

Department of Chemistry (& Research Centre) Pope's College Sawyerpuram



Name: Dr. P. VIJAYA., M.Sc., Ph.D.						
Designation: Assistant Professor (SF)						
I. Academic Details					II. Research Details	
Area of Specializati	on	Asymmetric Organo Catalysis, Phase Transfer			Research Publications	
					Publications	No. of Publications
		Latalyst, Synthesis of Hetrocyclic Compounds				10
Research Experienc	• •	8 Years			Journals	10
					Conferences	5
Teaching Experience	e	4 Years			Citations and Indexing	
Ph.D.Guidance		On-going: - Completed: -			Caasla scholar 22	
D rogrommo(s)	Organi	zed Attended			Google scholar	33
Workshops	organizeu		10		Web of Science	32
Seminar	01		8		Indexing	
Conference		-	7		Google Scholar	3
Additional Responsibilities Member in Criterion II (College Campus) Member in Criterion VII (College Campus) 					Scopus	3
					Web of Science	3
					Patent Details	
				Research Projects/Amount in Rs:		
				Project Title : Synthesis of Novel Heterocyclic Compounds		
				for Anticancer Activities		
				Funding from : Tamilnadu State Council for Science and		
				Technology (TNSCST)		
Invited Talks Delivered · -				III Parsonal Datails		
Countries Visited :-					III. I CISUIIAI Detaiis	
Awards / Recognition : Approved Research Guide in the				Date of Birth : 04.04.1991		
subject of Chemistry by Manonmaniam Sundaranar					Email Id : drvijayaponmuthu@gmail.com	
University, Tirunelveli.				Contact No : 8344794908		
				Urcia 1a : 0000-0002-5223-615X Caagla Sabalar Id: Dr. D. Vijava		
				bttps://scholar.google.com/citations?usor=walOC		
				ckAAAAI&hl=en		

List of Significant Publications

- An Green and Efficient Synthesis of Hexahydrospiro[Indoline-3,3'-pyrrolo[1,2-Imidazol] -2-one Derivatives via one-pot Multi component Reaction. Dr. P. Kottala Vijaya, *Journal of Emerging Technologies and Innovative Research*, 2019, 6, 341-346. (*Impact Factor* – 5.87), ISSN: 2349-5162, UGC APPROVED.
- Highly Enantioselective Epoxidation of α, β-Unsaturated Ketones Catalyzed by Chiral Multi-site Phase-Transfer Catalysts. Dr. P. Kottala Vijaya, Journal of Emerging Technologies and Innovative Research, 2019, 6, 347-353. (Impact Factor – 5.87), ISSN: 2349-5162, UGC APPROVED.
- 3. Highly Enantioselective Asymmetric Henry Reaction Catalyzed by Novel Chiral Phase Transfer Catalyst Derived

from Cinchona Alkaloids. **Ponmuthu Kottala Vijaya**, Sepperumal Murugesan, Ayyanar Siva. *Organic & Biomolecular Chemistry*, 2016, **14**, 10101-10109. (*Impact Factor –* **3.564**), ISSN (Online): 1477-0539 ISSN (Print): 1477-0520, UGC APPROVED.

- Unexpected solvent/substitution-dependent inversion of the enantioselectivity in Michael addition reaction using chiral phase transfer catalysts. Ponmuthu Kottala Vijaya, Sepperumal Murugesan, Ayyanar Siva, *Tetrahedron Letters* 2015, 56, 5209–5212. (*Impact Factor* – 2.379), ISSN (Online): 0040-4039, UGC APPROVED.
- New quaternary phosphonium salt as multi-site phase transfer catalyst for various alkylation reactions. Kottala Vijaya Ponmuthu, Duraimurugan Kumaraguru, Jesin Beneto Arockiam, Sadhasivam Velu, Murugesan Sepperumal, Siva Ayyanar, *Research on Chemical Intermediate* (2016). doi:10.1007/s11164-016-2600-1. (*Impact Factor -1.833*), ISSN (Online): 1568-5675 ISSN (Print): 0922-6168, UGC APPROVED.
- Enantioselective synthesis of dihydroquinazolinone derivatives catalyzed by a chiral organocatalyst. Siva Ayyanar, Ponmuthu Kottala Vijaya, Madhappan Mariyappan, Veeramanoharan Ashokkumar, Velu Sadhasivam, Sankar Balakrishnan, Chithiraikumar Chinnadurai and Sepperumal Murugesan. *New J. Chem.*, 2017, 41, 7980-7986. (*Impact Factor – 3.269*), ISSN (Online): 1369-9261 ISSN (Print): 1144-0546. UGC APPROVED.
- Efficient base-free asymmetric one-pot synthesis of spiro[indoline-3,3'-pyrrolizin] -2-one derivatives catalyzed by chiral organocatalysts. Chinnadurai Chithiraikumar, Kottala Vijaya Ponmuthu, Muniyasamy Harikrishnan, Nelson Malini, Murugesan Sepperumal, Ayyanar Siva, *Research on Chemical Intermediate* (2020). https://doi.org/10.1007/s11164-020-04303-8 (*Impact Factor* –1.833), ISSN (Online): 1568-5675 ISSN (Print): 0922-6168, UGC APPROVED.
- Enantioselective Asymmetric Michael Addition of α,β-Unsaturated Ketones using New Chiral Trisite Phase Transfer Catalysts. Jayaraman Sivamani, Ponmuthu Kottala Vijaya, Veeramanoharan Ashokkumar, Sepperumal Murugesan, Ayyanar Siva, (*IJIRSE*) International Journal of Innovative Research in Science & Engineering ISSN (Online):2347-3207, (2014). (Impact Factor –0.998), UGC APPROVED.
- Cinchona Alkaloid Based Quaternary Ammonium Salt as Chiral Phase-Transfer Catalysts: Asymmetric Alkylation Reactions. Veeramanoharan Ashokkumar, Jayaraman Sivamani, **Ponmuthu Kottala Vijaya**, Ayyanar Siva, (*IJIRSE*) International Journal of Innovative Research in Science & Engineering, ISSN (Online): 2347-3207, (2014). (*Impact Factor* – 0.998), UGC APPROVED.
- Crystal structures of 2'-benzoyl-1'-(4-methylphenyl)-1,1',2,2',5',6',7',7a'-octahydro spiro[indole-3,3'-pyrrolizin]-2-one and 2'-(4-bromobenzoyl)-1'-(2-hlorophenyl)-1,1',2,2',5',6',7',7a'octahydrospiro[indole-3,3'-pyrrolizin]-2-one. M. Chandrarekha, N. Srinivasan, P. Kottala Vijaya, A. Siva and R. V. Krishnakumar, *Acta Cryst.* (2016). E72, 1637–1641. (*Impact Factor* -0.567), ISSN (Online): 2056-9890, UGC APPROVED.