

Name : Joseph Ponniah S.

Designation : Assistant Professor

Department : Chemistry (SF)

Date of Joining : 24.08.2021



Email : josephinraja17@gmail.com & josephponniah@americancollege.edu.in

Educational Qualification:

Degree	Subject	College / Uuniversity & Place	Year Completed
Ph.D.	Chemistry	Indian Institute of Technology Madras	2015
M.Phil.	Chemistry	Madurai Kamaraj University, Madurai	2010
M. Sc	Chemistry	The American College, Madurai	2008
B. Sc.	Chemistry	Saiva Bhanu Kshatriya College, Aruppu kottai.	2006

Academic Credentials:

- **June 2020**, Qualified the Joint CSIR- UGC National Eligibility Test for **Assistant Professor** (All India Rank: 47)
- **March 2010**, Qualified Graduate Aptitude Test in Engineering GATE'10 (93.8 Percentile)

Specialisation in Teaching:

- Physical Chemistry

Specialisation in Research:

- Main Group and Organometallic Chemistry
- Metallaborane Cluster Chemistry
- Fluorescent Chemosensors
- Organoborane Chemistry

Research Interests:

- Synthesis and applications of chemosensors in detecting poisonous and heavy metal ions.
- Synthesis and catalytic application of metallaborane clusters.
- Synthesis of Multi-metallo Porphyrin Catalysts for Carbon dioxide (CO₂) Fixation

Any Other Work Experience:

Designation	Institution / Company	Year - From (month/year) To (month/year)
Lecturer	The American College, Madurai	November 2016-February 2017
National Postdoctoral fellow(Npdf)	National Institute of Science Education and Research (NISER)	February 2017- February 2019

Articles Published in International Journals:

1. R. S. Dhayal, **S. J. Ponniah**, S. Sahoo, S. Ghosh*. Synthesis and Structural Characterization of an Open Cage Dithiatungstaborane [(CpW)₂B₄H₄S₂] Cluster (*Invited Article for a special issue dedicated to A. P. C. Ray on his 150th birth anniversary*). *Ind. J. Chem.* **2011, 50A, 1363.**
2. **S. J. Ponniah**, S. K. Bose and S. Ghosh*. An Eleven-Vertex Metallaborane with Tetra capped Pentagonal Bipyramidal Geometry. *Dalton Trans.*, **2012, 41, 3627.**
3. **S. J. Ponniah**, K. B. Jeneena, S. K. Bose and Ghosh*. Synthesis and Characterization of Novel Eleven-Vertex Dimetallaheteroborane Clusters Containing Heavier Group 16 Elements. *J. Organomet. Chem.* **2012, 721, 42.**
4. **S. J. Ponniah**, S. K. Barik, A. Thakur, R. Ganesamoorthi, S. Ghosh*. Triazolyl Alkoxy Fischer Carbene Complexes in Conjugation with Ferrocene/Pyrene as Sensory Units: Multifunctional Chemosensor for Pb(II), Cu(II) and Zn(II) Ions. *Organometallics* **2014, 33, 3098.**

5. D. Mandal, P. Deb, B. Mondal, A. Thakur, **S. J. Ponniah**, S. Ghosh* Synthesis and Sensing Properties of 1,1'-disubstituted Unsymmetrical Ferrocene- Triazole Derivatives: A Multichannel Probe for Hg(II) Ion . *RSC. Adv.* **2013**, *3*, **18614**.
6. **S. J. Ponniah** , S. K. Barik, R. Borthakur, A. Thakur, B. Garai, S. Jana and S. Ghosh* Unprecedented ferrocene-quinoline conjugates: facile proton conduction via 1D helical water chains and selective chemosensor for Zn(II) ion in water. *RSC Adv.*, **2015**, *5*, 15690 .
7. D. Kunchala ; S. Sa, P. Nayak, **S. J. Ponniah**, and Krishnan Venkatasubbaiah* Tetrahydrodibenzo phenanthridine based boron-bridged polycyclic aromatic hydrocarbons: Synthesis, structural diversity, and optical properties. *Organometallics* **2019**, *38* , **870–878**.
8. S. Sa, **S. J. Ponniah**, Priyabrata Biswal, Venkatesan Sathesh, A. C. Murali, and Krishnan Venkatasubbaiah* Distannadithiophenes and their application towards hydroboration of carbonyl compounds. *Eur. J. Inorg. Chem.* **2022**, **2022**, *e202200283*.

PAPERS PRESENTED/PARTICIPATED AT NATIONAL/INTERNATIONAL CONFERENCES AND WORKSHOPS.

- Participated in the “Recent Trends in Chemistry (RTC-2024)” Conducted by Department of Chemistry, The American College, Madurai, March 1, 2024.
- Participated in the one day Workshop on Green chemistry Conducted by Department of Chemistry, The American College, Madurai, January 23 & 24, 2024.
- Participated in one day national level Workshop (virtual) on INTELLECTUAL PROPERTY RIGHTS AND INNOVATION” Conducted by FDP division A.C.T Academy, Tamilnadu, December 10, 2023.
- Participated in the two days International Conference on Advances in Chemistry – ICAC-2023 Conducted by Department of Chemistry, The American College, Madurai, December 4 & 5, 2023.
- Participated in the “Art and science of methodical scientific writing and publishing in high impact journal” Conducted by IQAC, The American College, March 6, 2023.
- Conduct the two days Workshop on “skill development in analytical skills” Department of Chemistry, The American College, Madurai February 2 & 3, 2023.

- **Joseph Ponniah. S** and Krishnan Venkatasubbaiah*, Presented a poster in International Conference on Materials for the Millennium, **MATCON-2019**, Department of Applied Chemistry, Cochin University of Science and Technology, Kochi 682022, India, March 14-16, 2019.

Title: *“Design and Synthesis of Multicobalto Porphyrin Moiety for Catalytic Applications”*

- Attended the National Bioorganic Chemistry Conference **NBCC- 2018**, School of Chemical Sciences, National Institute of Science Education and Research Bhubaneswar, Dec 22nd- 24th.

- **Joseph Ponniah. S** and Sundargopal Ghosh*, Presented a poster in CiHS-2013, Indian Institute of Technology Madras, Chennai 600036, India, August 21.

Title: *“Novel Eleven- Vertex Dimetallaheteroborane Clusters Containing Heavier Group 16 Elements”*

- **Joseph Ponniah. S** and Sundargopal Ghosh*, Presented a poster in NSRAC-2013, Pondicherry University, Feb 22-23.

Title: *“An Eleven-Vertex Metallaborane with Tetra capped Pentagonal Bipyramidal Geometry”*

- **Joseph Ponniah. S**, Berlin Asha, Bosco Bharathy J. R* National Symposium on Frontier areas in Chemistry held at the department of Chemistry, The American College, Madurai, January 10& 11, 2008.

Title: *“Kinetic study on Oxidation of L-Cystein amino acid by Mo (VI) Oxo-Peroxo Complex”*

AWARDS/FELLOWSHIPS

- **December 2019**, Selected for the Talented Young Scientist Program (**TYSP**) By Science and Technology Exchange Center, Beijing, China.
- **January 2017**, Awarded SERB National Postdoctoral fellowship. Government of India.
- **July 2015**, Awarded Prof. Werner **Silver Medal for the Best Ph.D Thesis** in Inorganic and Analytical Chemistry for the year 2015 from Indian Institute of Technology Madras, Chennai, India.
- **August 2010—March 2015**, Awarded Institute Research Fellowship from Indian Institute of Technology Madras, Chennai, India.