+</sup> Dication Bridged by Two P,N Ligands. *Zeitschrift für anorganische und allgemeine Chemie*, **2016**, 5, 390-394. Citation: 0. Impact factor: 1.251.

**Ramalingam Thirumoorthi**, Tristram Chivers. Potassium and Magnesium Complexes of the (Iminophosphoranyl)(selenophosphoranyl)methanide Ligand [CH(PPh<sub>2</sub>Se)(PPh<sub>2</sub>NSiMe<sub>3</sub>)]<sup>-</sup>. *European Journal of Inorganic Chemistry*, **2015**, 13, 2188-2192. Citation: 1. Impact factor: 2.686.

Andreas Nordheider, Katharina Hüll, Kasun S. Athukorala Arachchige, Alexandra M. Z. Slawin, J. Derek Woollins, **Ramalingam Thirumoorthi**, Tristram Chivers. Spirocyclic, Macrocyclic and Ladder Complexes of Coinage Metals and Mercury with Dichalcogeno P<sub>2</sub>N<sub>2</sub>-Supported Anions. *Dalton Transactions*, **2015**, 44, 5338-5346. Citation: 7. Impact factor: 4.177.

**Ramalingam Thirumoorthi**, Tristram Chivers, Ignacio Vargas-Baca. Experimental and Computational Investigations of Arsenic (III) and Phosphorus (III) Complexes of Bis(diphenylthiophosphinoyl)methanediide. *Journal of Organometallic Chemistry*, **2014**, 761, 93-97. Citation: 0. Impact factor: 2.173.

**Ramalingam Thirumoorthi**, Tristram Chivers, Risto S. Laitinen. 1, 1'-(Diselanediybis {[P, P-diphenyl-N-(trimethylsilyl)phosphorimidoyl]methanylylidene})bis[1,1-diphenyl-N-(trimethylsilyl)-λ5-phosphanamine] pentane disolvate. *Acta Crystallographica Section E*, **E70**, **2014**, O20-O21. Citation: 0. Impact factor: 0.

**Ramalingam Thirumoorthi**, Tristram Chivers. Octahedral Tin(IV) Complexes of the Chalcogen-Centred Ligands  $[EC(PPh_2S)_2]^{2-}$  (E = S, Se). *Zeitschrift für anorganische und allgemeine Chemie*, **2014**, *1*, 23-26. Citation: 1. Impact factor: 1.251.

**Ramalingam Thirumoorthi**, Tristram Chivers, Chris Gendy, Ignacio Vargas-Baca. CH-NH Tautomerism in the Products of the Reactions of the Methanide  $[HC(PPh_2NSiMe_3)_2]^-$  with Pnictogen and Tellurium Iodides. *Organometallics*, **2013**, *32*, 5360-5373. Citation: 2. Impact factor: 4.186.

Philip J. W. Elder, Tristram Chivers, **Ramalingam Thirumoorthi**. Experimental and Computational Investigations of Tautomerism and Fluxionality in PCP- and PNP-bridged Heavy Chalcogenides. *European Journal of Inorganic Chemistry*, **2013**, *16*, 2867-2876. Citation: 8. Impact factor: 2.686.

**Ramalingam Thirumoorthi**, Tristram Chivers. Structure of the Telluroketone  $TeC(PPh_2NSiMe_3)_2$  Coordinated to an  $Li_8O_6$  Cluster. *Polyhedron* **2013**, *53*, 230-234. Citation: 1. Impact factor: 2.011.

Andreas Nordheider, Tristram Chivers, **Ramalingam Thirumoorthi**, Kasun S. Athukorala Arachchige, Alexandra M. Z. Slawin, J. Derek Woollins, Ignacio Vargas-Baca. A Planar Dianionic Ditelluride and a Cyclic Tritelluride Supported by  $P_2N_2$  Rings. *Dalton Transactions*, **2013**, *42*, 3291-3294. Citation: 12. Impact factor: 4.177.

**Ramalingam Thirumoorthi**, Tristram Chivers. Alkali Metal, Magnesium, and Zinc Complexes of Bis(chalcogenophosphinoyl)methanide Ligands. *European Journal of Inorganic Chemistry*, **2012**, *18*, 3061-3069. Citation: 7. Impact factor: 2.686.

Andreas Nordheider, Tristram Chivers, **Ramalingam Thirumoorthi**, Ignacio Vargas-Baca, John Derek Woollins. Planar  $P_6E_6$  (E = Se, S) Macrocycles Incorporating  $P_2N_2$  Scaffolds. *Chemical Communications*, **2012**, *48*, 6346-6348. Citation: 15. Impact factor: 6.567.

Tristram Chivers, Konu, J.; **Ramalingam Thirumoorthi**. PCP-Bridged Chalcogen-Centred Anions: Coordination Chemistry and Carbon-Based Reactivity. *Dalton Transactions*, **2012**, *41*, 4283-4295. Citation: 17. Impact factor: 4.177.

**Ramalingam Thirumoorthi**, Tristram Chivers, Ignacio Vargas-Baca. Experimental and Theoretical Investigations of Tellurium(IV) Methanediides and Their Insertion Products with Sulfur and Iodine. *Organometallics* **2012**, *31*, 627-636. Citation: 12. Impact factor: 4.186.

**Ramalingam Thirumoorthi**, Tristram Chivers, Ignacio Vargas-Baca. *S,C,S*-Pnictogen Bonding in Pincer Complexes of the Methanediide  $[C(Ph_2PS)_2]^{2-}$ . *Dalton Transactions*, **2011**, *40*, 8086-8088. Citation: 14. Impact factor: 4.177.

### Articles Published in Ph.D. Work

Vadapalli Chandrasekhar, **Ramalingam Thirumoorthi**, Ramesh K Metre, Bani Mahanti. Steric Control in the Reactions of 3-Pyrazolecarboxylic Acid with Diorganotin Dichlorides. *Journal of Organometallic Chemistry*, **2011**, *696*, 600-606. Citation: 29. Impact factor: 2.173.

Vadapalli Chandrasekhar, **Ramalingam Thirumoorthi**. Coordination Polymers containing Ferrocene Backbone. Synthesis, Structure and Electrochemistry. *Dalton Transactions*, **2010**, *39*, 2684-2691. Citation: 25. Impact factor: 4.177.

Vadapalli Chandrasekhar, **Ramalingam Thirumoorthi**. Synthesis and Structure of Diorganotin Dibromides,  $R_2SnBr_2$  (R = 2,4,6-trimethylphenyl or 2,4,6-trimethylbenzyl): Hydrolysis of  $(2,4,6-Me_3C_6H_2)_2SnBr_2$ . *Journal of Chemical Sciences*, **2010**, *122*, 687-695. Citation: 1. Impact factor: 1.085.

- Vadapalli Chandrasekhar, **Ramalingam Thirumoorthi**. Halide-Capped Tellurium-Containing Macrocycles. *Inorganic Chemistry*, **2009**, *48*, 10330-10337. Citation: 17. Impact factor: 4.820.
- Vadapalli Chandrasekhar, **Ramalingam Thirumoorthi**. Tellurasiloxane cages containing  $\text{Te}_6\text{Si}_4\text{O}_{12}$  and  $\text{Te}_6\text{Si}_6\text{O}_{15}$  Frameworks. *Inorganic Chemistry*, **2009**, *48*, 6236-6241. Citation: 8. Impact factor: 4.820.
- Vadapalli Chandrasekhar, **Ramalingam Thirumoorthi**. A Nonanuclear Organostiboxane cage. *Organometallics* **2009**, *28*, 2637-2639. Citation: 15. Impact factor: 4.186.
- Vadapalli Chandrasekhar, **Ramalingam Thirumoorthi**. Reactions of 3,5-Pyrazoledicarboxylic acid with Organotin Chlorides and Oxides. Coordination Polymers containing Organotin Macrocycles. *Organometallics* **2009**, *28*, 2096-2106. Citation: 55. Impact factor: 4.186.
- Vadapalli Chandrasekhar, **Ramalingam Thirumoorthi**. Facile, Ambient Temperature, Double Sn-C Bond Cleavage: Synthesis, Structure, and Electrochemistry of Organotin and Organotellurium Ferrocenecarboxylates. *European Journal of Inorganic Chemistry*, **2008**, *29*, 4578-4585. Citation: 20. Impact factor: 2.686.
- Vadapalli Chandrasekhar, Sasikumar, P.; Puja Singh, **Ramalingam Thirumoorthi**, Tapas Senapati. Multi-functional Architectures Supported on Organostannoxane Scaffolds. *Journal of Chemical Sciences*, **2008**, *120*, 105-113. Citation: 8. Impact factor: 1.085.
- Vadapalli Chandrasekhar, **Ramalingam Thirumoorthi**. 1,1'-Ferrocenedicarboxylate-bridged Redox-Active Organotin and -tellurium containing 16-Membered Macrocycles: Synthesis, Structure, and Electrochemistry. *Organometallics* **2007**, *26*, 5415-5422. Citation: 46. Impact factor: 4.186.
- Vadapalli Chandrasekhar, **Ramalingam Thirumoorthi**, Ramachandran Azhakar. New Structural Forms of Organostannoxane Macrocyclic Networks. *Organometallics* **2007**, *26*, 26-29. Citation: 27. Impact factor: 4.186.
- Vadapalli Chandrasekhar, Kandaswamy Gopal, Palani Sasikumar, **Ramalingam Thirumoorthi**. Organooxotin Assemblies from Sn-C Bond Cleavage Reactions. *Coordination Chemistry Reviews*, **2005**, *249*, 1745-1765. Citation: 99. Impact factor: 12.994.

### Conference Participation by Thirumoorthi Ramalingam

- Thirumoorthi R.** presented a paper entitled "Hexafluorophore Assembled on Organostannoxane Core: Synthesis, Structure, Photophysical and Material Applications" in the National event "4 Minute Research Pitch" organized by IIS (deemed to be University), Jaipur & Govt., Madhav Science PG College, Ujjain on 15<sup>th</sup> to 16<sup>th</sup> April, **2022**.
- Thirumoorthi Ramalingam**, participated and successfully completed the 5-day online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education(AICTE) from 28<sup>th</sup> February, 2022 to 4<sup>th</sup> March, **2022**.
- Thirumoorthi, R.** Inorganic Cored Electroactive/Photoactive Assemblies. Guest speaker in five days FDP through online on *Multifunctional Materials And Their Applications*, MEPCO Schlenk Engineering College, Sivakasi, Tamilnadu, India, September 20–24, **2021**.
- Thirumoorthi Ramalingam**, awarded A grade in a one week FDP entitled "Systematic Literature Review and Meta-Analysis" from August 10-16, **2021** at TLC, Ramanujan College, University of Delhi.
- Thirumoorthi, R.** Trichalcogeno PCP Bridged Mono- and Dianion for Transition and Main-Group Metals. Resource person in short term FDP (Gyan Ganga) through online organized by Department of Chemistry, Government College, Kota, India, February 01–06, **2021**.
- Thirumoorthi, R.** PCP Bridged Mono and Dianion for Main-Group Metal Complexes. Guest speaker in five days FDP through online on *Frontier Research Areas in Chemistry-2020* (FRAC-2020), MEPCO Schlenk Engineering College, Sivakasi, Tamilnadu, India, October 19–23, **2020**.

**Thirumoorthi Ramalingam** participated in a one week FDP entitled “Implementation of National Education Policy 2020: Role of Faculty Members of HEIs” during November 04-08, 2020 at TLC, Central University of Rajasthan.

**Thirumoorthi, R.** Oral presentation in *1st International Conference on Frontier Areas of Chemistry*, Mahatma Gandhi Central University, Motihari, Bihar, India, February 28–29, **2020**.

**Thirumoorthi, R.** Participated in *25th CRSI National Symposium in Chemistry*, IIT Kanpur, Kalyanpur, India, July 19–21, **2019**.

**Thirumoorthi, R.** Participated in Three days National Workshop on “*Software and Applications of Single Crystal X-Ray Diffraction*”, Sankalchand Patel University, India, August 29–31, **2019**.

**Thirumoorthi, R.** Awarded ‘A’ Grade in Online Refresher Course in Chemistry for Higher Education Faculty, SWAYAM online course from 01<sup>st</sup> November **2018** to 28<sup>th</sup> February **2019**.

**Thirumoorthi, R.;** Chivers, T.; Vargas-Baca, I. Tautomerism in Group 15 Complexes of  $[\text{CH}(\text{PPh}_2\text{NSiMe}_3)_2]$ . Poster presentation in *24th CRSI National Symposium in Chemistry*, CSIR-CLRI, Adyar, Chennai, India, February 08–10, **2019** (poster no. 67).

**Thirumoorthi, R.;** Chivers, T.; Häggman, S.; Mansikkamäki, A.; Morgan, I. S.; Tuononen, H. M.; Lahtinen, M.; Konu, J. Variable Temperature  $^{31}\text{P}$  NMR and Theoretical Study of Nickel Complexes of  $[\text{S}(\text{H})\text{C}(\text{PPh}_2\text{S})_2]$ . Oral presentation in *International Conference on Frontiers at the Chemistry-Allied Sciences Interface (FCASI 2018)*, University of Rajasthan, Jaipur, India, Dec 21–22, **2018**.

**Thirumoorthi, R.;** Chivers, T.; Vargas-Baca, I.; Häggman, S.; Mansikkamäki, A.; Morgan, I. S.; Tuononen, H. M.; Lahtinen, M.; Konu, J. Exploitation of Sulfur-Centred PCP Bridged Ligand for Tellurium and Nickel Complexes. Poster presentation in *1<sup>st</sup> International Symposium on Main-Group Molecules to Materials*, Indian Institute of Science, Bangalore, India, Oct 28–31, **2018**.

**Thirumoorthi, R.** Participated in “Four Weeks Induction Training Program For Teachers of Higher Education Institutions (Orientation Course)”. Grade: **A**. *Central University of Rajasthan* from 01<sup>st</sup> May **2018** to 26<sup>th</sup> May **2018**.

**Thirumoorthi, R.;** Chivers, T.; Vargas-Baca, I. Synthesis, Structures and DFT Study of Main Group Complexes of PCP-Bridged Thio-Centred Ligands. Oral presentation in *Emerging Trends in Chemical Sciences*, Aligarh Muslim University, Aligarh, India, p. 74, Feb 24 – 25, **2018** (poster no. OP-31).

**Thirumoorthi, R.;** Chivers, T.; Häggman, S.; Mansikkamäki, A.; Morgan, I. S.; Tuononen, H. M.; Lahtinen, M.; Konu, J. Nickel and Zinc Complexes of  $[\text{Li}\{\text{S}(\text{H})\text{C}(\text{PPh}_2\text{S})_2\}]_2$ : Synthesis, Structural Characterization, Variable Temperature  $^{31}\text{P}$  NMR and Theoretical Study. Poster presentation in *21st CRSI National Symposium in Chemistry- CRSI-ACS symposium in Chemistry*, IICT-Tarnaka, Hyderabad, India, p. 310, July 13 – 16, **2017** (poster no. PA-239).

**Thirumoorthi, R.** Participated in workshop of *Instructional Design and Pedagogical Aspects of Engineering Education* organized by TEQIP Unit at National Institute of Technology Calicut from 2<sup>nd</sup> January **2014** to 5<sup>th</sup> January **2014**.

**Thirumoorthi, R.;** Chivers, T.; Gendy, C.; Vargas-Baca, I. Tautomerism and C-M bonding in Group 15 and 16 complexes of the methanide  $[\text{CH}(\text{PPh}_2\text{NSiMe}_3)_2]$ . Poster presentation in *96th Canadian Chemistry Conference and Exhibition*, Québec, Quebec, Canada, p. 82, May 26 – 30, **2013** (poster no. 972).

**Thirumoorthi, R.;** Chivers, T.; Vargas-Baca, I. Electron-Rich Main Group Methanediides: Structures, Bonding and Insertion Products. Poster presentation in *95th Canadian Chemistry Conference and Exhibition*, Calgary, Alberta, Canada, p. 54, May 26 – 30, **2012** (poster no. 349).

Chandrasekhar, V.; **Thirumoorthi, R.** 1,1'-Ferrocenedicarboxylate-Bridged Redox-Active Organotin and -tellurium Containing 16-membered Macrocycles: Synthesis, Structure and Electrochemistry. Poster

presentation in 10<sup>th</sup> Anniversary of CRSI National Symposium in Chemistry (NSC-10), Bangalore, India, February 1 – 3, 2008.

### Conference Participation with Others

Tristram Chivers, Jari Konu, Susanna Häggman, Akseli Mansikkamäki, Ian Morgan, Heikki Tuononen, **Ramalingam Thirumoorthi**, Manu Lahtinen. Square-planar and Octahedral Isomers of a Ni(II) complex with a Labile Sulfur-Centered Ligand. *Abstract of Papers of the American Chemical Society*, 13<sup>th</sup> March 2016, Volume 251, ACS Publisher.

Nordheider, A.; Chivers, T.; **Thirumoorthi, R.**; Vargas-Baca, I.; Woollins, D. J. Polychalcogen Macrocycles Supported by P<sub>2</sub>N<sub>2</sub> Rings. Presentation in *International Symposium on Inorganic Ring Systems (IRIS 13)*, Victoria, Canada, July 29 – Aug 02, 2012.

**Thirumoorthi, R.**; Chivers, T.; Vargas-Baca, I. S,C,S-Pnictogen and Chalcogen Bonding and Insertion Reaction of Methanediides of Sb, Bi and Te. *Abstract of Papers, 243<sup>rd</sup> ACS National Meeting & Exposition*, San Diego, USA, March 25 – 29, 2012.

Murage, G.; **Thirumoorthi, R.**; Thayumanavan, S.; Vachet, R. Using Covalent Labeling to Understand the Selective Extraction and Enhanced Detection of Peptides by Polymeric Reverse Micelles and MALDI-TOF-MS. Poster presentation in 59<sup>th</sup> ASMS Conference on Mass Spectrometry and Allied Topics, Denver, USA, p. 164, June 5-9, 2011 (poster no. Thp. 151).

Chandrasekhar, V.; **Thirumoorthi, R.**; Metre, R. K. Organostannoxane Macrocycles and Coordination Polymers. Poster presentation in *National Symposium on Frontiers in Main-Group and Organometallic Chemistry (NSFMOC)*, Bangalore, India, November 20, 2010.

Participated in *Frontiers of Chemistry - An Indo-German Symposium*, Indian Institute of Technology Kanpur, India, October 26-28, 2007.

### Project Completed

Half Sandwich Organotellurium Oxides/Hydroxides: An Alternative Reagent in Organic Synthesis. CSIR-EMR II Rs. 9,00,000/-. Principal Investigator: **Ramalingam Thirumoorthi**. Human Resource Development Group CSIR Complex, Library Avenue, Pusa, New Delhi – 110012 (01<sup>st</sup> July 2019 to 31<sup>st</sup> December 2022).

Synthesis, Structure and Magnetic Studies of Polymetallic Cages. UGC-BSR Start-Up-Grant Rs. 10,00,000/-. Principal Investigator: **Ramalingam Thirumoorthi**. University Grants Commission, Ministry of Human Resource Development (MHRD), Govt. of India (23<sup>rd</sup> March 2018 to 22<sup>nd</sup> March 2020).

Synthesis, Structure and Optical Study of Phosphane and/or Chalcogen Stabilized Gold Complexes. Fund: Rs. 17,50,000/-. Principal Investigator: **Ramalingam Thirumoorthi**. Science & Engineering Research Board, Department of Science & Technology (DST), India (16<sup>th</sup> March 2016 to 15<sup>th</sup> March 2019).

### Membership

- Indian Science Congress Association (ISCA).
- Chemical Research Society of India.