### **CURRICULUM VITAE**

#### Dr. S. MANGALARAJ

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### **Research Interests:**

Finding new and simple methodology for organic molecule synthesis and their applications in the synthesis of alkaloids and natural products.

# **Professional Qualifications:**

- Assistant Professor, Department of Chemistry, St. Xavier's College (Autonomous), Palyamkottai - 627 002. (From September 2015 to May 2016)
- Assistant Professor, Department of Chemistry, St. Joseph's College (Autonomous), Tiruchirappalli - 620002 (From June 2016 on wards).

# **Academic Qualifications:**

- B. Sc. (Chemistry, 80.00%) St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu, India (2006).
- M. Sc. (Chemistry, 79.01%) St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu, India (2008).
- ✤ Qualified in CSIR-NET (*June 2008*).
- ✤ Qualified in UGC-JRF (*June 2009*).
- ✤ UGC-SRF (*June 2011*).
- Ph.D, Chemistry (*December 2015*) Pondicherry University (A Central University), Pondicherry.

### Awards and Achievements:

Dr. K. Nambi Endowment Cash Award for first in Physical Chemistry in M. Sc. Chemistry 2008 in St. Joseph's College (Autonomous), Tiruchirappalli.

### **Publications:**

- Construction of tetrahydro-β-carboline skeletons *via* Brønsted acid activation of Impact imide carbonyl group: syntheses of indole alkaloids (±)-harmicine and (±)-10- Factor 3.9 desbromoarborescidine-A. Mangalaraj, S.; Ramanathan, C. R. *RSC Adv.*, 2012, 2, 12665.
- Syntheses of fused tetrahydro-β-carboline analogues through imide carbonyl Impact activation using BBr<sub>3</sub>: Evidence for the involvement of fused cyclic N- Factor 1.7 acyliminium ion intermediate. Mangalaraj, S.; Selvakumar, J.; Ramanathan, C. R. J. Chem. Sci. 2015, 127 (5), 811.
- Synthesis and biological evaluation of isoindoloisoquinolinone, Impact pyroloisoquinolinone and benzoquinazolinone derivatives as poly(ADP-ribose) Factor 3.3 polymerase-1 inhibitors, Suyavaran, A.; Ramamurthy, C.; Mareeswaran, R.; Viswa Shanthi, Y.; Selvakumar, J.; Mangalaraj, S.; Suresh Kumar, M.; Ramanathan, C. R.; Thirunavukkarasu, C. *Bioorganic & Medicinal Chemistry.* 2015, 23, 488.
- Triflic Acid Mediated Cyclization of Unsymmetrical N-Phenethyl and N-(3- Impact Indolylethyl)succinimides: Regio- and Diastereoselective Synthesis of Factor 2.2 Substituted Pyrroloisoquinolinones and Indolizinoindolones, Selvakumar, J.; Mangalaraj, S.; Murali Mohan Achari, K.; Mukund, K.; Ramanathan, C. R. Synthesis 2016, 49 (5), 1053.
- Structural Elucidation and Position Identification of Cu(II) ion in Impact Hexaaquazinc(diaquabismalonto)zincate: Single Crystal EPR and Optical Factor 2.7 Studies, Parthiban, A.; Arun Prasath Lingam, K.; Mangalaraj, S.; Muthukrishnan, P.; Surendiran, M. *Journal of Cluster Science*, 2021, 32, 1401.
- Indolyl-4H-chromenes: Multicomponent one-pot green synthesis, *in vitro* and *in* Impact *silico*, anticancer and antioxidant studies, Parthiban, A.; Mangalaraj, S.; Factor 4.0 Prabhakaran, J.; Pooventhir, T.; Christopher Jyakumar, T.; Thomas, R.; Parameshwar Makam, *Journal of Molecular Structure*, 2022, *1266*, 133464.

 Indolyl-4*H*-Chromene Derivatives as Antibacterial Agents: Synthesis, *in Vitro* Impact and *in Silico* Studies, Parthiban, A.; Priyanka Adhikari.; Baskaran, S.; Factor 2.7 Mangalaraj. S.; Mohd Afzal.; Parameshwar Makam. *Chem. Biodiversity* 2023, 21 (1), doi.org/10.1002/cbdv.202301392

Total number of citations	:	157
h-index	:	5
i10-index	:	4

#### **Presentation in Conferences / Seminars:**

- Oral presentation titled "Brønsted acid activation of imide carbonyl group: Synthesis of alkaloids (±)-harmicine and (±)-10-desbromoarborescidine-A" in "NATIONAL CONFERENCE ON FRONTIER AREAS IN CHEMISTRY (NCFAC-2011)" conducted by Department of Chemistry, Pondicherry University, Puducherry during December 22, 2011.
- Poster presentation in "14<sup>th</sup> NATIONAL SYMPOSIUM IN CHEMISTRY (NSC-14) and 6<sup>th</sup> CRSI-RSC SYMPOSIUM IN CHEMISTRY" conducted by National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), Thiruvananthapuram during February 2-5, 2012.

# **Teaching Experiences:**

UG - 8 Years PG - 8 Years

# Service in St. Joseph's College:

- 2017 President, Department of Chemistry
- 2019 onwards mentors for UG students
- 2020 175 years of excellence exhibition in charge, Department of Chemistry
- 2021 2022 IIT JAM in charge, Department of Chemistry
- 2024 Member in Archbishop Casimir Instrumentation Centre (ACIC) and IPR Cell