

Faculty Profile

Name & Address	Dr. Priyadarshini Sayala
Educational Qualifications	M.Sc., CSIR-NET, PhD.,
Area of Expertise	Catalysis & Methodology Development, C-H activation.
Teaching Experience	Nil
Research Experience	7 years
Present Post & Responsibilities held	Lecturer in Chemistry
Professional Training Programs attended	Trained for Development of Process for some important Chiral Pharma Intermediates via Asymmetric Hydrogenation Technologies
Publications in Journals	<p style="text-align: center;"><i>International:</i></p> <ol style="list-style-type: none"> 1) <u>Copper-Mediated C=X Functionalization of Aryl Halides.</u> P. J. Amal Joseph, S. Priyadarshini, <u><i>Organic Process Research & Development</i>, 2017, 21, 1889-1924.</u> 2) <u>Copper catalyzed oxidative cross-coupling of aryl and heteroaryl amines with 2-pyrrolidinone: A facile synthesis of γ-N-aryl-γ-lactams.</u> S. Priyadarshini, P. J. Amal Joseph, M. Lakshmi Kantam. <u><i>Tetrahedron</i> 2014, 36, 6068-6074.</u> 3) <u>Copper catalyzed cross-coupling reactions of carboxylic acids: An expedient route to amides, 5-substituted γ-lactams and α-acyloxy esters.</u> S. Priyadarshini, P. J. Amal Joseph, M. Lakshmi Kantam. <u><i>RSC Advances</i> 2013, 3, 18283-18287.</u> 4) <u>Investigation of the scope and mechanism of copper catalyzed regioselective methylthiolation of aryl halides.</u> P. J. Amal Joseph, S. Priyadarshini, M. Lakshmi Kantam, B. Sreedhar. <u><i>Tetrahedron</i> 2013, 69, 8276-8283.</u> 5) <u>Copper MOF: scope and limitation in catalytic hydroxylation and nitration of aryl halides.</u> S. Priyadarshini, P. J. Amal Joseph, M. Lakshmi Kantam, B. Sreedhar. <u><i>Tetrahedron</i> 2013, 69, 6409-6414.</u> 6) <u>Catalytic quanylation of aliphatic, aromatic, heterocyclic primary and secondary amines using nanocrystalline zinc(II) oxide.</u> M. Lakshmi Kantam, S. Priyadarshini, P. J. Amal Joseph, P. Srinivas, A. Vinu, K. J. Klabunde. <u><i>Tetrahedron</i> 2012, 68, 5730-5737.</u> 7) <u>Copper catalyzed ipso-nitration of iodoarenes, bromoarenes and heterocyclic haloarenes under ligand-free conditions.</u> P. J. Amal Joseph, S. Priyadarshini, M. Lakshmi Kantam, H. Maheswaran. <u><i>Tetrahedron Letters</i> 2012, 53, 1511-1513.</u> 8) <u>Sulfonic acid resin and copper salts: a novel heterogeneous catalytic system for direct hydroxylation of haloarenes.</u> P. J. Amal Joseph, S. Priyadarshini, M.

	<p>Lakshmi Kantam, H. Maheswaran. <i>Catalysis Science and Technology</i>2011, <i>1</i>, 582–585.</p> <p>9) Sulfonic acid containing cation-exchanger resin “INDION-770” & copper(I) salts: A novel reusable catalyst for N-arylation of NH-heterocycles with haloarenes. P. J. Amal Joseph, S. Priyadarshini, M. Lakshmi Kantam, H. Maheswaran. <i>Catalysis Science and Technology</i>2011, <i>1</i>, 234–238.</p> <p>10) Bis(μ-iodo)bis((-)-sparteine)dicopper(I) catalyzed Sonogashira-type reaction under palladium and phosphine-free conditions. S. Priyadarshini, P. J. Amal Joseph, P. Srinivas, H. Maheswaran, M. Lakshmi Kantam, Suresh Bhargava. <i>Tetrahedron Letters</i>2011, <i>52</i>, 1615–1618.</p> <p>11) Investigations of enantio reversal in both direct and directed enantioselective aldol reaction catalyzed by CuCl_2[(-)-sparteine] and NiCl_2[(-)-sparteine] complexes. H. Maheswaran, P. J. Amal Joseph, K. Leon Prasanth, S. Priyadarshini, P. Satyanarayana, Praveen R. Likhar, M. Lakshmi Kantam. <i>Tetrahedron Asymmetry</i>2010, <i>21</i>, 2158–2166.</p>
National /International Seminars attended	Participated in 21st National Symposium on “ <i>Catalysis for Sustainable Development</i> ” (CATSYMP-21) held at CSIR-Indian Institute of Chemical Technology, Hyderabad, India on 11-13 February 2013.
Awards /Honours	<ol style="list-style-type: none"> 1. Awarded Lectureship CSIR-NET by CSIR-UGC in December 2007. 2. Awarded CSIR-SRF by CSIR-HRDG in February 2011. 3. Awarded SERB INDO-US Postdoctoral Fellowship for the year 2016.