

CURRICULUM VITAE

Dr. S. Muthumari

No: 6/10, Devamar south street
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Professional Summary

Experienced organic/organometallic chemist with 2 years in Post doc conducting standard organic synthesis, purification, and characterization using analytical techniques.

Academic Profile:

Doctor of Philosophy (Ph.D.)

University : Bharathidasan University, India.
Main Subject : Chemistry
Field of Specialization : Catalysis
Year : Oct-2013 to Sep 2018
Research Supervisor : Prof. Dr. R. Ramesh

Master of Science (M.Sc.)

Course : Master of Science in Chemistry (2009 – 2011)
University : Manonmaniam Sundaranar University, Tamil Nadu, India
Percentage : 77.05 %
Grade : First Class with Distinction
Dissertation : Crystal Growth and Characterization of Some NLO Complexes

Bachelor of Science (B.Sc.)

Course : Bachelor of Science in Chemistry (2005 – 2008)
University : Manonmaniam Sundaranar University, Tamil Nadu, India
Percentage : 66.42 %
Grade : First Class
Dissertation : Electrochemical Study on the Conductance of Cu complexes with amino acid

Career Summary/ Awards

- ✓ Post doctoral fellow, NISER, Bhubaneswar (16th December to present)
- ✓ Assistant Professor, Sri Paramakalyani College, Tenkasi. Tamilnadu (September 2021 to November 2021)
- ✓ Post Doctoral Fellow, Department of Biochemistry, West Virginia University, United

States (August 2019 to October 2020)

- ✓ Post Doctoral Fellow, Department of Chemistry, Indian Institute of Technology, Bombay (November 2018 to August 2019)
- ✓ Senior Research Fellow (UGC-RFSMS-SRF), School of Chemistry, Bharathidasan University (March 2016 to September 2018)
- ✓ Junior Research Fellow (UGC-RFSMS-JRF), School of Chemistry, Bharathidasan University (March 2014 to March 2016)
- ✓ Project Fellow (UGC), School of Chemistry, Bharathidasan University (July 2013 to January 2014).
- ✓ Best outgoing student in M.Sc.,

Skills

- ✓ Excellent interpersonal, technical writing, and oral communication skills
- ✓ Leadership qualities
- ✓ Able to perform organic compounds in 100 ml to 20 liter reaction flask
- ✓ Be able to develop and optimize synthetic methods to synthesize compounds using appropriate chromatography, inert-handling techniques, conventional and microwave reaction techniques, and distillation techniques.
- ✓ Knowledge to characterize the products of chemical reactions using appropriate instrumentation including, but not limited to, NMR, IR spectroscopy, mass spectrometry and elemental analysis.
- ✓ Able to work in organic and organometallic catalysis reaction.
- ✓ Maintain a safe, well-stocked and clean laboratory in accordance with technical and safety protocols.

Industrial Experiences

1. Worked as a Lab In charge from June 2011 to Oct. 2012 in PWDS-CARDS, Tirunelveli and expertise in
 - ✓ Soil and gas sampling
 - ✓ Analysis of Greenhouse gas emission by GC and GC-MS
 - ✓ Training farmers for sustainable practice in agriculture
 - ✓ Carbon credit scoring

2. Worked as a Trainee Analyst from Nov. 2012 to June, 2013 in Spices Board, Ministry of Commerce and Industry, Tuticorin and expertise in sampling spices
- ✓ Be able to develop and optimize analytical methods to characterized compounds using appropriate chromatography, inert-handling techniques, conventional reaction techniques, and distillation techniques
 - ✓ Quality analysis by GC, GC-MS, HPLC, UV, LCMS, HRMS, AAS, ICPMS etc.

Research Publications

1. An efficient trifunctional benzhydrazone ligated Pd(II) complex for Heck reaction of aryl bromides
Muthumari, S.; Mohan, N.; Ramesh, R. *Tetrahedron Lett.* **2015**, 56, 4170–4174.
2. Synthesis, structure and anticancer activity of (η^6 - benzene) ruthenium(II) complexes containing aroylhydrazone ligands
Mohan, N.; **Muthumari, S.;** Ramesh, R. *J. Organomet. Chem.* **2016**, 807, 45–51.
3. Highly efficient palladium(II) hydrazone based catalysts for the Suzuki coupling reaction in aqueous medium
Muthumari, S.; Ramesh, R. *RSC Adv.* **2016**, 6, 52101–52112.
4. Synthesis and structure of Ru(II) complexes of thiosemicarbazone: Highly selective catalysts for oxidative scission of olefins to aldehyde
Muthumari, S.; Ramesh, R. *ChemistrySelect* **2018**, 3, 3036 – 3041.
5. Synthesis of bioactive quinoline by one pot catalytic approach using efficient arene Ru(II) catalysts under mild condition
Muthumari, S.; Saranya, S.; Ramesh, R. *Applied Organometallic Chemistry*, **2018**; e4582.
6. Efficient arene ruthenium(II) catalysts for N-alkylation of *ortho*-substituted aniline with aldehydes: A facile access to substituted benzimidazole and benzthiazole derivatives
Muthumari, S.; Ramesh, R. (To be communicated)

Instruments Handling

- ✓ Gas Chromatography, FT-NMR, FT IR spectrometer, UV-Vis Spectroscopy, Florescence Spectroscopy, GC/ MS, LC/ MS/MS, HRMS, HPLC, AAS, ICPMS

Personal Informations

Father's Name	:	Mr. S. Subramanian
Mother's Name	:	Mrs. S. Esakkiammal
Gender	:	Male
Date of Birth	:	01 th June 1988

Marital Status : Married
Nationality : Indian
Languages Known : Tamil, English
Mobile No : +91 – 9488664807/ +91 – 8248900324

List of References

<p style="text-align: center;"><u>Research Supervisor</u></p> <p>Prof. R. Ramesh Head and Coordinator Centre for Organometallic Chemistry School of Chemistry Bharathidasan University Tiruchirappalli-620 024 Tamil Nadu, India.</p>	<p>E-Mail : ramesh_bdu@yahoo.com, rramesh@bdu.ac.in Mobile Phone : +91-94860 66934 Phone : +91-431-2407053</p>
<p>Prof. A. Ilangovan School of Chemistry Bharathidasan University Tiruchirappalli-620 024 Tamil Nadu, India.</p>	<p>E-mail: ilangovan@bdu.ac.in, ilangovanbdu@yahoo.com</p>
<p>Prof. P. Venuvanalingam Professor Emeritus School of Chemistry Bharathidasan University Tiruchirappalli-620 024 Tamil Nadu, India.</p>	<p>E-mail : venuvanalingam@yahoo.com</p>

Declaration

I hereby solemnly affirm that all the details provided above are true to the best of my knowledge and belief and that at all times, I shall carry myself in a manner that lends dignity to the organization and worthy enough of the person.

Place: India

(S. Muthumari)