

Curriculum Vitae

Dr. Palani ELUMALAI

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Objectives

I am interested in applying for an **Editor/Editorial Board/Reviewer**. I believe such an opportunity would provide me with the world class research experience that I am seeking to further develop the skills. This position appeals to me because of my strong interest and vast experience in synthetic organic, organometallic, bioinorganic/coordination compounds and interlocked and non-interlocked supramolecular self-assemblies, MOFs and modern analytical techniques.

Professional Experience and Education

2014 – Present	National Research Foundation Fellow of Korea Department of Chemistry & Biology, University of Ulsan, Ulsan, South Korea
2013 – 2014	Post-Doctoral Fellow (Advisor: <i>Prof. Ki-Whan Chi</i>) Department of Chemistry & Biology, University of Ulsan, Ulsan, South Korea
2012 – 2013	Post-doctoral Research Associate (Advisor: <i>Prof. M. Sathiyendiran</i>) Department of Chemistry, University of Delhi, New Delhi, India
2007 – 2012	Ph.D. , Synthetic Organometallic Chemistry (Advisor: <i>Prof. Natesan Thirupathi</i>) Department of Chemistry, University of Delhi, New Delhi, India
2005 – 2007	M.S. , Chemical Sciences (Advisor: <i>Prof. Ram. Murugesan</i>) School of Chemistry, Madurai Kamaraj University, Tamil Nadu, India
2001 – 2005	B.S. , Chemistry, Honors AAGA-College, University of Madras, India

Research Experience

Dec. 2014 – Present	National Research Foundation Fellow of Korea (NRF-Fellow) University of Ulsan, Ulsan, South Korea <i>“Functionalized supramolecular arene-Ruthenium and Iridium based non-trivial interlocked organic/metal based self-assemblies: and their applications in materials and biomedicines”</i> Design, synthesis, stability and solution, solid state characterization of all newly synthesised organic and metal-based self-assemblies via NMR, IR spectroscopy, HR-ESI-MS, single crystal X-ray diffraction (SC-XRD), UV-visible and micro-analytical techniques. Newly synthesised supramolecular self-assemblies will be studied their anti-cancer studies via cytotoxic, cellular uptake, DNA-binding and other methods. Metal-organic frameworks (MOFs) also will utilise for the gas-adsorption, gas-storage and as a sensing materials.
Nov. 2013 – Dec.2014	Post-doctoral Research Fellow (Brain Korean Fellow-BK-21, Korea) University of Ulsan, Ulsan, South Korea <i>“Bio-supramolecular and self-assemblies of arene-ruthenium(II) based interlocked and non-interlocked metalla drugs synthesis and their studies on bio-medicinal and materials properties”</i> Synthesis, characterisation and applications towards finding the potential anti-tumour properties via cytotoxicity studies, cellular-uptake and DNA binding studies. Also studied their host-guest, template effect and sensing properties of Ru, Rh, Ir and Pt metalla supramolecular self-assemblies.

June 2012 – Nov. 2013 **Postdoctoral Research Associate** (CSIR-RA, INDIA)
University of Delhi, New Delhi, India

Supramolecular self-assemblies of photo-active fac-Re(CO)₃-core self-assemblies with N-, P- and P=O donor ligands and their structural and materials studies

Rational design and synthesis of biologically important bio-organometallics and supramolecular compounds of fac-Re(CO)₃, organometallic arene-Ru(II) metal based metallo-macrocycles with nitrogen, phosphine and phosphine oxide (P=O) donors as ligands: Studied their photo-physical and chemical properties.

Aug. 2007 – May. 2012 **Doctoral Research (PH.D.)** in Synthetic Organometallic Chemistry
University of Delhi, New Delhi, India

"Palladium(II) and Platinum(II) Complexes of sym. N,N',N''-Triarylguanidines: Efforts Directed Towards the Understanding of Mechanistic Aspects of C-H Activation Process"

Thesis work was focused on synthesis, characterization and understanding the mechanism aspects of C-H and C-C activation processes in Synthetic Bio-Organometallic and Coordination Chemistry of Palladium(II) and Platinum(II) metals with biologically important Guanidine backbone.

A significant success was achieved in our objective of the synthesis of various Platinum(II) and Palladium(II) organometallic/coordination complexes, which are known to be as a catalysts, materials in several applications and biological and pharmaceutical field.

Mar. 2006 – June 2007 **Master's (M.S.)** Dissertation
Madurai Kamaraj University, Madurai, India

"Improvisation of Anthraquinones as Photodynamic Therapeutic Agents: A Molecular Modelling Approach"

Series of anthraquinone based photodynamic therapeutic agents was screened by optimisation and energy calculation studies by molecular modelling approaches and verified the theoretically calculated optimised data with experimentally performed results.

Awards and Recognition

2013 – Present	Reviewer of Peer-Reviewed Journals: <i>Journal of American Chemical Society, Scientific Reports (Nature Publications), Inorganic Chemistry, Organometallics, Chemical Sciences, Chemical Communication, Dalton Transaction, Biomacromolecules and Molecules.</i>
2014 – 2017	National Research Foundation Fellow of Korea (<i>NRF-Fellow of Korea</i>)
2014 – 2015	Post-doctoral Senior Research Fellow (<i>ESHRC-Fellow</i>)
2013 – 2014	Post-doctoral Fellow (<i>Korean BK-21-Fellow</i>)
2012 – 2013	Research Associate (<i>CSIR-India</i>)
2008 – 2012	University Research Fellowship (<i>USIC-DU, INDIA</i>)

Research Grants Authored

- 2014-2017 **Prepared Individual Basic Science & Engineering Research Program Project Grant** entitled *"Functionalized Supramolecular Self-assemblies of Metallaladderanes: Synthesis, Characterization and Their Applications in Materials and Biomedicines"*
Granted by National Research Foundation of Korea (Project worth 154,500,000/- SKW)
- Assisted in the preparation of several research proposal for the National and International Grants in the area of Supramolecular Self-assemblies and Bio-organometallic Compounds: Synthetic Methodologies and Their Application Studies

Research Interest

- Synthesis of Supramolecular Self-assembled interlocked Organic/Metallacycles (*Catenane, Trefoil Knot, Solomon Link, Borromean rings, Coordination Cages and Cubes*) and non-interlocked (*Metalla-Cage, Cubes, Rectangles, Squares*) (for energy harvest-storage, soft-materials, gas adsorption and storage materials and bio-materials).
- Synthetic Organometallic, Bioinorganic/Coordination Chemistry (*C-H, C-C activation, Catalysis Studies and biomedicine applications such as anti-cancer, cytotoxicity, cellular uptake, protein and DNA-binding studies*)
- Covalent and Non-covalent Bonded Organic and Metal Organic Frameworks (MOFs) (*Recognition, gas storage, gas adsorption, sensing materials and catalysis studies*).
- Bio-materials properties, Anti-tumor, Protein, DNA-bindings, Cellular-uptake and Imaging Studies.
- Host-Guest, Molecular Recognition, and CO-releasing properties (*Photo-CORMs*).

Experimental Skills:

- Highly commendable knowledge/experienced in the designing of new problems to synthesis of suitable organic molecules/ligands and their corresponding organometallic, bioinorganic, coordination complexes, metallo-supramolecular self-assemblies and biologically active metalla-drugs.
- Highly commendable experience in the design and synthesis of non-trivial structures of interlocked supramolecular self-assemblies such as single interlocked *Catenane*, double interlocked *Solomon Knot* and triply interlocked *Borromean rings* and Metal Organic-frame Works (MOFs).
- Vast experience in multi-step organic, inorganic, organometallic and supramolecular self-assemblies synthesis. Excellent knowledge in purification and characterization of organic, inorganic and organometallic metalla-biosupramolecular self-assemblies using crystallization, column chromatography and other techniques.
- Vast experience to carry out in High Pressure and Air Sensitive reactions using Schlenk line techniques and expertise in handling various chemicals, performing moisture sensitive/ $-78\text{ }^{\circ}\text{C}$ temperature reactions. Also expert in high-pressure synthetic methods such as solvo-, hydro-thermal methods and solid state synthesis.
- Excellent experience in the applications studies towards finding high potential anti-cancer drugs and imaging agents, photo-CORM molecules via cytotoxicity, cellular uptake, DNA-binding and CO-releasing properties. Also application studies on homogeneous catalysis, bio-sensor and host-gest studies.
- Excellent experience analysing potential for newly synthesised compounds by various techniques such as IR, NMR (^1H , ^{13}C , ^{19}F , ^{31}P and ^{195}Pt), 2D-NMRs (COSY, DOSY, HMQC, ROESY, NOE and DEPT), UV-visible, fluorescence spectroscopic, ESI-MS spectrometry, elemental analysis methods, TGA, DTA and single crystal X-ray diffraction.
- Excellent analysis and writing skills related synthetic methodologies, and bio-materials applications for manuscripts, projects to high quality journals, project grants and fellowships, respectively.

Technical Skills:

- Excellent experiences in handling JEOL-400 MHz NMR instrument.
- Excellent experiences in handling Bruker Avance 300 MHz NMR instrument.
- Good experiences in handling *CrysAlis PRO (Oxford Diffraction 2006)* single crystal X-ray diffraction.
- Expert handling experience of *Analysensysteme GmbH VarioEL V3.00*, Elemental Analyser (CHNSO).
- Good experience in handling UV-visible and Fluorescence spectrometer.
- Good experience in handling ESI-MS mass, FT-IR, TGA and DTA instruments.
- Other techniques • Use of Schlenk Line Distillation • Column chromatography • Crystallization techniques.
- Expert in modern computers with *Microsoft* and *Macintosh* OS.
- Expert in Single Crystal X-ray diffraction software such as *Diamond 3.3*, *Olex2.1*, *Mercury 3.3*, *Wingx-Shelx-97*, *Origin 8*, *Chemdraw 12*, and many other chemistry, scientific and non-scientific software.

Analysis Skills

- • Single Crystal X-ray Diffraction (SCXRD) • ^1H , ^{13}C , ^{19}F , ^{31}P , ^{195}Pt 1D-Nuclear Magnetic Resonance Spectroscopy (1D-NMR) and 2D-NMRs COSY, ROESY, NOESY, DEPT, HMQC, HMBC, HETCORE and DOSY • Infrared spectroscopy (FT-IR) • UV-Visible spectroscopy • Fluorescence spectroscopy • Differential Scanning Calorimetry (DSC) • Thermal Gravimetric Analysis (TGA) • High Resolution Electrospray Ionization Mass spectrometry (HR-ESI-MS).
- **In addition to these synthetic skills, I have good knowledge to solve the single crystal X-ray structures of organic, inorganic, organometallic, coordination complexes and supramolecular self-assemblies, and have solved good number of crystal structures up to the publication standard.**

List of Publications: 19 (Perrier Reviewed, No. of citations: 154; h-index: 9; i10-index: 8 dated on 16-Mar-2016)

- [1]. **Elumalai, P.**; Jeong, Y. J.; Park, D. W.; Kim, D-W.; Kim, H.; Kang, S. C.; Chi, K-W.; "Antitumor and biological investigation of doubly cyclometalated ruthenium(II) organometallics derived from benzimidazolyl derivatives". *Dalton Trans.*, **2016**, DOI: [10.1039/C5DT04400F](https://doi.org/10.1039/C5DT04400F) (article in press).
<http://pubs.rsc.org/en/content/articlelanding/2016/dt/c5dt04400f#!divAbstract>
- [2]. **#Lee, H.-W.**; **#Elumalai, P.**; Singh, N.; Kim, H.; Lee, S. U.; Chi, K-W.; "Selective Synthesis of Ruthenium(II) Metalla[2]Catenane via Solvent and Guest-Dependent Self-Assembly". *J. Am. Chem. Soc.*, **2015**, *137*, 4674-4677. (**#these authors contributed equally**)
<http://pubs.acs.org/doi/abs/10.1021/jacs.5b02573>
- [3]. **Elumalai, P.**; Kanagaraj, R.; Marimuthu, R.; Shankar, B.; Kalita, A. C.; Sathiyendiran, M. "Rhenium(I)-based Bridgeless Double Metallocalix[4]arenes". *Dalton Trans.*, **2015**, *44*, 11274-11277.
<http://pubs.rsc.org/en/content/articlepdf/2015/dt/c5dt00841g?page=search>
- [4]. Shankar, B.; **Elumalai, P.**; Sathiyashivan, S. D.; Sathiyendiran, M. "Spheroid metallocavitands with eight calixarene-shaped receptors on surface". *Inorg. Chem.* **2014**, *53*, 10018-10020.
<http://pubs.acs.org/doi/pdf/10.1021/ic5014895>
- [5]. Shankar, B.; Sahu, S.; Deibel, N.; Schweinfurth, D.; Sarkar, B.; **Elumalai, P.**; Sathiyendiran, M. "Luminescent Dirhenium(I)-Double-Heterostranded Helicate and Mesocate". *Inorg. Chem.* **2014**, *53*, 922-930.
<http://pubs.acs.org/doi/pdf/10.1021/ic4023135>
- [6]. Shankar, B.; **Elumalai, P.**; Shanmugam, R.; Sathiyendiran, M. "Neutral heteroleptic rhenium-based M₃L₃L' type metallacycles: Synthesis, structural characterization and DFT/TDFT studies". *J. Organomet. Chem.* **2014**, *749*, 224-232.
<http://www.sciencedirect.com/science/article/pii/S0022328X13006967>
- [7]. Gupta, D.; Shankar, B.; **Elumalai, P.**; Shanmugam, R.; Mobin, S. M.; Weisser, F.; Sarkar, B.; Sathiyendiran, M. "Synthesis and characterization of a tetrametallic coordination complex of tetrahydroxy-p-benzoquinone". *J. Organomet. Chem.* **2014**, *754*, 59-62.
<http://www.sciencedirect.com/science/article/pii/S0022328X13008978>
- [8]. **Elumalai, P.**; Thirupathi, N.; Nethaji, M. "The Dual Role of Acetate as a Nucleophile and as an Internal Base in Cycloplatination Reaction of *sym N,N',N''*-Triarylguanidines". *Inorg. Chem.* **2013**, *52*, 1883-1894.
<http://pubs.acs.org/doi/pdf/10.1021/ic302058u>
- [9]. **Elumalai, P.**; Rajakannu, P.; Hussain, F.; Sathiyendiran, M. "Design Strategy for Arranging an Aromatic Cyclic Trimer into a Tripodal Molecule". *RSC Adv.* **2013**, *3*, 2171-2173.
<http://pubs.rsc.org/en/content/articlelanding/2013/ra/c2ra22679k/unauth#!divAbstract>
- [10]. Shankar, B.; **Elumalai, P.**; Shanmugam, R.; Singh, V.; Masram, D. T.; Sathiyendiran, M. "New class of supramolecular coordination complexes based on neutral oxygen donor bridging ligands". *Inorg. Chem.* **2013**, *52*, 10217-10219.
<http://pubs.acs.org/doi/pdf/10.1021/ic401257w>
- [11]. Rajakannu, P.; **Elumalai, P.**; Shankar, B.; Hussain, F.; Sathiyendiran, M. "Rhenium(I) based metallocalix[4]arenes decorated with free functionalized benzimidazolyl unit". *Dalton Trans.* **2013**, *42*, 11259-11362.
<http://pubs.rsc.org/en/content/articlepdf/2013/dt/c3dt51096d?page=search>
- [12]. Rajakannu, P.; **Elumalai, P.**; Hussain, F.; Sathiyendiran, M. "Rhenium-based Bicyclic Supramolecule with Calixarene-shaped Bowls". *J. Organomet. Chem.* **2013**, *725*, 1-4.
<http://www.sciencedirect.com/science/article/pii/S0022328X12006961>

- [13]. **Elumalai, P.**; Thirupathi, N.; Netaji, M. "Six-membered [C,N] cyclopalladated sym N,N',N"-tri(4-tolyl)guanidines: Synthesis, reactivity studies and structural aspects".
J. Organomet. Chem. **2013**, 741-742, 141-147.
<http://www.sciencedirect.com/science/article/pii/S0022328X13004178>
- [14]. Shankar, B.; **Elumalai, P.**; Hussain, F.; Sathiyendiran, M. "Synthesis and Characterization of Tetragonal Prismatic π -stacked Metallacycles".
J. Organomet. Chem. **2013**, 732, 130-136.
<http://www.sciencedirect.com/science/article/pii/S0022328X1300154X>
- [15]. Kanchithalaivan, S.; Sivakumar, S.; Ranjith Kumar, R. **Elumalai, P.** "Four-component domino Strategy for the Combinatorial Synthesis of novel 1,4-dihydropyrano[2,3-c]pyrazol-6-amines".
ACS, Comb. Sci., **2013**, 15, 631-638.
<http://pubs.acs.org/doi/pdf/10.1021/co4000997>
- [16]. Manoharan, S.; Ramkumar, S.; **Elumalai, P.**; Anandan, S. "One-pot synthesis of metal free organic dyes containing different acceptor moieties for fabrication of dye sensitized solar cells".
Tetrahedron Lett. **2013**, 54, 3132-3136.
<http://www.sciencedirect.com/science/article/pii/S0040403913005765>
- [17]. Rajakannu, P.; **Elumalai, P.**; Mobin, S. M.; Sathiyendiran, M. "Hard and Soft-Donor Decorated Rhenium Based Calx[4]arene-Shaped Metallomacrocycles".
J. Organomet. Chem. **2013**, 743, 17-23.
<http://www.sciencedirect.com/science/article/pii/S0022328X13004531>
- [18]. Shankar, B.; **Elumalai, P.**; Jackmil, P. J.; Pramod, K.; Singh, S.; Sathiyendiran, M. "Synthesis of rhenium-based M_2LL' -type supramolecular coordination complexes from flexible ligands".
J. Organomet. Chem. **2013**, 743, 109-113.
<http://www.sciencedirect.com/science/article/pii/S0022328X13004828>
- [19]. Shankar, B.; **Elumalai, P.**; Sathiyendiran, M. "Synthesis of a polynuclear complex possessing four spatially arranged rhenium units".
Inorg. Chem. Commun. **2013**, 36, 109-112.
<http://www.sciencedirect.com/science/article/pii/S1387700313003377>

List of Publications (*Submitted and Under Preparations* (Selected))

- [20]. Sivalingam, Y.; **Elumalai, P.**; Yuvaraj, S. V. J.; Magna, G.; Sowmya, V. J.; Martinelli, E.; Paolesse, R.; Natale, C. D.; Chi, K.-W.; Kawazoe, Y.; Natale, C. D. "Interaction of VOCs with Pyrene Tetratopic Ligands Layered on ZnO Nanorods Under Visible Light"
J. Photochem. Photobiol. A: Chem., **2016** (*Revision Submitted*)
- [21]. **Elumalai, P.**; Chi, K.-W.; "Self-assemblies with Ruthenium Metal and their Anti-cancer Potential".
Dalton Trans., **2016** (*Invited Review*) and (*Manuscript under Preparation*)
- [22]. **Elumalai, P.**; Kim, D-H.; Lee, J.; Chi, K.-W.; "One-Spot Synthesis of Interlocked Metalla-[2]Catenanes and Non-Catenanes: Synthesis, Structural and Biomaterials Aspects".
Angew. Chem. **2016** (*Manuscript under Preparation*).
- [23]. **Elumalai, P.**; Kaushik, N.; Kim, D-H.; Kaushik, N. K.; Chi, K.-W.; "Targeting glioma-like stem cells for glioblastoma treatment with potent self-assembled tetranuclear ruthenium (II) metalla-chairs".
J. Am. Chem. Soc., **2016** (*Manuscript under Preparation*).
- [24]. **Elumalai, P.**; Nethaji, M.; Thirupathi, N. "Preparation, Structural Characterization and Catalytic Utility of $trans-[X_2Pd(LH_2^{2,5\text{-xylyl}})_2]$ (X = Cl and OC(O)R; R = Me, ^tBu and Ph) in Heck-Mizoroki Coupling Reaction".
(*Manuscript under Preparation*).

Presentations in Conferences

- [1]. Interlocked and Non-Interlocked Supramolecular Coordination-Driven Self-Assemblies, “*The 116th General Meeting of the Korean Chemical Society*” (**116th-KCS-2015**), Oct 14–16, **2015**, EXCO in Daegu, South Korea. (poster)
- [2]. Rational Design and Synthesis of Functionalized Ruthenium(II) Organometallics, “*The 116th General Meeting of the Korean Chemical Society*” (**116th-KCS-2015**), Oct 14–16, **2015**, EXCO in Daegu, South Korea. (poster)
- [3]. Supramolecular Self-assembled arene-Ruthenium(II) Metalla-Chairs, “*The 45th World Chemistry Congress*” (**45th-IUPAC-2015**), August 09–14, **2015**, BEXCO in Busan, South Korea. (poster)
- [4]. Ruthenium(II) Supramolecular Self-assembled Metalla-[2]Catenane and Non-catenanes, *The 45th World Chemistry Congress*” (**45th-IUPAC-2015**), August 09–14, **2015**, BEXCO in Busan, South Korea. (poster)
- [5]. Ruthenium(II) Supramolecular Self-assembled Metalla-Chairs, “*The XXI EuCheMS International conference on Organometallic Chemistry*” (**XXI-EuCOMC-2015**), July 05–09, **2015**, Department of Chemistry, Comenius University in Bratislava, **Slovakia**. (poster)
- [6]. Organometallic Ruthenium(II) Supramolecular Self-assemblies of Dipyridyl-Diimine based N,N-donor, “*The 115th General Meeting of the Korean Chemical Society*” (**115th-KCS-2015**), April 15–17, **2015**, KINTEX in Goyang, South Korea. (poster)
- [7]. Ruthenium(II) Supramolecular Self-assemblies of Rigid Dipyridyl Based Diimides: Synthesis and Structural Aspects, “*The 115th General Meeting of the Korean Chemical Society*” (**115th-KCS-2015**), April 15–17, **2015**, KINTEX in Goyang, South Korea. (poster)
- [8]. Investigation on Interaction of VOCs with Pyrene Based Tetratopic Ligand, “*The 9th General Meeting of Asian Consortium on Computational Materials Science-Virtual Organization*” (**ACCMS-VOM9-2014**), Dec 20–22, **2014**, Okinawa Institute of S&T. (OIST), Okinawa, **JAPAN**. (poster)
- [9]. Rational Design and Synthesis of Organometallic Ruthenium(II) Supramolecular Self-assemblies of Flexible Naphthalene Diimide, “*The 114th General Meeting of the Korean Chemical Society*” (**114th-KCS-2014**), Oct 15–17, **2014**, Kimdaejung Convention Center, in Gwangju, **South Korea**. (poster)
- [10]. Flexible Pyromellitic Diimide Scaffold Organometallic arene-Ruthenium(II) Supramolecular Self-assemblies, “*The 114th General Meeting of the Korean Chemical Society*” (**114th-KCS-2014**), Oct 15–17, **2014**, Kimdaejung Convention Center, in Gwangju, South Korea. (poster)
- [11]. Design, Synthesis and Characterization of Doubly Cyclometallated Benzimidazole Based Ruthinacycles”, poster presented in “*2014th Joined Seminar of Fukuoka Univ. and Univ. of Ulsan*” (**JSFU-2014**), Aug. 18–21, **2014**, Department of Chemistry in University of Ulsan, South Korea. (poster)
- [12]. Doubly Cyclometallation of Ru(II), Rh(III) and Ir(III) Organometallic Complexes and Their Supramolecular Self-assemblies, “*The 113th General Meeting of the Korean Chemical Society*” (**113th-KCS-2014**), April 16–18, **2014**, KINTEX in Goyang, South Korea. (poster)
- [13]. New class of phosphine oxide donor-based Re(I)-complexes from an in situ phosphine oxidation, “*16th CRSI National Symposium in Chemistry*” (**16th CRSI-2014**), Feb. 07–09, **2014**, Department of Chemistry, Indian Institute of Bombay (IITB), Mumbai. (poster)
- [14]. Neutral Bridgeless Double Metallocalix[4]arenes, “*50th Annual Convention of Chemists*” (**50th-ACC-2013**), December 04–07, **2013**, Department of Chemistry & Center for Advanced Studies in Chemistry, Punjab University, Chandigarh. (poster)
- [15]. Luminescent Re(I)-based Helicate and Mesocate, “*Modern Trends in Inorganic Chemistry*” (**MTIC-XV-2013**), December 13–16, **2013**, Department of Chemistry, Indian Institute of Roorkee, IIT-Roorkee. (poster)
- [16]. Phosphine oxide based supramolecular complexes from phosphine donor, “*9th International School of Organometallic Chemistry*” (**9th-ISOC-2013**) Aug. 30– Sept-03, **2013** in University of Camerino, **ITALY**. (poster)
- [17]. Ruthenium(I)-based supramolecules possessing calixarene-shaped bowls from flexible bifunctional tritopic ligand, “*New Directions in Chemical Sciences: A Symposium*” (**NDCS-2012**), December 7–9, **2012**, Department of Chemistry, Indian Institute of Technology Delhi (IIT-Delhi), New Delhi. (poster)
- [18]. Participated in International Symposium on “*3rd Asian Conference on Coordination Chemistry*” (**ACCC-2011**), India Habitat Centre, New Delhi, India, October 17–20, **2011**, Organised by IIT-Kanpur and IIT-Delhi, New Delhi.

- [19]. A Rational Design of *Sym N,N',N''*-Tris(2,5-xylyl)guanidine that Avoids Cyclopalladation: Synthesis, and Structural Characterization of *trans*-[X₂Pd(LH₂^{2,5-xylyl})₂] (X = Cl and OC(O)R; R = Me, ^tBu, Ph and CF₃) and Their Utility as Precatalysts for Heck-Mizoroki Coupling of Aryl Cl, "Modern Trends in Inorganic Chemistry" (**MTIC-2011**), December 10–13, **2011**, Department of Chemistry, University of Hyderabad, Hyderabad. (poster)
- [20]. A Rational Design of *Sym N,N',N''*-Tris(2,5-xylyl)guanidine that Avoids Cyclopalladation: Synthesis, and Structural Characterization of *trans*-[X₂Pd(LH₂^{2,5-xylyl})₂] (X = Cl and OC(O)R; R = Me, ^tBu, Ph and CF₃) and Their Utility as Precatalysts for Heck-Mizoroki Coupling of Aryl Chlorides, "Modern Trends in Inorganic Chemistry" (**MTIC-2011**), December 10–13, **2011**, Department of Chemistry, University of Hyderabad, Hyderabad. (**Oral presentation**)
- [21]. Influence of Conformations of *sym N,N',N''*-Triarylguanidines on Their Reactivity with *cis*-[Cl₂Pt(DMSO)₂]: Substitution versus Cyclometalation, *International Symposium On "Frontiers in Inorganic Chemistry"* (**FIG-2010**), December 11–13, **2010**, Department of Inorganic Chemistry, IACS, Kolkata. India. (poster)
- [22]. Participated in International Symposium on "Trends in Drug Discovery and Development" (**T3D-2010**), 5th–8th January **2010**, Organised by Department of Chemistry, University of Delhi, New Delhi.
- [23]. Training Programme for Laboratory Staff As an instructor and imparted technical training in the programme 6th–24th December **2010**, Organised by University Science Instrumentation Centre, University of Delhi, New Delhi.
- [24]. Participated in 6th Indo-Italian Workshop on "Chemistry and Biology of Antioxidant, 10th – 11th December **2009**, Organised by Department of Chemistry, University of Delhi, New Delhi.
- [25]. Participated in 3rd Indo-Italian Seminar on "Green Chemistry" 9th December **2009**, Organised by Department of Chemistry, University of Delhi, New Delhi.
- [26]. Participated in 13th ISCB-International Conference on "Interplay of Chemical and Biological Sciences: Impact on Health and Environment" (**ISCBC-2009**), 26th February – 1st March **2009**, Organised by Department of Chemistry, University of Delhi, New Delhi.
- [27]. Participated in Indo-Italian Seminar on "Green Chemistry and Natural Products" 5th – 6th December **2008**, Organised by Department of Chemistry, University of Delhi, New Delhi.

Personal Information

Date of Birth : 17-May-1981
 Sex : Male
 Nationality : Indian
 Marital Status : Married
 Languages Known : English, Tamil and Hindi
 Permanent address : S/O K. Palani, Kodukkan Kuppam (village),
 Melmalayanur (post), Gingee (taluk) Villupuram (Dt),
 Tamil Nadu, INDIA- 604 204.

Declaration:

I worked closely with a team of researchers and learned the value of working independently as well as in a team with good lab practice. I am very reliable and well organized person, with keen willingness to expand my knowledge on new research fields. Thank you for your consideration and would welcome the opportunity to discuss further about this position. I hereby declare that all the above-furnished details are true to the best of my knowledge and belief.

Sincerely Yours



Place: Ulsan, South Korea

(Dr. Palani ELUMALAI)