

**NANJIL CATHOLIC COLLEGE OF ARTS AND SCIENCE**  
**KALIYAKKAVILAI**

**FACULTY PROFILE**



Name	Dr. MARY SHEEBA M.				
Department	Chemistry				
Designation	Assistant Professor				
Address	Kadayara Vilai, Parakunnu Vanniyoor Post				
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Academic Qualifications (with Name of Degree awarding university)	S.No	Course	Board/ University	Year	Percentage
	1	M.Sc	Mother Teresa Womens University	2010	87
	2	M.Phil	Bharathidasan University	2011	74
	3	Ph.D	National Institute of Technology, Tiruchirappalli	2016	-
Teaching Experience	Level	Years of Service	Institution		
	UG	1	National Institute of Technology, Tiruchirappalli		
	UG & PG	2.3	Nanjil Catholic College of Arts and Science		
Specialization	Inorganic Chemistry, Organometallics and catalysis				
Publications/ Participation in Seminars/ Conferences etc				International	National
	No. of Research Papers in Journals			11	-
	No. of Publications in Conference Proceedings			1	4
No. of Conferences Participated in			2	20	

	Books	-	-
Projects	-		
Details of Research Supervision	<b>On going</b>	<b>Completed</b>	
Honours and Awards			
Posts held	-		
Any other Information			

**List of Publications:**

1. N. Selvakumaran, **M. Mary Sheeba**, R. Karvembu, S.W. Ng and E.R.T. Tiekink, 3-Benzoyl-1-(2-methoxyphenyl)thiourea, *Acta Cryst. E* 68(12), 2012, o3259, I. F. 0.581, ISSN : 1600-5368, DOI: 10.1107/S160053681204456X
2. N. Selvakumaran, **M. Mary Sheeba**, R. Karvembu, S.W. Ng and E.R.T. Tiekink, 1-Benzoyl-3-(4-chlorophenyl)thiourea dichloromethanehemisolvate, *Acta Cryst. E* 68(12), 2012, o3313, I. F. 0.581, ISSN : 1600-5368, DOI:10.1107/S1600536812045588
3. **M. Mary Sheeba**, M. Muthu Tamizh,L. J. Farrugia, A. Endo, R. Karvembu, Chiral ( $\eta^6$ -*p*-cymene)ruthenium(II) complexes containing monodentate acylthiourea ligands for efficient asymmetric transfer hydrogenation of ketones, *Organometallics* 33, 2014, 540–550, I. F. 3.862, ISSN: 0276-7333, doi.org/10.1021/om4010548
4. **M. Mary Sheeba**, S. Preethi, A. Nijamudheen, M. Muthu Tamizh, A. Datta, L. J. Farrugia, R. Karvembu, Half-sandwich Ru( $\eta^6$ -C<sub>6</sub>H<sub>6</sub>) complexes with chiral aroylthioureas for enhanced asymmetric transfer hydrogenation of ketones – experimental and theoretical studies, *Catal. Sci. Technol.*, 5, 2015, 4790–4799, I.F. 5.726, ISSN: 2044-4753, DOI:10.1039/C5CY00774G.
5. **M. Mary Sheeba**, M. Muthu Tamizh,S. Ganesh Babu,N. S. P. Bhuvanesh, R. Karvembu, Ru(II)-*p*-cymene complexes containing ester of chiral D/L-phenylalanine derived aroylthiourea ligands for enantioselective reduction of pro-chiral ketones, *RSC Adv.*, 6, 2016, 68494–68503, I.F. 3.36, ISSN: 2046-2069, DOI:10.1039/C6RA12428C.

6. **M. Mary Sheeba**, M. Muthu Tamizh, L. J. Farrugia, R. Karvembu, Enantioselective reduction of pro-chiral ketones catalyzed by chiral Ru(II)-benzene complexes containing aminoacid based aroylthiourea ligands, *J. Organomet. Chem.* 831, 2017, 45-49, I.F. 2.369, ISSN: 0022-328X, DOI:10.1016/j.jorgancem.2016.12.016.
7. G. Rohini, J. Haribabu, **M. Mary Sheeba**, K. N. Aneesrahman, N. S. P. Bhuvanesh, C. Balachandran, R. Karvembu, A. Sreekanth, Ruthenium(II)- $\eta^6$ -benzene complexes of dibenzosuberenyl appended aryl/acylthiourea ligands: *In vitro* biomolecular interaction studies and catalytic transfer hydrogenation, *Chem. Select* 3, 2018, 18-28, I.F. 2.109, ISSN: 2365-6549, DOI:10.1002/slct.201702538
8. **M. Mary Sheeba**, M. Muthu Tamizh, N. S. P. Bhuvanesh, R. Karvembu, Water soluble Ru(II)-*p*-cymene complexes bearing unprotected D/L-alanine derived thiourea ligands for asymmetric reduction of pro-chiral ketones, *J.Appl. Organomet. Chem.* 33, 2, 2018, e4667, I.F. 3.581, ISSN: 1099-0739, doi.org/10.1002/aoc.4667.
9. **M. Mary Sheeba**, N. S. P. Bhuvanesh, R. Karvembu, Piano-stool chiral Ru(II)-benzene complexes bearing D/L-alanine derived thiourea ligands for asymmetric transfer hydrogenation of ketones in water, *J. chem. Sci.* 130, 163 (2018), I.F. 1.406, ISSN: 0974-3626, doi.org/10.1007/s12039-018-1566-5
10. R. R. Jeyapalan, J. Venkataraman, M. Jain, V. Srinivasan, S. Sarika, B. Mohana, **M. Mary Sheeba**, K. Thanigaiarul, V. Vaithiswaran, R. Karvembu, M. Sharma, N. Kalkura, Regional differences in gall bladder bile acids composition in patients with gallstones, *J. Clin. Exp. Hepatol.* 8, 2018, S104, I.F. 2.47, ISSN: 09736883, DOI:<https://doi.org/10.1016/j.jceh.2018.06.464>
11. **M. Mary Sheeba**, T. Shalini, Determination of comparison of ascorbic acid in vegetables, 8 (6), (2021) f202-f207, I.F. 7.95, (ISSN – 2349-5162).

#### **List of Papers Presented in National/International Conferences:**

- Chiral water soluble Ru(II)-arene complexes for asymmetric hydrogenation of pro-chiral ketones, **M. Mary Sheeba** and R. Karvembu, Multidisciplinary National Conference on ‘Research in Present Scenario’ held in Nesamony Memorial Christian College, Marthandam, India on January 27, 2017.
- Unprotected D/L-alanine derived thiourea ligands and their water soluble Ru(II)-*p*-cymene complexes for asymmetric reduction of pro-chiral ketones, **M. Mary Sheeba** and R. Karvembu, RSC-NIT Symposium held in National Institute of Technology, Trichy, India on November 5, 2016
- Half-sandwich chiral ruthenium(II) arene complexes for asymmetric transfer hydrogenation of ketones, **M. Mary Sheeba**, S. Preethi, and R. Karvembu, 13<sup>th</sup> Eurasia Conference on Chemical Sciences held in Indian Institute of Science Bangalore, India from December 14 to 18, 2014  
**(Received RSC best poster award)**

4. Chiral acyl thiourea ligands and its Ru(II) complexes as efficient catalysts for asymmetric transfer hydrogenation of ketones, M. Mary Sheeba and R. Karvembu, Symposium on modern trends in inorganic chemistry (MTIC) - XV held in Indian Institute of Technology Roorkee, India from December 13 to 16, 2013
5. Chiral Ru(II) complexes as catalyst for asymmetric transfer hydrogenation of ketones, M. Mary Sheeba and R. Karvembu, CRSI 15<sup>th</sup> National symposium in chemistry (NSC-15) held in Banaras Hindu University, Varanasi, India from February 1 to 3, 2013