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Education

Ph.D
Madurai Kamaraj University
1992 – 1998
Madurai, India

Skills

- Teaching and supervision
- Applied research
- Organizing
- Management of time

Awards

Senior Research Fellow (CSIR) (1995 ~ 1997)
Research Associate (CSIR) (1999 ~ 2001)

Membership

1. Indian Society for Radiation and Photochemical Sciences (ISRAPS, Life Member 253).
2. Chemical Research Society of India (CRSI, Life Member 797).
3. Managing Editor and Adviser - Oriental Journal of Chemistry.

THANASEKARAN POUNRAJ

Associate Professor

Profile summary:

A versatile and enthusiastic person who has been working in the field of Materials Science, Photochemistry and Chemical Biology teaches physical chemistry and physical chemistry practicals for more than 2 years and guides several Ph.D & Master students.

Academic Positions:

- **Associate Professor -** **Pondicherry University, India**
  - 03-01-2022 – Present: Teaching and Research guiding to M.Sc and Ph.D students
- **Postdoctoral Fellow -** **Fu Jen Catholic University, Taiwan**
  - 08-12-2019 – 31/12/2021: Electronically conductive properties of metal-organic Frameworks
- **Postdoctoral Fellow -** **Academia Sinica, Taiwan**
  - 01-09-2009 – 07/12/2019: Design and application of Supramolecules; Photoactivation of biomolecules
- **Postdoctoral Fellow -** **National Sun-Yat Sen University, Taiwan**
  - 07-10-2008 – 31-08-2009: Metal-catalyzed coupling reactions
- **Postdoctoral Fellow -** **Auburn University, USA**
  - 15-08-2006 – 30-06-2007: Fast reaction kinetics of biomolecules with Ruthenium(II) complexes
- **Postdoctoral Fellow -** **Academia Sinica, Taiwan**
  - 27-03-2001 – 30/06/2006: Design and application of supramolecules.
- **Research Associate (CSIR) -** **Madurai Kamaraj University, India**
  - 01-10-1999 – 16/03/2001: Studies on chiral Ruthenium(II) complexes
- **Postdoctoral Fellow -** **Academia Sinica, Taiwan**
  - 14-09-1998 – 15/03/1999: Design and application of supramolecules
- **Lecturer -** **Manonmaniam Sundaranar University, India**
  - 10-12-1997 – 30/04/1998: Teaching and research guiding for M.Sc students.

Publications: **Google Scholar:** Citations: 3559; h-index: 36; i10-index: 67

Research articles and Reviews:

82. Veerakumar*, P.; Pandiyan, R.; Chen*, S.-M.; **Thanasekaran, P.** *, Saranya, K. Recent Trends and Perspectives in Rhenium-Based Nanomaterials for Sustainable Applications, *Coord. Chem. Rev.* **2025**, *527*, 216382. (Impact Factor = 20.6; Times Cited = 1)

81. Li, D.; Yadav, A.; Zhou, H.; Roy, K.; **Thanasekaran, P**.*; Lee, C*. Advances and Applications of Metal-Organic Frameworks (MOFs) in Emerging Technologies: A Comprehensive Review. *Global Challenges*, **2024**, *8*, 2300244. (Impact Factor = 4.9; Times Cited = 00)

80. Lu, Z.-Z.; **Thanasekaran, P**.; Huang, C.-Y.; Wu, J.-Y.; Chang, T.-T.; Li, W.-S.; Velayudham, M.; Lu, K.-L. A Neutral Rhenium–Biimidazole Complex for the Selective Recognition of Fluoride Ions. *Spectrochim Acta A Mol. Biomol. Spectrosc.* **2023**, *301*, 122956. (Impact Factor = 4.4; Times Cited = 0).

79. Nurnabi, M.; Gurusamy, S.; Wu, J.-Y.; Lee, C.-C.; Sathiyendiran, M.; Huang, S.-M.; Chang, C.-H.; Chao, I.; Lee, G.-H.; Peng, S.-M.; Sathish, V.; **Thanasekaran, P.***; Lu, K.-L.* "Aggregation-Induced Emission Enhancement (AIEE) of Tetrarhenium(I) Metallacycles and Their Application as Luminescent Sensors for Nitroaromatics and Antibiotics". *Dalton Trans*. **2023,** *52*, 1939-1949. (Impact Factor = 4.0; Times Cited = 0).

78. **Thanasekaran, P**.; Huang, J.-H.; Jhou, C.-R.; Tsao, H.-C.; Mendiratta, S.; Su, C.-H.; Liu, C.-P.; Liu, Y.-H.; Lu, K.L. "A Neutral Mononuclear Rhenium(I) Complex with a Rare *in situ*-Generated Triazolyl Ligand for the Luminescence. "Turn-On" Detection of Histidine". *Dalton Trans*., **2023**, *52*, 703-709. (Impact Factor = 4.0; Times Cited = 0).

77. **Thanasekaran, P**.; Lin, B.-C.; Valaboju, A.; Lan, C.-F.; Chang, C.-H.; Lee, C.-C.; Wu, J.-Y.; Bhattacharya, D.; Tseng, T.-W.; Lee, H.-M.; Hsu, C.-P.; Lu, K.-L. "Molecular Mechanics of Glove-Like Re(I) Metallacycles: Toward Light-Activated Molecular Catchers". *J. Chin. Chem. Soc*. **2022**, *69*, 1392-1399. (Impact Factor = 1.8; Times Cited = 0).

76. Krishnaveni, K.; Gurusamy, S.; Rajakumar, K.; Sathish, V.; **Thanasekaran, P.*;** Mathavan, A.* "Aggregation. Induced Emission (AIE), Selective Fluoride Ion Sensing and Lysozyme Interaction Properties of Julolidinesulphonyl Derived Schiff Base". *J. Photochem. Photobiol. A: Chem*. **2022**, *427*, 113822. (Impact Factor = 4.3; Times Cited = 0).

75. Gurusamy, S.; Sankarganesh, M.; Sathish, V.; **Thanasekaran, P**.*; Mathavan, A.* "A Novel Colorimetric, Selective Fluorescent "Turn-Off" Chemosensor and Biomolecules Binding Studies Based on Iodosalicylimine Schiff Base Derivative". *J. Photochem. Photobiol. A: Chem,* **2022**, *425*, 113674. (Impact Factor = 4.3; Times Cited = 0).

74. Veerakumar, P. Velusamy, N.; **Thanasekaran, P.**; Lin, K.C.; Rajagopal, S. "Copper Supported Silica-Based. Nanocatalysts for CuAAC and Cross-Coupling Reactions". *React. Chem. Engg*. **2022**, *7*, 1891-1920. (Impact Factor = 3.9; Times Cited = 00).

73. Ramdass, A.; Sathish, V.; **Thanasekaran, P**.* "AIE or AIE(P)E-Active Transition Metal Complexes for Highly. Selective Detection of Nitroaromatic Explosives". *Results Chem*. **2022**, 4, 100337. (Impact Factor = 2.5; Times Cited = 00)

72. **Thanasekaran, P.;** Su, C.-H.; Liu, Y.-H.; Lu, K.-L. "Hydrophobic Metal-Organic Frameworks and Derived. Composites for Microelectronics Applications". *Chem. Eur. J*. **2021**, *27*, 16543-16563. (Impact Factor = 4.3; Times Cited = 00)

71.**Thanasekaran, P.;** Su, C.-H.; Liu, Y.-H.; Lu, K.-L. "Weak interactions in Conducting Metal-Organic Frameworks". *Coord. Chem. Rev.* **2021**, *442*, 213987. (Impact Factor = 20.6; Times Cited = 00)

70. Sathish, V.; Manivannan, C.; Malathi, B.; Ramesh Kumar, A.; **Thanasekaran, P**.* "Advances of Inorganic Materials in the Detection and Therapeutic Uses Against Coronaviruses". *Curr. Med. Chem.* **2021**, *28*, 1-17 (Impact Factor = 4.1; Times Cited = 00)

69. Babu, E.; Bhuvaneswari, J.; Rajakumar, K.; Sathish, V.; **Thanasekaran, P.*** "Non-Conventional Photoactive Transition Metal Complexes That Mediated Sensing and Inhibition of Amyloidogenic Aggregates", *Coord. Chem. Rev.* **2021**, *428*, 213612. (Impact Factor = 20.6; Times Cited = 2)

68. Krishnaveni, K.; Gurusamy, S.; Sathish, V.; **Thanasekaran, P.***; Mathavan, A*. "Selective Anions Mediated Fluorescence "Turn-On", Aggregation Induced Emission (AIE) and Lysozyme Targeting Properties of Pyrene-

Naphthalene Sulphonyl Conjugate". *Spectrochim Acta A Mol. Biomol. Spectrosc.* **2021**, *252*, 119537 (Impact Factor = 4.098; Times Cited = 1).

67. Gurusamy, S.; Krishnaveni, K.; Sankarganesh, M.; Sathish, V.; **Thanasekaran, P.***; Mathavan, A*. "Multiple Target Detection and Binding Properties of Naphthalene-Derived Schiff-Base Chemosensor", *J. Mol. Liq.* **2021,** *325,* 115190 (Impact Factor = 6.0; Times Cited = 0)

66. Hsu, K. T.; **Thanasekaran, P.;** Su, C.-H.; Chang, B.-C.; Liu, Y.-H.; Hung, C.-H.; Lu, K.-L. "A Nonlinear Optical Cadmium(II)-Based Metal-Organic Framework with Chiral Helical Chains Derived from an Achiral Bent Dicarboxylate Ligand", *CrystEngComm*. **2021**, *23*, 824-830 (Impact Factor = 3.1; Times Cited = 0)

65. Veerakumar, P.; Sangili, A.; Manavalan, S.; **Thanasekaran**, **P.;** Lin, K.-C. "Research Progress on Porous Carbon Supported Metal/Metal Oxide Nanomaterials for Supercapacitor Electrode Applications", *Ind. Eng. Chem. Res.* **2020**, *59*, 6347-6374. (Impact Factor = 4.2; Times Cited = 19)

64. Wu, H.-W.; Lee, L.-W.; **Thanasekaran, P.;** Su, C.-H.; Liu, Y.-H.; Chin, T.-M.; Lu, K.-L. "Weak Interactions in Imidazole-Containing Zinc(II)-Based Metal-Organic Frameworks", *J. Chin. Chem. Soc.* **2020**, 67, 2182-2188. (Impact Factor = 1.8; Times Cited = 0).

63. Lee, T.-Y.; Jayakumar, T.; **Thanasekaran, P.;** Lin, K.-C.; Chen, H.-M.; Veerakumar, P.; Sheu, J.-R. "Carbon Dot Nanoparticles Exert Inhibitory Effects on Human Platelets and Reduce Mortality in Mice with Acute Pulmonary Thromboembolism", *Nanomaterials*, **2020**, *10*, 1254-1254. (Impact Factor = 5.3; Times Cited = 2)

62. **Thanasekaran, P.**; Luo, T.-T.; Kao, Y.-C.; Lin, C.-C.; Yang, C.-I.; Lu, K.-L. "Self-Assembly: An Intriguing Relationship Between Structures of Metal Complexes and Shapes of Ancient Chinese Characters", *J. Chin. Chem. Soc.* **2019**, 66, 1027-1030 (Impact Factor = 1.8; Times Cited = 0).

61. Sathish, V.; Murali Krishnan, M.; Velayudham, M.; **Thanasekaran**, **P.;** Lu, K.-L.; Rajagopal, S. "Host-guest Interaction Studies of Polycyclic Aromatic Hydrocarbons (PAHs) in Alkoxy Bridged Binuclear Rhenium (I) Complexes", *Spectrochim Acta A Mol. Biomol. Spectrosc*. **2019**, *222*, 117160 (Impact Factor = 4.098; Times Cited = 01).

60. **Thanasekaran, P.**; Chu, C.-H.; Wang, S.-B.; Chen, K.-Y.; Gao, H. -D.; Lee, M. M.; Sun, S.-S.; Li, J.-P.; Chen, J.-Y.; Chen, J.-K.; Chang, Y.-H.; Lee, H. -M. "Lipid-Wrapped Upconversion Nanoconstruct/Photosensitizer Complex for Near-Infrared Light-Mediated Photodynamic Therapy". *ACS Appl. Mater. Interfaces*, **2019**, *11*, 84-95 (Impact Factor = 9.5; Times Cited = 9).

59. Babu, E.; Bhuvaneswari, J.; Muthumareeswaran, P.; **Thanasekaran, P.**; Lee, H.-M.; Rajagopal, S. "Transition Metal Complexes-based Aptamers as Optical Diagnostic Tools for Disease Proteins". *Coord. Chem. Rev.* **2019,** *380*, 519-549. (Impact Factor = 22.315; Times Cited = 12)

58. Veerakumar, P.; **Thanasekaran, P.;** Subburaj, T.; Lin, K.-C. "A Metal-free Carbon-based Catalyst: An Overview and Directions for Future Research". *C- J. Carbon. Res*. **2018**, *4*, 54; (Impact Factor = 4.1; Times Cited = 11)

57. Ramdass, A.; Sathish, V.; **Thanasekaran, P**. "Utilization of Heavy Metal Complexes As Phosphorogenic Sensors for the Detection of Amino Acids", *Orient. J. Chem.* **2018**, *34*, 1-23. (Impact Factor = 0.5)

56. Veerakumar, P.; Salamalai, K.; **Thanasekaran, P.**; Lin, K.-C. "Simple Preparation of Porous Carbon Supported Ruthenium: Propitious Catalytic Activity in the Reduction of Ferrocyanate(III) and Cationic Dye" *ACS Omega*, **2018,** *3*, 12609-12621. (Impact Factor = 4.1; Times Cited = 12)

55. Babu, E.; Muthu Mareeswaran, P.; Murali Krishnan, M.; Sathish, V; **Thanasekaran, P.**; Rajagopal, S. "Unravelling the Aggregation Induced Emission Enhancement in Tris(4,7-diphenyl-1,10- phenanthroline)ruthenium(II) Complex". *Inorg. Chem. Commun.* **2018,** *98*, 7-10. (Impact Factor = 3.8; Times Cited = 5)

54. Chang, J.-F.; Liang, S.-S.; **Thanasekaran, P.**; Chang, H.-W.; Wen, L.-L.; Chen, C.-H.; Liou, J.-C.; Yeh, J.-C.; Liu, S.-H.; Dai, H.-M.; Lin, W.-N. Translational Medicine in Pulmonary-Renal Crosstalk: Therapeutic Targeting of p-Cresyl Sulfate Triggered Nonspecific ROS and Chemoattractants in Dyspneic Patients with Uremic Lung Injury. *J. Clin. Med.* **2018**, *7*, 266; (Impact Factor = 3.9; Times Cited = 12)

53. Densil, S.; Chang, C.H; Chen, C.L; Mathavan, A.; Ramdass, A.; Sathish, V; **Thanasekaran, P.**; Li, W.S; Rajagopal, S. "Aggregation Induced Emission Enhancement (AIEE) of Anthracene Derived Schiff Base Compounds

and their Applications as Sensor for BSA and Optical Cell Imaging", *Luminescence*, **2018**, *33*, 780-789 (Impact Factor = 2.9; Times Cited = 11)

52. Ramdass, A.; Sathish, V.; Velayudham, M.; **Thanasekaran, P.**; Rajagopal, S. "Phosphorescence "Turn-On" Sensing of Anions by Rhenium(I) Schiff-base Complexes", *ChemistrySelect*, **2018**, 3, 2277-2285 (Impact Factor = 2.1; Times Cited = 8)

51. Veerakumar, P.; Panner Muthuselvam, I.; **Thanasekaran, P.**; Lin, K.-C. "Low-cost Palladium Decorated on m-Aminophenolformaldehyde-Derived Porous Carbon Spheres for the Enhanced Catalytic Reduction of Organic Dyes", *Inorg. Chem. Front.* **2018**, *5*, 354-363 (Impact Factor = 7; Times Cited = 22)

50. Gao, H.-D.; **Thanasekaran, P**.; Chen, T.-h.; Chang, Y.-H.; Chen, Y.-J.; Lee, H.-M. "An Integrated System to Remotely Trigger Intracellular Signal Transduction by Upconversion Nanoparticle Mediated Kinase Photoactivation", *J. Vis. Exp.* **2017**, *126*, e55769 (Impact Factor = 1.2; Times Cited = 01) (**Video Article**).

49. Veerakumar, P.; **Thanasekaran, P**.; Lin, K.-C.; Liu, S.-B. "Well-dispersed Rhenium Nanoparticles on Three-dimensional Carbon Nanostructures: Efficient Catalysts for the Reduction of Aromatic Nitro Compounds", *J. Colloid Interface Sci.* **2017**, *506*, 271-282. (Impact Factor = 9.9; Times Cited = 29)

48. Veerakumar, P.; **Thanasekaran, P**.; Lin, K.-C.; Liu, S.-B. "Biomass Derived Sheet-like Carbon/Palladium Nanocomposite: An Excellent Opportunity for Reduction of Toxic Hexavalent Chromium", *ACS Sustainable Chem. Eng.* **2017**, *5,* 5302-5312 (Impact Factor = 8.198; Times Cited = 47)

47. Ramdass, A.; Sathish, V.; Velayudham, M.; **Thanasekaran, P.**; Umapathy, S.; Rajagopal, S. "Luminescent Sensor for Copper(II) Ion Based on Imine Functionalized Monometallic Rhenium(I) Complexes", *Sens. Actuators B*. **2017**, *240*, 1216-1225 (Impact Factor = 8.4; Times Cited = 15)

46. Sathish, V.; Ramdass, A.; Velayudham, M.; Lu, K.-L.; **Thanasekaran, P**.; Rajagopal, S. "Development of Luminescent Sensors based on Transition Metal Complexes for the Detection of Nitroexplosives", *Dalton Trans.*, **2017**, *46*, 16738-16769 (Impact Factor = 4.0; Times Cited = 35)

45. Veerakumar, P.*; **Thanasekaran, P.***; Lu, K.-L.; Liu, S.-B.; Rajagopal, S*. "Computational Studies of Versatile Heterogeneous Palladium-Catalyzed Suzuki, Heck and Sonogashira Coupling Reactions", *ACS Sustainable Chem. Eng.* **2017***, 5,* 8475-8490 (Impact Factor = 8.4; Times Cited = 34)

44. Veerakumar, P.*; **Thanasekaran, P.**;* Lu, K.-L.; Liu, S.-B.; Rajagopal, S.*Functionalized Silica Matrices and Palladium: A Versatile Heterogeneous Catalyst for Suzuki, Heck and Sonogashira Reactions", *ACS Sustainable Chem. Eng.* **2017**, *5*, 6357-6376 (Impact Factor = 8.4; Times Cited = 89)

43. Ramdass, A.; Sathish, V.; Babu, E.; Velayudham, M.; **Thanasekaran, P.***; Rajagopal, S.* "Recent Developments on Optical and Electrochemical Sensing of Copper(II) Ion Based on Transition Metal Complexes", *Coord. Chem. Rev.* **2017**, *343*, 278-307. (Impact Factor = 22.315; Times Cited = 58)

42. Sathish, V.; Ramdass, A.; Lu, Z.-Z.; Velayudham, M.; **Thanasekaran, P.**; Lu, K. L.; Rajagopal, S. "Sensing of Insulin Fibrillation using Alkoxy-bridged Binuclear Rhenium(I) Complexes", *Inorg. Chem. Commun.* **2016**, *73*, 49-51 (Impact Factor = 3.8; Times Cited = 04)

41. Ramdass, A.; Sathish, V.; Manimaran, Bala.; **Thanasekaran, P.***; Rajagopal, S*. "Synthesis and Photophysical Properties of Rhenium(I)-alkynyl Molecular Rectangles", *Orient. J. Chem*. **2016**, *32*, 1859-1873.

40. Gao, H.-D.; **Thanasekaran, P.**; Chiang, C.-W.; Hong, J.-L.; Liu, Y.-C.; Chang, Y.-H.; Lee, H.-M. "Construction of an Near-Infrared-Activatable Enzyme Platform to Remotely Trigger Intracellular Signal Transduction Using an Upconversion Nanoparticle", *ACS Nano* **2015**, *9*, 7041-7051. (Impact Factor = 17.1; Times Cited = 27)

39. Ramdass, A.; Sathish, V.; Velayudham, M.; **Thanasekaran, P.**; Umapathy, S.; Rajagopal, S. "Synthesis and Characterization of Monometallic Rhenium(I) Complexes and Their Application as Selective Sensor for Copper(II) ion", *RSC Adv*. **2015**, *5*, 38479-38488. (Impact Factor = 4.036; Times Cited = 13)

38. Sathish, V.; Ramdass, A.; **Thanasekaran, P.***; Lu, K.-L.;* Rajagopal, S*. "Aggregation-Induced Phosphorescence Enhancement (AIPE) Based on Transition Metal Complexes - An Overview", *J. Photochem. Photobiol. C: Photochem. Rev*. **2015**, *23*, 25-44. (Impact Factor = 13.6; Times Cited = 71)

37. **Thanasekaran, P.**; Lee, C.-H.; Lu, K.L. "Neutral Discrete Metal-organic Cyclic Architectures: Opportunities for Structural Features and Properties in Confined Spaces", *Coord. Chem. Rev.* **2014**, *280*, 96-175. (Impact Factor = 22.315; Times Cited = 24)
36. Sathish, V.; Babu, E.; Ramdass, A.; Lu, Z.-Z.; Velayudham, M.; **Thanasekaran, P.***; Lu, K.-L.; Rajagopal, S. "Alkoxy Bridged Binuclear Rhenium (I) Complexes as a Potential Sensor for b-Amyloid Aggregation", *Talanta* **2014**, *130*, 274-279. (Impact Factor = 6.1; Times Cited = 34)

35. Lin, S.-M.; Velayudham, M.; Tsai, C.-H.; Chang, C.-H.; Lee, C.-C.; **Thanasekaran, P.**; Lu, K.-L. "A Molecular Triangle as a Precursor Toward the Assembly of a Jar-Shaped Metallasupramolecule", *Organometallics* **2014**, *33*, 40-44. (Impact Factor = 2.8; Times Cited = 9)

34. Sathish, V.; Ramdass, A.; Lu, Z.-Z.; Velayudham, M.; **Thanasekaran, P.***; Lu, K.-L.*; Rajagopal, S*. "Aggregation Induced Emission Enhancement in Alkoxy-Bridged Binuclear Rhenium(I) Complexes – Application as Sensor for Explosives and Interaction with Microheterogeneous Media", *J. Phys. Chem. B*. **2013**, *117*, 14358-14366 (Impact Factor = 3.466; Times Cited = 46)

33. Lin, J. W.; **Thanasekaran, P.**; Chang, J. S.; Wu, J. Y.; Lai, L. L.; Lu, K. L. "Host–Guest Key–Lock Hydrogen-Bonding Interactions: A Rare Case in the Design of a V-Shaped Polycarboxylate Ni(II)-Based Chiral Coordination Polymer", *CrystEngComm*. **2013**, *15*, 9798-9810. (Impact Factor = 3.1; Times Cited = 17)

32. Sathish, V.; Babu, E.; Ramdass, A.; Lu, Z. Z.; Chang, T. T.; Velayudham, M.; **Thanasekaran, P.**; Lu, K. L.; Li, W. S.; Rajagopal, S. "Photoswitchable Alkoxy-Bridged Binuclear Rhenium(I) Complexes–A Potential Probe for Biomolecules and Optical Cell Imaging", *RSC Adv.* **2013**, *3*, 18557-18566. (Impact Factor = 4.036; Times Cited = 34)

31. Ramdass, A; Satish, V.; Velayudham, M.; **Thanasekaran, P.**; Rajagopal, S.; Lu, K. L. "Monometallic Rhenium(I) Complexes as Sensor for Anions", *Inorg. Chem. Commun.* **2013**, *35*, 186-191. (Impact Factor = 3.8; Times Cited = 24)

30. Lee, C. H.; Huang, C. Y.; **Thanasekaran, P.*** "Crystallographic Evidence for the Host-Guest Interaction of Metallamacromolecules", *Orient. J. Chem.* **2013**, *29*, 1257-1266. (*Highlights Review*)

29. **Thanasekaran, P.**; Huang, C.Y.; Lu, K. L. "Synthesis, Structure and Dynamic Behavior of Discrete Metallacyclic Rotors", *Chem. Lett*. **2013**, *42*, 776-784. (*Highlights Review*) (Impact Factor = 1.6; Times Cited = 2)

28. **Thanasekaran, P.**; Liu, C. M.; Cho,J. F.; Lu, K. L. "Melamine-Promoted Crystal Growth of Calcium Oxalate Monohydrate from Calcium Nitrate and Oxalic Acid", *Inorg. Chem. Commun.* **2012**, *17*, 84-87. (Impact Factor = 3.8; Times Cited = 13)

27. **Thanasekaran, P.**; Lee, C. C.; Lu, K. L. "One-step Orthogonal Bonding Approach Towards the Self- Assembly of Neutral Rhenium-Based Metalllacycles: Synthesis, Structures, Photophysics and Sensing Applications", *Acc. Chem. Res*. **2012**, *45*, 1403-1418. (Impact Factor = 18.3; Times Cited = 87)

26. **Thanasekaran, P.**; Luo, T. T.; Wu, J. Y.; Lu, K. L. "Giant Metal−organic Frameworks with Bulky Organic Scaffolds: From Microporous to Mesoporous Functional Materials", *Dalton Trans.* **2012**, *41*, 5437-5453. (*Perspective Article*) (Impact Factor = 4.390; Times Cited = 38)

25. Sathiyendiran, M.; Tsai, C. C.; **Thanasekaran, P.**; Luo, T. T.; Yang, C. I.; Lee, G. H.; Peng, S. M.; Lu, K. L. "Organometallic Calixarenes: Sycee-Like Tetrarhenium(I) Cavitands with Tunable Size, Color, Functionality, and Coin-Slot Complexation", *Chem. Eur. J.* **2011**, *17*, 3343-3346

24. **Thanasekaran, P.**; Luo, T. T.; Lee, C. H.; Lu, K. L. "A Journey in Search of Single-walled Metal-organic Nanotubes", *J. Mater. Chem*. **2011**, *21*, 13140-13149.

23. Bhattacharya, D.; Sathiyendiran, M.; Wu, J. Y.; Chang, C. H.; Huang, S. C.; Zeng, Y. L.; Lin, C. Y.; **Thanasekaran, P.**; Lee, G. H.; Peng, S. M.; Lu, K. L. "Quinonoid-Bridged Chair-Shaped Dirhenium(I) Metallacycles: Synthesis, Characterization and Spectroelectrochemical Studies", *Inorg. Chem*. **2010**, *49*, 10264-10272. (Impact Factor = 4.6; Times Cited = 16)

22. Tseng, Y. H.; Bhattacharya, D.; Lin, S. M.; **Thanasekaran, P.**; Wu, J. Y.; Lee, L. W.; Sathiyendiran, M.; Ho, M. L.; Chung, M. W.; Hsu, K. C.; Chou, P. T.; Lu, K. L. "Highly Emissive Cyclometalated Rhenium Metallacycles: Structure-Luminescence Relationship", *Inorg. Chem*. **2010**, *49*, 6805-6807. (Impact Factor = 4.6; Times Cited = 38)

21. Rajendran, T.; Manimaran, B.; Liao, R. T.; Liu, Y. H.; **Thanasekaran, P.**; Lin, R. J.; Chang, I. J.; Chou, P. T.; Ramaraj, R.; Rajagopal, S.; Lu, K. L. "Luminescence Quenching of Re(I) Molecular Rectangles by Quinones", *Dalton Trans.* **2010**, *39*, 2928-2935. (Impact Factor = 4.0; Times Cited = 17)

20. Yin, J. F.; Bhattacharya, D.; **Thanasekaran, P.**; Hsu, C. P.; Tseng, T. W.; Lu, K. L. "Effect of Ancillary Ligands on The Photophysical Properties of Ru(II) Complexes Bearing a Highly Conjugated Diimine Ligand: A Density Functional Theory Study", *Inorg. Chim. Acta* **2009**, *362,* 5064-5072*.*

19. Wu, J. Y.; Chang, C. H.; **Thanasekaran, P.**; Tsai, C. C.; Tseng, T. W.; Lee, G. H.; Peng, S. M.; Lu, K. L. "Unusual Face-to-Face pi-pi Stacking Interactions Within an Indigo-pillared M_3(tpt)-based Triangular Metalloprism", *Dalton Trans.* **2008**, 6110-6112. (Impact Factor = 4.0; Times Cited = 23)

18. Liao, R. T.; Yang, W. C.; **Thanasekaran, P.**; Tsai, C. C.; Sathiyendiran, M.; Liu, Y. H.; Rajendran, T.; Lin, H. M.; Tseng, T. W.; Lu, K. L. "Rhenium-based Molecular Rectangular Boxes With Large Inner Cavity and High Shape Selectivity Towards Benzene Molecule", *Chem. Commun.* **2008**, 3175-3177. (Impact Factor = 6.222; Times Cited = 31)

17. Wu, J. Y.; **Thanasekaran, P.**; Cheng, Y. W.; Lee, C. C.; Manimaran, B.; Rajendran, T.; Liao, R. T.; Lee, G. H.; Peng, S. M.; Lu, K. L. "Unprecedented Reduction of 2,2'-Bipyrimidine in a One-Pot Synthesis of Neutral Rhenium(I)-Based Molecular Rectangles", *Organometallics* **2008**, *27*, 2141-2144. (Impact Factor = 2.8; Times Cited = 26)

16. **Thanasekaran, P.**; Wu, J. Y.; Manimaran, B.; Rajendran, T.; Chang, I. J.; Rajagopal, S.; Lee, G. H.; Peng, S. M.; Lu, K.-L."Aggregate of Alkoxy-Bridged Re(I)-Rectangles as a Probe for Photoluminescence Quenching", *J. Phys. Chem. A.* **2007**, *111*, 10953-10960.

15. Sathiyendiran, M.; Liao, R.-T.; **Thanasekaran, P.**; Luo, T. T.; Venkataramanan, N. S.; Lee, G. H.; Peng, S. M.; Lu, K. L."Gondola-Shaped Luminescent Tetrarhenium Metallacycles with Crown-Ether-like Multiple Recognition Sites", *Inorg. Chem*. **2006**, *45*, 10052-10054. (Impact Factor = 4.6; Times Cited = 56)

14. Wu, H. C.; **Thanasekaran, P.**; Tsai, C. H.; Wu, J. Y.; Huang, S. M.; Wen, Y. S.; Lu, K. L. "Self-Assembly, Reorganization, and Photophysical Properties of Silver(I)-Schiff-Base Molecular Rectangle and Polymeric Array Species", *Inorg. Chem*. **2006**, *45*, 295-303. (Impact Factor = 4.6; Times Cited = 149)

13. Manimaran, B.; Lai, L. J.; **Thanasekaran, P.**; Wu, J. Y.; Liao, R. T.; Tseng, T. W.; Liu, Y. H.; Lee, G. H.; Peng, S. M.; Lu, K. L. "CH···pi Interaction for Rhenium-Based Rectangles: An Interaction That Is Rarely Designed into a Host-Guest Pair", *Inorg. Chem*. **2006**, *45*, 8070-8077. (Impact Factor = 4.6; Times Cited = 54)

12. Balakumar, S.; **Thanasekaran, P.**; Rajkumar, E.; John Adaikalasamy, K.; Rajagopal, S.; Ramaraj, R.; Rajendran, T.; Manimaran, B.; Lu, K.-L. "Micellar Catalysis on The Electron Transfer Reactions Of Iron(III)- polypyridyl Complexes With Organic Sulfides - Importance of Hydrophobic Interactions", *Org. Biomol. Chem.* **2006**, *4*, 352-358. (Impact Factor = 3.2; Times Cited = 23)

11. **Thanasekaran, P.**; Liao, R. T.; Manimaran, B.; Liu, Y. H.; Chou, P. T.; Rajagopal, S.; Lu, K. L. "Photoluminescence Electron-Transfer Quenching of Rhenium(I) Rectangles with Amines", *J. Phys. Chem. A.* **2006**, *110*, 10683-10689. (Impact Factor = 2.9; Times Cited = 34)

10. **Thanasekaran, P.**; Liao, R. T.; Liu, Y. H.; Rajendran, T.; Rajagopal, S.; Lu, K. L. "Metal-containing Molecular Rectangles: Synthesis and Photophysical Properties", *Coord. Chem. Rev*. **2005**, 249, 1085-1110. (Impact Factor = 22.315; Times Cited = 195)

9. Rajendran, T.; Manimaran, B.; Liao, R. T.; Lin, R. J.; **Thanasekaran, P.**; Lee, G. H.; Peng, S. M.; Liu, Y. H.; Chang, I. J.; Rajagopal, S.; Lu, K. L. "Synthesis and Photophysical Properties of Neutral Luminescent Rhenium-Based Molecular Rectangles", *Inorg. Chem*. **2003**, *42,* 6388-6394. (Impact Factor = 4.6; Times Cited = 82)

8. Manimaran, B.; **Thanasekaran, P.**; Rajendran, T.; Liao, R. T.; Liu, Y. H.; Lee, G. H.; Peng, S. M.; Rajagopal, S.; Lu, K. L. "Self-Assembly of Octarhenium-Based Neutral Luminescent Rectangular Prisms", *Inorg. Chem*. **2003**, *42*, 4795-4797. (Impact Factor = 4.6; Times Cited = 47)

7. Manimaran, B.; **Thanasekaran, P.**; Rajendran, T.; Lin, R. J.; Chang, I. J.; Lee, G. H.; Peng, S. M.; Rajagopal, S.; Lu, K. L. "Luminescence Enhancement Induced by Aggregation of Alkoxy-Bridged Rhenium(I) Molecular Rectangles", *Inorg. Chem*. **2002,** *41*, 5323-5325. (Impact Factor = 4.6; Times Cited = 98)

6. Rajendran, T.; **Thanasekaran, P.**; Rajagopal, S.; Allen Gnanaraj, G.; Srinivasan, C.; Ramamurthy, P.; Venkatachalapathy, B.; Manimaran, B.; Lu, K. L. "Steric Effects in the Photoinduced Electron Transfer Reactions of Ruthenium(II)-polypyridine Complexes With 2,6-Disubstituted Phenolate Ions", *Phys. Chem. Chem. Phys.*, **2001**, *3*, 2063-2069. (Impact Factor = 3.3; Times Cited = 34

5. Thanasekaran, P.; Rajagopal, S.; Srinivasan, C. "Charge Transfer Photochemistry of $Ru(bpz)_3^{2+}$ With Carboxylic Acids and Carboxylate Ions", *J. Photochem. Photobiol. A: Chem* **1999***, 120,* 181-184. (Impact Factor = 4.3; Times Cited = 3)

4. Thanasekaran, P.; Rajagopal, S.; Srinivasan, C. "Photoredox Reactions of Tris(2,2'-bipyrazine)-, Tris(2,2'-bipyrimidine)- and Tris(2,3-bis[2-pyridyl]pyrazine)-ruthenium(II) Cations With Phenolate Ions In Aqueous Acetonitrile", *J. Chem. Soc., Faraday Trans.* **1998**, *94*, 3339-3344. (Impact Factor = 3.430; Times Cited = 17)

3. Thanasekaran, P.; Rajendran, T.; Rajagopal, S.; Srinivasan, C.; Ramaraj, R.; Ramamurthy, P.; Venkatachalapathy, B. "Marcus Inverted Region in the Photoinduced Electron Transfer Reactions of Ruthenium(II)-Polypyridine Complexes With Phenolate Ions", *J. Phys. Chem. A*. **1997**, *101*, 8195-8199. (Impact Factor = 2.9; Times Cited = 55)

2. Thanasekaran, P.; Rajagopal, S.; Ramaraj, R. Srinivasan, C. "Photosensitized Redox Reactions of Organic Sulphides With Tris-(2,2'-bipyrazine)ruthenium(II) Cation", *Rad. Phys. Chem.* **1997***, 49,* 103-106. (Impact Factor = 2.9; Times Cited = 6)

1. Balakumar, S.; Thanasekaran, P.; Rajagopal, S.; Ramaraj, R. "Electron Transfer Reactions of Iron (III)- polypyridyl Complexes With Organic Sulphides", *Tetrahedron*, **1995**, *51,* 4801-4818. (Impact Factor = 2.1; Times Cited = 30)

Book chapters and Monographs:

1. Velayudham, M.; **Thanasekaran, P.**, *Photophysics of Supramolecular Architectures*, P. Muthu Mareeswaran, P. Suresh and S. Rajagopal (Eds.) Rhenium(I)-Based Metallacycles for Sensing Applications, Bentham Science Publishers, **2022**, pages 137-180.

2. Ramdass, A.; Sathish, V.; Velayudham, M.; Rajagopal, S.; Lu, K.-L.; **Thanasekaran, P. "**Encyclopedia of Nanoscience and Nanotechnology: Structural Topologies and Properties of Neutral Discrete Organic Macromolecules", Dr. Hari Singh Nalwa (Ed), Vol. 30, American Scientific Publishers, USA, **2018**, pages 87– 140.

3. **Thanasekaran, P.** Monograph on "Rhenium(I) Complexes as Potential Sensors for Biomolecules", *Verlag/Publisher:* Scholars' Press, OmniScriptum GmbH & Co. KG, Saarbrucken, Deutchland/Germany, **2017**.

4. **Thanasekaran, P.**; Gao, H.-D.; Lee, H.-M. "Phosphors, Up conversion Nano Particles, Quantum Dots and their Applications: *Upconversion Nanoparticle as a Platform for Photoactivation*", **Liu**, Ru-Shi (Ed.) Vol.2, Springer Science+Business Media, Singapore, Chapter 29, **2016**, Pages 391-418.

5. **Thanasekaran, P.** Monograph on "Supramoleculear Chemistry: Rhenium(I) Metallacyclic Compounds", *Verlag/Publisher: LAP LAMBERT Academic Publishing*, Saarbrucken, Deutchland/Germany, **2014**.

6. Rajkumar, E.; **Thanasekaran, P.**; Swarnalatha, K.; Rajendran, T.; Helen Ratna Monica, J.; Rajagopal**,** S. "*Photo/Electrochemistry & Photobiology in the Environment, Energy and Fuel*: A biomimetic model of the electron transfer in photosystem II – Photoinduced electron transfer reactions of ruthenium (II)-polypyridine complexes with phenols", Satoshi Kaneco, Satoshi Kaneco (Eds.) Research Signpost 37/661 (2), Fort P.O., Trivandrum-695 023, Kerala, India, **2006**, Pages, 169–206.

Patent:

1. Lu, K. L.; Manimaran, Bala.; Rajendran, T.; Lee, G. H.; Peng, S. M.; Liao, R. T.; **Thanasekaran, P**. "Prismatic Supramolecules", United States Patent, Patent No. US 6,852,249 B2, February 8, **2005**.

Teaching Responsibilities

2022 – present	CHEM 313 Equilibrium Chemical Thermodynamics CHEM 414 Chemical Reactions and Energetics CHEM 420 Physical Chemistry Practical CHEM 421 Reaction Kinetics and Mechanism
2021 - present	CHEM 324 Kinetic Theory of Gases and Chemical Kinetics

Conferences (Invited Talk/Attended) (since 2022):

18. Participated ACS Science Talks on Biosensing with Arrayed Deep Cavitand Hosts organized by the American Chemical Society via ONLINE mode, 20 March 2025.

17. Invited talk on “Metal-based Aggregation-Induced Emission”, in the International Conference on Advanced Materials and Their Applications (ICAMA 2024) organized by PG & Research Department of Chemistry, V. O. Chidambaram College, Thoothukudi 628 008, Tamil Nadu, December 27, 2024.

16. Attended Royal Society of Chemistry (RSC) Desktop Seminar: Porous Materials via Online Mode London, UK, Jan 26, 2024.

15. A. Yadav, T.-C. Huang, Y.-H. He, H.-J. Lei, M. Karthick, C. R. Ramanathan, J.-Y. Wu, P. Thanasekaran, Highly Sensitive and Selective Luminescent Sensing Behavior of Sr(II)-Based Metal-Organic Framework Towards Fe^{3+} and Cr^{3+} Ions (PP-41), National Conference on Current Trends in Chemical Sciences, School of Chemistry, Madurai Kamaraj University, February 21-23, 2024.

14. A. Yadav, T.-C. Huang, Y.-H. He, H.-J. Lei, M. Karthick, C. R. Ramanathan, J.-Y. Wu, P. Thanasekaran, Luminescent Sr(II)-Based Metal-Organic Frameworks for Selective Detection of Toxic and Highly Oxidizing $Cr_2O_7^{2-}$ Anion” (P27), An International Conference on “Emerging Trends in Photodynamics and Photochemistry”, Indian Institute of Science Education and Research (IISER), Mohali, March 26-28, 2024.

13. Attended the American Chemical Society (ACS) Science Talks on “Acceptor Caged Phosphine Ligands: Exploration of Novel Catalytic Reactivity and Mechanism” via Online Mode, American Chemical Society, May 27, 2024.

12. A. Ramdoss, V. Sathish, P. Thanasekaran, “Luminescent Nanoaggregates of Tetrarhenium(I) Metallacycles with Their Application As Sensor for Antibiotics”, Proceedings of the International Seminar on “Advanced Materials and Their Applications (ISAMA 2023)”, Department of Chemistry, Aditanar College, Tiruchendur, Tamilnadu, Jan. 25, 2023.

11. Invited talk on “Aggregation-Induced Emission Characteristics of Metal Complexes”, Refresher Course in Chemistry UGC-HRDC, Pondicherry University. July 5-18, 2023.

10. Attended the International Conference on “Molecularly designed functional materials 2023 (MDFM 23)”, S & T Digital, September 28-30, 2023.

9. Attended Dalton Transactions: Outstanding Paper 2022 via Online Mode, Sep 20, 2023.

8. Invited talk on “Host-Guest Chemistry of Rhenium(I) Supramolecules”, UGC–Sponsored Refresher Course in Chemistry entitled, "Functional Materials for Energy, Environment and Biomedical Applications", Department of Materials Science, Madurai Kamaraj University, Tamil Nadu, October 14, 2023.

7. Attended the Online “NEP Orientation & Sensitization Program, Malaviya Mission Teacher Training Programme (MMTTP) of UGC”, UGC-MMTTP, Pondicherry University, November 15-28, 2023.

6. Attended the “2023 5th International Conference on Soft Computing and its Engineering Applications (icSoft Comp 2023)”, Smt. Chandaben Mohanbhai Patel Institute of Computer Applications, Charotar University of Science and Technology (CHARUSAT), Changa, India, December 07-09, 2023.

5. Attended the “Virtual Short Term Training Programme, Chemistry from computational tools for beginners (CCTB-2022)”, Sardar Vallabhbhai Patel National Institute of Technology (SVNIT), Gujarat, India, March 1-5, 2022.

4. Attended the Virtual Workshop on “Trends and Application of GC-MS (TAG – 2022)”, Department of Chemistry, Sathyabama Institute of Science and Technology, July 11–16, 2022.

3. Invited talk on “Rhenium-based Supramolecules”, PG & Research Department of Chemistry, Golden Jubilee Webinar Series -2022, Event II, V. O. Chidambaram College, Thoothukudi 628 008, Tamil Nadu, July 27, 2022.

2. Invited talk on “Sensing Applications of Rhenium(I) Complexes”, Refresher Course in Chemistry, UGC-HRDC – Bharathiar University, October 15, 2022.

1. Participated at the International Conference on Futuristic Materials in Science and Technology (ICFMST-2022) via Virtual Mode, CHIEF GUEST, Department of Chemistry, Bannari Amman Institute of Technology, Sathyamangalam, Tamilnadu, December 21, 2022.

Number of Ph.D candidates supervising: **3**

1. Anurag Yadav (3rd year)
2. Silu Nayak (1st year)
3. Swathi, G (1st year)

Number of M.Sc project students completed: **7**

Institutional responsibilities:

1. **Member of Board of Studies** – School of Education, Pondicherry University.
2. **Co-ordinator** - PhD Entrance Examination conducted by Pondicherry University in 2024.
3. **Nodal Officer** – Industry-Academic Relationship Promotion Cell, Pondicherry University.

Foreign collaboration:

1. Prof. Jing-Yun Wu, Department of Applied Chemistry, National Chi Nan University, Taiwan though Memorandum of Understanding (MoU) between Pondicherry University and National Chi Nan University, Taiwan from 2024 to 2027.
2. Prof. Chengkuo Lee, Center for Intelligent Sensors and MEMS, National University of Singapore, Singapore 117608, Singapore.
3. Prof. Majdi Hochlaf, Distinguished Professor of Molecular Physics and of Physical and Theoretical Chemistry, Department of Chemistry, Universite Gustave Eiffel, France.

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