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	Assistant Professor, Department of Chemistry, Central University of Rajasthan (CURaj)
(Jan-)	Bandarsindri, Ajmer-Dt.
2016 - 2016	DST Young Scientist Fellow, Department of Chemistry, Indian Institute of Technology
(Mar-Dec)	Madras. Title: Synthesis, Structure and Optical Properties of Phosphane and/or Chalcogen
	Stabilized Gold Complex.
2015 - 2016	Assistant Professor (on contract), Central University of Tamil Nadu Thiruvarur (CUTN),
(July-Mar)	Department of Chemistry, India.
2014 - 2015	Adhoc Faculty, National Institute of Technology Warangal (NIT W), Department of
(Dec-May)	Chemistry, India.
2013 - 2014	Adhoc Lecturer, National Institute of Technology Calicut (NIT C), Department of
(Dec-Dec)	Chemistry, India.
2012 - 2013	Research associate, University of Calgary (U of C), Canada, Department of Chemistry.
(Nov-Oct)	Title: Synthesis, Spectroscopic and Structural Characterization of Inorganic Macrocycles
	Containing Sulphur or Selenium.
2010 - 2012	NSERC-Post doctoral fellow, University of Calgary (U of C), Canada, Department of
(Nov-Oct)	Chemistry. Title: Electron-Rich Main Group Methanediides: Structures, Bonding and
	Insertion Products.
2010 - 2010	DARPA-Post doctoral research associate, University of Massachusetts (UMASS),
(Jan-Nov)	Amherst, Department of Chemistry. Title: Polymeric Bulk/Nanogels for Naloxone Delivery.
2009 - 2009	DST-Project scientist, Indian Institute of Technology Kanpur (IITK), Department of
(Nov-Dec)	Chemistry. Title: Synthesis and Hydrolysis of Sterically Hindered Diorganotin Compounds.
2004 - 2009	Ph.D-Chemistry, Indian Institute of Technology Kanpur, Department of Chemistry. Title:
(July-Oct)	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 (³¹P, ¹¹⁹Sn, ¹²⁵Te, ²⁹Si) 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: 09th March, 2023; Ph.D. Viva-voce date: 19th April, 2024.
- 2) Mrs. Aarti Saini (2018PHDCH001), Thesis submitted date: 29th May, 2024; Ph.D. Viva-voce date: 14th October, 2024
- 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
- 13) Mr. Praveen (2021IMSCH021) 2021-'24

List of Students Guided for PG (MSc) Project

1) Mr. Ihthisham (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 SeC12 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 (ICHP1001)

Title: Synthesis and Characterization of Organosilicon or Organotin Coordinated Coumarin-3-carboxylates

9) Mr. Deepak Kumar (2014IMSCH004). 2014-'20 (ICHP1001)

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) Ms. Ankita Panda (2020MSCH004) 2020-'22 (CHM500)

Title: Applications of diorganotin(IV) dichloride in C-C cross-coupled product formation.

18) 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)₃.

19) 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.

20) 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.

21) Mr. K. R. S. Lalithananda (2018IMSCH019) 2018-'23 (CHM500)

Title: Synthesis, Characterization and Application of Multi-Azobenzene Substituted on Cyclophosphazene Core.

22) Mr. Kalamati Nagesh (2021MSCH010) 2021-'23 (CHM500)

Title: Tin Assisted Coupling Of Electronically Deactivated 4-Cyanobenzyl Chloride with different Arenes.

23) Mr. Pradeep Kumar (2021MSCH017) 2021-'23 (CHM500)

Title: Tin Assisted 4-Fluorobenzylation of Arenes.

24) Ms. Priyanka Sachan (2022MSCH018) 2022-'24 (CHM-500(I) & CHM-500(II))

Title: Metal, Solvent and additive Free Single-Pot Synthesis of Fluoro-Substituted Diarylmethane Derivatives.

25) Ms. Tejasvi (2022MSCH025) 2022-'24 (CHM-500(I) & CHM-500(II))

Title: One-Pot Synthesis of Chloro-Substituted Diarylmethane Derivatives via Promotor and Additive Free Method.

26) Mr. Chandan Das (2021IMSBCH007) 2021-'24 (CHM-599)

Title: Synthesis of Ferrocene methanol and C-C Cross-Coupling of Ferrocene methanol with Heterocyclic Compound Mediated by Lewis Acid.

27) Ms. Pragati Meena (2021IMSBCH016) 2021-'24 (CHM-599)

Title: Catalyst & Mediator Free One-Pot C-C Cross-Coupling Reaction.

28) Ms. Pratibha Choudhary (2021IMSBCH017) 2021-'24 (CHM-599)

Title: C-C Cross-Coupling Reactions of Substituted Benzyl Halides with Mesitylene.

29) Mr. Pawan Sharma (2019IMSCH021) 2019-'24 (CHM-500)

Title: Coumarin Bearing Organotin Compound For Fluorescence Study.

Current Interests

- Organometallic Chemistry
- C–C bond forming reactions
- Inorganic rings and macrocycles
- Electrochemistry of electroactive materials
- Cages containing main-group elements

Paper Published with CURaj Affiliation

- Om Prakash Joshi, **Ramalingam Thirumoorthi**, Ram T. Pardasani, Sriparna Ray, Chandrakanta Dash. Palladium(II) complexes bearing mesoionic carbene ligands: catalytic application in domino Sonogashira coupling/cyclization reactions for one-pot synthesis of benzofuran and indole derivatives. *RSC Advances*, **2024**, *14*, 27141-27152.
- Aarti Saini, Kisturi Dhanwant, Mukesh Verma, Sher Singh Meena, Yugandhar Bitla, **Ramalingam Thirumoorthi**. Observation of cluster spin glass behavior in thermally decomposed nanocrystalline Sn_{0.5}Fe_{0.5}O_{2-δ}. *Materials Advances*, **2024**, *5*, 5543-5553.
- Aarti Saini, Dharmveer Bhedi, Kisturi Dhanwant, **Ramalingam Thirumoorthi**. Multi-Azobenzene Moieties On Rigid Cyclotriphosphazene Core: Synthesis, Structural Characterization, Electrochemistry, and Photoisomerization Study. *Journal of Photochemistry and Photobiology A: Chemistry*, **2024**, *452*, 115603.
- Ritu Raj Lakshkar, Seema Yadav, **Ramalingam Thirumoorthi**, Sriparna Ray, Chandrakanta Dash. Zinc-bis(imino)pyridine Complexes as Catalysts for Intermolecular Amidation of Benzylic C(sp³)–H Bond. *ChemistrySelect* **2024**, *9*, e202302804.
- Om Prakash Joshi, Ankit Kumar Dash, **Ramalingam Thirumoorthi**, Chandrakanta Dash. Iron-Catalyzed Annulation of 2-Aminobenzaldehydes with Iodonium Ylides: A Mild and General Route for the Synthesis of Acridinone Derivatives. *Asian Journal of Chemistry*, **2024**, *36*, 1423-1428.
- Deepika Sahil, **Ramalingam Thirumoorthi**, Chandrakanta Dash. Multicomponent click reactions catalyzed by copper(I) complex bearing Bis(imino)pyridine-phosphine ligands. *Inorganic Chemistry Communications*, **2023**, 157, 111323.
- 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_{sp}-C_{sp} Homocoupling Catalyzed by CuFe₂O₄ 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_{sp}^3 - C_{sp}^2 Bond-Forming Reactions. *Chemistry A European Journal*, **2023**, *29*(*14*), 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, x221023.
- 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 [CH₂(PPh₂NSiMe₃)(PPh₂NR)] (R = SiMe₃, 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(PPh₂S)₂]: 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_2^{2+} 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(PPh₂Se)(PPh₂NSiMe₃)]⁻. *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 P₂N₂-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 Chem*istry, **2014**, *761*, 93-97. Citation: 0. Impact factor: 2.173.
- **Ramalingam Thirumoorthi,** Tristram Chivers, Risto S. Laitinen. 1, 1'-(Diselanediylbis {[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(PPh₂S)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(PPh₂NSiMe₃)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(PPh₂NSiMe₃)₂ Coordinated to an Li₈O₆ 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 P₂N₂ 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 P₆E₆ (E = Se, S) Macrocycles Incorporating P₂N₂ Scaffolds. *Chemical Communications*, **2012**, *48*, 6346-6348. Citation: 15. Impact factor: 6.567.
- Tristram Chivers, Jari Konu, **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(Ph₂PS)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 Chem*istry, **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, R₂SnBr₂ (R = 2,4,6-trimethylphenyl or 2,4,6-trimethylbenzyl): Hydrolysis of (2,4,6-Me₃C₆H₂)₂SnBr₂. *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 Te₆Si₄O₁₂ and Te₆Si₆O₁₅ 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, Palani Sasikumar, 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 Macrocycle 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 an invited lecture entitled "Thermolysis of Bis(arylmethyl)tin Dichlorides: An Efficient Reagent for C–C and C–N Bond-Forming Reactions" in 20th International Conference on "Modern Trends in Inorganic Chemistry (MTIC-XX)" organized by Department of Chemistry, IISc Bangalore from 14th December to 17th December, **2023**.
- **Thirumoorthi R.** presented a poster entitled "Thermolysis Produces Arylmethyl Radicals From Bis(arylmethyl)tin Dichlorides: Utilization For C–C Bond Forming Reactions" in the one-day symposium "Recent Advances in Inorganic Molecules to Materials (RAIMM-23)" organized by Department of Chemistry, IIT Kanpur on 04th November, **2023**.
- **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 15th to 16th 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 28th February, 2022 to 4th 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**. Title: Photophysical Studies of Organostannoxane Supported Hexafluorophore Assemblies.
- **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 01st November **2018** to 28th February **2019**.
- **Thirumoorthi, R.**; Chivers, T.; Vargas-Baca, I. Tautomerism in Group 15 Complexes of [CH(PPh₂NSiMe₃)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 ³¹P NMR and Theoretical Study of Nickel Complexes of [S(H)C(PPh₂S)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 1st 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 01st May **2018** to 26th 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 [Li{S(H)C(PPh₂S)₂}]₂: Synthesis, Structural Characterization, Variable Temperature ³¹P 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 2nd January **2014** to 5th 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 [CH(PPh₂NSiMe₃)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 10th 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, 13th March 2016, Volume 251, ACS Publisher.
- Nordheider, A.; Chivers, T.; **Thirumoorthi, R.**; Vargas-Baca, I.; Woollins, D. J. Polychalcogen Macrocycles Supported by P₂N₂ 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, 243rd 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 59th 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**.

Projects 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 (01st July 2019 to 31st 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 (23rd March 2018 to 22nd 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 (16th March 2016 to 15th March 2019).

Ongoing Project

Exploitation of Organotin Derivatives or Inorganic Tin Halides Towards the Synthesis of Organic Compounds. Science & Engineering Research Board-Core Research Grant, Rs. 28,68,728/-. Principal Investigator:

Ramalingam Thirumoorthi. CRG/2023/003075 dated 18th January 2024 (23rd January 2024 to 22nd January 2027).

Membership

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