



Dr. K. SRINIVASAN
Associate Professor

Contact

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Academic Qualifications: M.Sc.,Ph.D. (U. of Madras) and PDF (U. of New Orleans, USA)

Teaching Experience: 11 Years (PG)

Research Experience: 14 Years

Additional Responsibilities

1. M. Phil. Coordinator, School of Chemistry, Bharathidasan University (Feb 2015 onwards)
2. Additional in-charge for M.Sc. Chemistry program of Centre for Distance Education, Bharathidasan University (Oct 2017 onwards)

Areas of Research

Synthetic Organic Chemistry [Research in my group focuses on development of new methods for the synthesis of biologically important carbocycles, heterocycles and natural

products from (i) activated donor-acceptor cyclopropanes and (ii) *ortho*-functionalized alkynylarenes]

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	4	4
	M.Phil.	5	1
Project	PG	24	7
	UG / Others	-	-

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
34	5	-	11	-

For independent publications: (22)

Cumulative Impact Factor (as per JCR) :	85
h-index :	12
i10 index :	12
Total Citations :	300

Funded Research Projects

Completed Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	DST	2009	2012	Synthesis, recognition and catalysis of water-soluble molecular belts	20
2	CSIR	2012	2015	Studies on synthetic applications of <i>ortho</i> -functionalized alkynylarenes	18
3	SERB	2013	2016	Synthesis of nitrogen heterocycles <i>via</i> formal cycloaddition reactions of activated donor-acceptor cyclopropanes with nitriles	35

Ongoing Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	SERB	2016	2019	Total synthesis of leoligin and related tetrahydrofuran lignans through asymmetric formal [3+2] cycloaddition of donor-acceptor cyclopropanes with formaldehyde	60

Distinctive Achievements / Awards

1. Awarded *Ripon* medal for proficiency in studies (First Rank) at B. Sc. level.
2. Qualified in Graduate Aptitude Test in Engineering (GATE) conducted by Ministry of Human Resource Development, India.
3. Qualified in National Eligibility Test (NET) conducted jointly by Council of Scientific and Industrial Research and University Grants Commission, India and awarded Junior Research Fellowship (JRF) and Senior Research Fellowship (SRF).
4. Awarded Post-Doctoral Research Fellowship by University of New Orleans, USA.
5. Awarded FAST TRACK young scientist project by DST, India.
6. Awarded Dr. S. I. Perumal Endowment Award for contribution in the field of Synthetic Organic Chemistry by Department of Organic Chemistry, University of Madras.

Events organized in leading roles

1. Acted as General Secretary of SPECTRUM, a Chemical Society of University of Madras and organized several invited talks (2002-03).
2. Acted as Joint Organizing Secretary for "Seminar on Recent Developments in Chemistry" conducted by School of Chemistry, Bharathidasan University on Aug 29, 2011.
3. Acted as Co-Convener for "International Conference on Sustainable Energy Technologies" conducted by School of Chemistry, Bharathidasan University on June 27 & 28, 2018.

Overseas Exposure / Visits

- Post-Doctoral Researcher, University of New Orleans, USA with Prof. Bruce C. Gibb

Membership in

Editorial Board

Member in the Editorial Board of Sacred Heart Journal of Science and Humanities (ISSN 2277-6613)

Academic Bodies (such as Board of Studies etc.,)

1. Served as Member, Board of Studies in Chemistry (UG) of Bharathidasan University (affiliated colleges) (2009-12)
2. Serving as Member, Board of Studies in Chemistry (PG) of Bharathidasan University (affiliated colleges) (2018-21)
3. Served/serving as a member, Board of Studies in Chemistry of (i) School of Chemistry, Bharathidasan University, (ii) School of Chemistry, University of Madras, (iii) Sacred Heart College, (iv) Karur Government Arts College, (v) Bishop Heber College, (vi) Kundhavai Naachiaar Government Arts College for Women and (vii) A.D.M. College for Women

Others

1. Member (Subject Expert) for conducting External Academic Audit at Department of Chemistry, Jamal Mohammed College (2015)
2. Member of selection committee for the appointment of Assistant Professors (Govt aided) in Chemistry at Nehru Memorial College (2015)
3. Member (Subject Expert) for review committee for B.Sc. Chemistry additional section at Cauvery College for Women (2018)
4. Member (Subject Expert) for review committee for B.Sc. Chemistry additional section at Bishop Heber College (2018)

Resource persons in various capacities

- Delivered a lecture entitled, "Donor-Acceptor Cyclopropanes as Versatile Synthetic Building Blocks" at Academic Staff College of University of Madras (2015).
- Delivered a lecture entitled, "Synthetic Applications of *ortho*-Functionalized Alkynylarenes" at Academic Staff College of University of Madras (2015).

- Delivered a Dr. S. I. Perumal Endowment lecture entitled, “Synthetic Applications of Aroyl- and Nitro-substituted Donor-Acceptor Cyclopropanes” at University of Madras, Guindy Campus on Apr 07, 2016.
- Delivered a lecture on stereochemistry in the “Short Term Course on Training Program for CSIR/UGC JRF exam in Chemical Sciences” held at National Institute of Technology Tiruchirappalli during Sep 1-5, 2017.
- Delivered a lecture entitled, “Synthesis of Thiophenes from Donor-Acceptor Cyclopropanes” for a National Seminar, “Recent Trends in Organic Chemistry” held at Padmavani Arts and Science College for Women, Salem on Oct 5, 2018.
- Delivered a Dr. S. J. Arulraj Endowment lecture entitled, “Thiophenes from Donor-Acceptor Cyclopropanes and Mercaptoacetaldehyde” at St. Joseph’s College, Tiruchirappalli on Feb 05, 2019.

Others

- Set/setting question papers for B.Sc., B.Tech., M.Sc., M.Tech., M.Phil., and Ph.D., degrees of Bharathidasan University, Anna University, Bharathiar University, Periyar University, Tamil Nadu Agricultural University, Cochin University of Science and Technology and University of Kerala.
- Evaluated Ph. D. theses of University of Hyderabad (4) and VIT University (1) and conducted viva-voce examinations of University of Hyderabad (1) and VIT University (1).
- Served/serving as a member in the Doctoral Committees of several Ph. D. students of Bharathidasan University (including affiliated colleges), VIT University, Periyar Maniyammai University and Anna University.
- Served/serving as a reviewer for Journals such as *Chem. Commun.*, *Org. Lett.*, *Adv. Synth. Catal.*, *J. Org. Chem.*, *Eur. J. Org. Chem.*, *RSC Adv.*, and *Synlett*.
- Past PhD Scholars: Dr. K. Sakthivel (GATE & NET), Dr. G. Sathishkannan (GATE & NET), Dr. T. Selvi (GATE & INSPIRE) and Dr. S. Akbar (GATE & NET)
- Present PhD Scholars: Mr. John Tamilarasan (GATE & NET), Mr. M. Thangamani (GATE & NET), Ms. S. Selvi (GATE & NET) and Ms. M. Thangamalar.

Recent Publications

1. "Neighboring formyl group assisted oxidation of *o*-alkynylarene carboxaldehydes by an iodine/water system"; K. Sakthivel and K. Srinivasan*; *Eur. J. Org. Chem.* **2011**, 2781-2784. (IF: 3.029)
2. "Highly diastereoselective synthesis of 1-pyrrolines via SnCl₄-promoted [3+2] cycloaddition between activated donor-acceptor cyclopropanes and nitriles"; G. Sathishkannan and K. Srinivasan*; *Org. Lett.* **2011**, 13, 6002-6005 (highlighted in *Synfacts* **2012**, 8, 65). (IF: 6.492)
3. "A tandem strategy for the synthesis of 1H-benzo[g]indazoles and naphtho[2,1-d]isoxazoles from *o*-alkynylarene chalcones"; S. Akbar and K. Srinivasan*; *Eur. J. Org. Chem.* **2013**, 1663-1666. (IF: 3.029)
4. "Indium triflate-catalysed Diels-Alder reactions of isochromenylium cations with enones"; T. Selvi and K. Srinivasan*; *Org. Biomol. Chem.* **2013**, 11, 2162-2167. (IF: 3.423)
5. "Iodine/water-mediated oxidation of *o*-alkynylaroyl compounds and application of the products of oxidation in the synthesis of nitrogen heterocycles"; K. Sakthivel and K. Srinivasan*; *Eur. J. Org. Chem.* **2013**, 3386-3396. (IF: 3.029)
6. "Indium(III) triflate-catalysed [4 + 2] benzannulation reactions of *o*-alkynylbenzaldehydes with enolisable carbonyl compounds: selective synthesis of naphthyl ketones"; K. Sakthivel and K. Srinivasan*; *Org. Biomol. Chem.* **2014**, 12, 269-277. (IF: 3.423)
7. "Lewis acid-mediated transformations of trans-2-aryloxy-3-arylcyclopropane-1,1-dicarboxylates into 2-pyrones and 1-indanones"; G. Sathishkannan and K. Srinivasan*; *Adv. Synth. Catal.* **2014**, 356, 729-735. (IF: 5.123)
8. "[3+3] Annulation of donor-acceptor cyclopropanes with mercaptoacetaldehyde: application to the synthesis of tetrasubstituted thiophenes"; G. Sathishkannan and K. Srinivasan*; *Chem. Commun.* **2014**, 50, 4062-4064. (IF: 6.290)
9. "Synthesis of naphthalene amino esters by the Blaise reaction of *o*-alkynylarene nitriles"; K. Sakthivel and K. Srinivasan*; *J. Org. Chem.* **2014**, 79, 3244-3248. (IF: 4.805) (highlighted in *Synfacts* **2014**, 10, 854).
10. "Boron trifluoride mediated ring-opening reactions of trans-2-aryl-3-nitrocyclopropane-1,1-dicarboxylates. Synthesis of aroylmethylidene malonates as potential building blocks for heterocycles"; T. Selvi and K. Srinivasan*; *J. Org. Chem.* **2014**, 79, 3653-3658. (IF: 4.805)
11. "Synthesis of 3,3-disubstituted-2,3-dihydroazanaphthoquinones via simultaneous alkyne oxidation and nitrile hydration of *ortho*-alkynylarene nitriles"; K. Sakthivel and K. Srinivasan*; *Org. Biomol. Chem.* **2014**, 12, 6440-6446. (IF: 3.423)

12. "Synthesis of 2,4,5-trisubstituted oxazoles through tin(IV) chloride-mediated reaction of *trans*-2-aryl-3-nitro-cyclopropane-1,1-dicarboxylates with nitriles"; T. Selvi and K. Srinivasan*; *Chem. Commun.* **2014**, 50, 10845-10848. (IF: 6.290)
13. "Iron(III) halide or iodine-promoted synthesis of 3-haloindene derivatives from *o*-alkynylarene chalcones"; S. Akbar and K. Srinivasan*; *RSC Adv.* **2015**, 5, 5542–5545. (IF: 2.936)
14. "Boron trifluoride-promoted indium(III) triflate-catalyzed sequential one-pot synthesis of (1,2-diaryl-2-oxoethyl)malonates from *trans*-2-aryl-3-nitrocyclopropane-1,1-dicarboxylates and activated arenes"; T. Selvi and K. Srinivasan*; *Adv. Synth. Catal.* **2015**, 357, 2111-2118. (IF: 5.123)
15. "Synthesis of 2,3-disubstituted thiophenes from 2-aryl-3-nitro-cyclopropane-1,1-dicarboxylates and 1,4-dithiane-2,5-diol"; T. Selvi, G. Vanmathi and K. Srinivasan*; *RSC Adv.* **2015**, 5, 49326-49328 (IF: 2.936)
16. "Iodine-catalyzed synthesis of highly functionalized 1*H*-indene derivatives from Michael adducts of *o*-alkynylarene chalcones with diethyl malonate"; S. Akbar and K. Srinivasan*; *Eur. J. Org. Chem.* **2015**, 7652-7655. (IF: 3.029)
17. "Iron-catalyzed tandem Conia-ene/Friedel-Crafts reactions of *o*-alkynyldihydrochalcones: access to benzo[*b*]fluorenes"; S. Akbar and K. Srinivasan*; *J. Org. Chem.* **2016**, 81, 1229-1236. (IF: 4.805)
18. "Synthetic applications of aryl- and nitro-substituted 2-aryl-cyclopropane-1,1-dicarboxylates"; T. Selvi and K. Srinivasan*; *Isr. J. Chem.* **2016**, 56, 454-462. (IF: 2.607) (Invited Review)
19. "Nucleophilic ring opening reactions of *trans*-2-aryl-3-arylcyclopropane-1,1-dicarboxylates with hydrazines"; G. Sathishkannan, V. J. Tamilarasan and K. Srinivasan*; *Org. Biomol. Chem.* **2017**, 15, 1400-1406. (IF: 3.423)
20. "Tandem ring-opening/cyclization of *trans*-2-aryl-3-nitro-cyclopropane-1,1-dicarboxylates with 2-aminopyridines: Access to pyrido[1,2-*a*]pyrimidin-4-one derivatives"; S. Selvi and K. Srinivasan*; *Eur. J. Org. Chem.* **2017**, 5644-5648. (IF: 3.029)
21. "Lewis acid-mediated ring-opening reactions of *trans*-2-aryl-3-styryl-cyclopropane-1,1-dicarboxylates: Access to cyclopentenes and *E,E*-1,3-dienes"; M. Thangamani and K. Srinivasan*; *J. Org. Chem.* **2018**, 83, 571-577. (IF: 4.805)
22. "SnCl₄-Promoted [3+2] annulation of γ -butyrolactone fused donor-acceptor cyclopropanes with nitriles: Access to γ -butyrolactone fused 1-pyrrolines"; V. J. Tamilarasan and K. Srinivasan*; *J. Org. Chem.* **2019**, 84, DOI: 10.1021/acs.joc.9b01155. (IF: 4.805)
