NIRMALA COLLEGE, MUVATTUPUZHA, KERALA

Faculty Academic Profile

<table>
<tr><td>  </td><td>Name: Jyothish Kuthanapillil
Designation and Department: Asst. Professor, Chemistry
Date of Joining: 28-12-2015
Contact info:
Phone: 8943021832
Email :jyothish12345@nirmalacollege.ac.in Teaching
Experience in years: 4 years

<u>Academic Credentials – From Degree to the highest academic qualification</u>
PhD in Chemistry (2008): National Institute for Interdisciplinary Science and Technology (NIIST), Trivandrum.
Thesis title: Design of Quinoloine Based Squaraine Dyes for Photodynamic Therapy: Synthesis and Study of their Photophysical and Photobiological Properties.
MSc Chemistry (2000-2002): St. Thomas College, Palai. Percentage: First Class
BSc Chemistry (1997-2000): Pavanatma College, Murickassery. Percentage: First Class.</td></tr>
<tr><td>Scopus ID or Any Other Research ID:
Google Scholar Profile Link URL
Any other Research Profile URL
https://scholar.google.co.in/citations?user=SZXhExUAAAAJ&hl=en</td><td>Areas of Interest
a. Teaching:
b. Research: Organic Synthesis, Self-assembly, Photophysics, Photochemistry, Photobiology</td></tr>
<tr><td colspan="2">Subjects Taught: Organic Spectroscopy, Inorganic Photochemistry, Nanomaterials, Group Theory and Symmetry of molecules, Bio-organic chemistry, Solution Chemistry</td></tr>
<tr><td colspan="2">Institutional Responsibilities (Past and Present - Time period should be mentioned): Research Committee, Nirmala Research Group, IPR cell (Coordinator).</td></tr>
<tr><td colspan="2">Details of Research Guidance: Research Guide of M.G. University</td></tr>
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a. Research Projects

Title	Details	Amount	Nature	Status
Rational Design of Crop-based Amphiphiles as New Building Blocks for Self-assembled Materials	DST-SERB Major Project	29,64000/-	Early Career Research (ECR) Scheme	Ongoing

b. Research Papers in International Journals

Year	Title	Name of the Journal	Volume/Issue/doi number	Remarks (CARE list number or Scopus Number)
2004	Synthesis of novel quinaldine-based squaraine dyes: Effect of substituents and role of electronic factors	*Organic Letters*	6	https://doi.org/10.1021/ol048411y
2006	Synthesis of new cholesterol- and sugar-anchored squaraine dyes: Further evidence of how electronic factors influence dye formation	*Organic Letters*	8	https://doi.org/10.1021/ol052639j
2007	Development of squaraine dyes for photodynamic therapeutical applications: Synthesis and study of electronic factors in the dye formation reaction,	*ARKIVOC*	8	http://www.arkat-usa.org/get-file/20038/
2007	Dual-mode semisquaraine-based sensor for the selective detection of Hg^{2+} in a micellar media	*Organic Letters*	9	https://doi.org/10.1021/ol062691v
2008	Supramolecular chiral assemblies of	*Chemistry a European Journal*	13	https://doi.org/10.1002/chem.200700130

	a squaraine dye in solution and thin films: concentration, temperature and solvent induced chirality inversion,			
2008	Harvesting infrared photons with croconate dyes,	*Chemistry of Materials*	20	https://doi.org/10.1021/cm7018668
2008	Infrared absorbing croconaine dyes: Synthesis and metal ion binding properties	*Journal of Organic Chemistry*	73	https://doi.org/10.1021/jo702209a
2009	Self-Standing, Metal Nanoparticle Embedded Transparent Films From Multi-Armed Cardanol Conjugates Through *In Situ* Synthesis	*Chemical Communications*	36	https://doi.org/10.1039/B900208A
2010	A vegetable oil derived chemodosimeter for the selective detection of Hg^{2+} in aqueous media: A potential green laboratory method	*Green Chemistry*	12	https://doi.org/10.1039/C002651D
2011	Introducing a Podand Motif to Alkyne Metathesis Catalyst Design: A Highly Active Mo(VI) Propylidyne Catalyst Resisting Alkyne Polymerization	*Angewandte Chemie*	50	https://doi.org/10.1002/anie.201007559
2011	Towards Highly Active and Robust Alkyne Metathesis Catalysts: Recent	*Angewandte Chemie*	50	https://doi.org/10.1002/anie.201102678

	Developments in Catalyst Design			
2011	Novel Semisquaraine Regioisomers: Isolation, Divergent Chemical Reactivity and Photophysical Properties	*Chemical Communications*	47	https://doi.org/10.1039/C1CC15261K
2012	Highly Active Multidentate Alkyne Metathesis Catalysts: Ligand-activity Relationship and Their Applications in Efficient Synthesis of Porphyrin-based Aryleneethynylene Polymers	*Advanced Synthesis and Catalysis*	354	https://doi.org/10.1002/adsc.201200243

c) List of Patents

1. Quinaldine based semisquaraines and squaraine dyes, a process for the preparation thereof and use thereof, Ramaiah, D.; **Jyothish, K.**; Arun, K. T. U. S. Patent No. 7998935 dated August 16, 2011.

2. Amphiphilic squaraine dyes, a process for the preparation thereof and their use as near-infrared fluorescence probes for biological, biochemical and industrial applications, Ramaiah, D.; Arun, K. T.; **Jyothish, K**. CN Patent No. ZL 200580052408.2, dated March 31, **2012**.

3. Highly Active Multidentate Catalysts for Efficient Alkyne Metathesis to Prepare Disubstituted Alkynes, Zhang, W.; **Jyothish, K.**, Wang, Q. U.S. Pat. Appl. Publ. **2013**, US 2013261295.

4. Novel self assembled cardanol compounds: A process for the synthesis thereof and applications thereof**, Jyothish, K.**; Anjali, R. Patent application filing Number.