VISVAGANESAN, K
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Objectives

- Provide high quality teaching
- Help students to develop their hidden skills and abilities
- Train students in the fundamental concepts of chemistry required for the employment or admission to post graduation
- Develop and maintain commitment in research activities

Total Years of Experience

10 Years

Educational Qualification

- 2004 - NET (National Eligibility Test) Qualified Council of Scientific & Industrial Research (CSIR)
- 2004 - MSc Chemistry (First class with distinction) Madurai Kamaraj University
- 2002 - BSc Chemistry (First class with distinction) Madurai Kamaraj University

Technical Skills

- Agilent Diode Array **UV-Vis Spectrophotometer** with Unisoku thermostat
- EG & G PAR 273 PC Driven **Electrochemical Instrument** equipped with EG & GM
- Hewlett Packard HP 7890 series **GC-MS** equipped with HP Chemstation software
- Perkin Elmer Clarus 500 **GC-MS** Series
- X-ray crystal structures solving using **SHELXS/SHELXL** Programs
- MS-WINDOWS operating systems

Research Publications

1. Iron(III) Complexes of Tridentate 3N Ligands as Functional Models for Catechol Dioxygenases: The Role of Ligand *N*-alkyl Substitution and Solvent on Reaction Rate and Product Selectivity, **Kusalendiran Visvaganesan**, Ramasamy Mayilmurugan, Eringathodi Suresh and Mallayan Palaniandavar, *Inorg. Chem.* **2007**, *46*, 10294-10306.

2. Highly Selective Hydroxylation of Alkanes Catalyzed by (l-oxo)bis(l-carboxylato)-bridged Diiron(III) Complexes: Involvement of Mononuclear Iron(III) Species in Catalysis, **Kusalendiran Visvaganesan**, Eringathodi Suresh and Mallayan Palaniandavar, *Dalton Trans.* **2009**, 3814–3823.

3. Iron(III) Complexes of Tripodal Monophenolate Ligands as Models for Non-Heme Catechol Dioxygenase Enzymes: Correlation of Dioxygenase Activity with Ligand Stereoelectronic Properties, Ramasamy Mayilmurugan, **Kusalendiran Visvaganesan**, Eringathodi Suresh, and Mallayan Palaniandavar, *Inorg. Chem.* **2009**, *48*, 8771–8783

4. Mononuclear Non-heme Iron(III) Complexes of Linear and Tripodal Tridentate Ligands as Functional Models for Catechol Dioxygenases: Effect of *N*-alkyl Substitution on Regioselectivity and Reaction Rate, Mallayan Palaniandavar and **Kusalendiran Visvaganesan**, *J. Chem. Sci.* **2011**, *123 (2)*, 145-162.

5. Functional Models for Enzyme-Substrate Adducts of Catechol Dioxygenase Enzymes: The Lewis Basicity of Facially Coordinating Tridentate Phenolate Ligands Tunes the

Rate of Dioxygenation and Product Selectivity, **Kusalendiran Visvaganesan**, Somasundaram Ramachitra and Mallayan Palaniandavar, *Inorg. Chim. Acta*, **2011** 378 (1), 87-94

Paper Presentation

1. INDO-US Workshop on 'Green Chemistry' January 07-09, 2006, University of Delhi, New Delhi.
2. Eighth National Symposium in Chemistry, Indian Institute of Technology Bombay, Mumbai, Organized by Chemical research society of India (CRSI), Activation of Molecular Oxygen: Synthesis and Characterization of 3,5-di-tetr-butyl-(2-oxo-2-piperidin-1-ylethyl)-5H-2-furanone by Using a Non-heme Iron Catalyst, **K. Visvaganesan**, R. Mayilmurugan and M. Palaniandavar, Feb 3-5, 2006, Abstract p. 091.
3. Ninth National Symposium in Chemistry, University of Delhi, Delhi, Organized by Chemical Research Society of India (CRSI), Iron(III) Complexes of Tridentate 3N Ligands as Functional Models for Extradiol Cleaving Catechol Dioxygenases: The Role of Ligand Substitution on Reaction Rate and Product Selectivity, **K. Visvaganesan**, R. Mayilmurugan, E. Suresh and M. Palaniandavar, Feb 1-4, 2007, Abstract, p. 157.
4. Winterschool in Bioinoorganic Chemistry, Sponsored by Deprtment of Science and Technology (DST), New Delhi, Organized by IIT Bombay, Powai, Mumbai, Nov 17-30, 2007.
5. Modern Trends in Inorganic Chemistry (MTIC-XII), IIT Madras, Chennai, (μ-Oxo) bis(μ-carboxylato)-bridged Diiron(III) Complexes of 3N Ligands and Their Use as Alkane Oxidation Catalysis, **K. Visvaganesan**, E. Suresh and M. Palaniandavar, Dec 6-8, 2007, Abstract p. 071.
6. School and Symposium on Advanced Biological Inorganic Chemistry (SaBIC-2009), Tata Institute of Fundamental Research (TIFR), Mumbai, Iron(II) Complexes of Tripodal 4N Ligands as Functional Models for Non-heme Rieske Dioxygenases: Cis-dihydroxylation versus Epoxidation, **K. Visvaganesan**, M. Balamurugan and M. Palaniandavar, Nov 2-7, 2009, Abstract p. 022.

FDP Attended

- FDP, **Advancements in Materials Science**, Jeppiaar Institute of Technology, Chennai, 05.06.2020
- FDP (MHRD), **Managing Online Classes and Cocreating MOOCS**, Ramanujan College, New Delhi, 20.04.2020
- FDP, "**Futuristic Perspectives of Nano Materials in Biomedical Applications and Energy Storage Devices**", RMD Engineering College, Chennai, 11.05.2020
- FDP, **Advancements in Applied Chemistry**, St. Joseph College of Engineering, Chennai, 06.07.2020
- FDP, **PRIME Pedagogy**, MEASI Institute of Management, 20.11.2020

Semianr/Workshops Attended

- **Webinar on Chemistry**, The American College, Madurai, 29.05.2020
- Webinar, **Electroanalytical Techniques**, The American College, Madurai, 24.06.2020

- Webinar, **Employability Post Covid Era: Expectation of Industry Vs Education System's Preparedness**, ASSOCHAM India, 11.07.2020
- Webinar, **H^1-NMR Spectroscopy**, Keshav Memorial Institute of Commerce and Sciences, Hyderabad, 27.06.2020
- Webinar, **Green Energy and Technology**, Kings Engineering College, Chennai, 19.06.2020
- Webinar, **A Webinar on Scope of Chemoinformatics in Research**, Sacred Heart College, Tirupattur, 20.06.2020
- Webinar, **Computational Chemistry on Biofuel Development**, St. Joseph 's College of Engineering, Chennai, 16.07.2020
- Webinar, **Nuances of Scholarly Writing and Manuscript Preparation**, Stella Maris College, Chennai, 18.05.2020
- Webinar, **A Journey of Drug Discovery: Computational Chemistry Approach**, TJS Engineering College, Chennai, 27.06.2020
- Webinar, **Plant Derived Antiviral Compounds as Possible Drug Target against COVID-19**, Thiruthangal Nadar College, Chennai, 25.05.2020
- Webinar, **Creative Teaching for Effective Class Handling**, Thiruthangal Nadar College, Chennai, 02.06.2020
- Workshop, **Recent Advances in Science and Technology of Concrete,** Indian Institute of Technology, Madras, 02.05.2020

Awards & Recognition

- Qualified **CSIR National Eligibility Test** (CSIR-JRF) in December 2004 conducted by CSIR (Council of Scientific and Industrial Research)
- Awarded the Thirumathi Kanchana Subash Chandra Bose **Gold Medal** for having secured the First Place in **MSc Chemistry**

Achievements

- Organized three days awareness program (Jan 10-12, 2018) "**Entrepreneurship Awareness Camp**" funded by Entrepreneurship Development Institute of India, Gujarat.
- Imparting training (2016 – 2019) to the rural youths of Tamil Nadu under **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** sponsored by All India Council for Technical Institutions (AICTE)
- Imparting training (Nov 2014 – Oct 2017) to the rural youths of Tamil Nadu under "**Electronic System Design and Manufacturing (ESDM)**" sponsored by National Institute of Electronics and Information Technology (NIELIT), Government of India
- Training provided (2013-2015) to more than 1000 students of Thiruvallur District under "**Equipment Repair and Maintenance (ERM)**" scheme sponsored by National Institute of Electronics and Information Technology (NIELIT), Government of India