



# SRM Valliammai Engineering College

(An Autonomous Institution)

SRM Nagar, Kattankulathur-603203, Kancheepuram District, Tamil Nadu

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## Department of Chemistry

### Personal Details

<b>Name :</b>	J. KRISHNAMURTHI	
<b>Designation :</b>	ASSISTANT PROFESSOR (Sr.G)	
<b>Educational Qualification :</b>	M.Sc., Ph.D.	
<b>Experience:</b>	5 years as POSTDOC and 8 years in TEACHING	
<b>Area of Specialization :</b>	Organic , Inorganic and materials Chemistry	
<b>Date of Birth :</b>	25/05/1976	
<b>Date of Joining :</b>	03/01/2014	
<b>Email ID :</b>	<a href="mailto:jkmurthi@yahoo.co.in">jkmurthi@yahoo.co.in</a>	
<b>Contact Numbers :</b>	Mobile:8056038833; Off: 27454784	<b>Extn:</b> 8061



### Educational Details

S.No	Degree	Branch/Specialization	Institution / University	Year
1	B.Sc.	Chemistry	Presidency College, Chennai	1997
2	M.Sc.	Inorganic Chemistry	University of Madras, Guindy Campus	2000
3	Ph.D.	Chemistry	CSMCRI / Bhavnagar University	2007

### Professional Society Memberships

1. Indian Society of Technical Education (ISTE) : Life Member
2. Indian Science Congress (ISC) : Life Member
3. Indian JSPS Alumni Association (IJAA) : Life Member
4. Chemistry Teachers Association (CTA) : Life Member
5. Indian Association of Crystal Growth (IACG): Life Member

### Publication Details

#### Journals:

- 1 M. Ito, R. Namie, **J. Krishnamurthi**, H. Miyamae, K. Takeda, H. Nambu, S. Hashimoto  
"Asymmetric Total Synthesis of (–)-trans-Blechnic Acid via Rh(II)-Catalyzed C–H Insertion and Pd(II)-Catalyzed C–H Olefination Reactions"  
*Synlett*, **2014**, **25**, 0288–0292
- 2 **J. Krishnamurthi**, H. Nambu, K. Takeda, M. Anada, A. Yamano, Hashimoto, S.  
"Enantioselective cycloaddition of carbonyl ylides with arylallenes using Rh<sub>2</sub>(S-TCPTTL)<sub>4</sub>"  
*Organic & Biomolecular Chemistry*, **2013**, 5374-5382. IF = 3.568
- 3 Watanabe, Y.; Washio, T.; **Krishnamurthi, J.**; Anada, M.; Hashimoto, S.  
"Enantio- and diastereoselective hetero-Diels–Alder reactions between 2-aza-3-silyloxy-1,3-butadienes and aldehydes catalyzed by chiral dirhodium(II) carboxamidates"  
*Chem. Commun.* **2012**, 6969-6971. IF = 6.378
- 4 Shimada, M; Oohara, T.; **Krishnamurthi, J.**; Nambu, H.; Hashimoto, S.  
"Catalytic Enantioselective Intermolecular Cycloaddition of Diazodiketoester-Derived Carbonyl Ylides with Indoles Using Chiral Dirhodium(II) Carboxylates"  
*Org. Lett.*, **2011**, **13**, 6284-6287. IF = 6.142

- 5 Muthusamy, S.; Gangadurai, C.; **Krishnamurthi, J.**; Suresh, E.  
"Stereoselective synthesis of piperidinone and quinolinone systems via ring opening reactions using  $\text{TiCl}_4$ /silyl reagents"  
*Tetrahedron* **2011**, 67, 4212-4220. IF = 2.803
- 6 **Krishnamurthi, J.**; Ono, T.; Amemori, S.; Komatsu, H.; Shinkai, S.; Sada, K.  
"Thiourea-tagged poly(octadecyl acrylate) gels as fluoride and acetate responsive polymer gels through selective complexation"  
*Chem. Commun.* **2011**, 1571-1573. IF = 6.378
- 7 Nambu, H.; Hikime, M.; **Krishnamurthi, J.**; Kamiya, M.; Shimada, N.; Hashimoto, S. "Asymmetric approach to the pentacyclic skeleton of *Aspidosperma* alkaloids via enantioselective intramolecular 1,3-dipolar cycloaddition of carbonyl ylides catalyzed by chiral dirhodium(II) carboxylates"  
*Tetrahedron Letters* **2009**, 3675–3678. IF = 2.397
- 8 Muthusamy, S.; **Krishnamurthi, J.**  
"Multicomponent reactions involving *p*-benzoquinones, diazo esters, titanium(IV) isopropoxide and alcohol in the presence of rhodium(II) acetate catalyst"  
*Tetrahedron Letters* **2007**, 6692–6695. IF = 2.397
- 9 Muthusamy, S.; **Krishnamurthi, J.**; Suresh, E.  
"Multicomponent Reactions Involving Tricyclooxonium Ylide Intermediate: Diastereoselective Synthesis of Mono- and Bisalkoxyoctahydro-1,4-Benzodioxocin-6(5*H*)-one Frameworks"  
*Chem. Commun.*, **2007**, 861-863. IF = 6.378
- 10 Muthusamy, S.; **Krishnamurthi, J.**; Babu, S. A.; Suresh, E.  
"Anomalous Reaction of  $\text{Rh}_2(\text{OAc})_4$ -Generated Transient Carbonyl Ylides: Chemoselective Synthesis of Epoxy-bridged Tetrahydropyranone, Oxepanone, Oxocinone, and Oxoninone Ring Systems"  
*J. Org. Chem.*, **2007**, 1252-1262. IF = 4.564
- 11 Muthusamy, S.; **Krishnamurthi, J.**; Suresh, E.  
"Highly Regio- and Chemoselective Ring Opening of Oxa-Bridged Piperidinones toward Functionalized Furanones and Piperidines"  
*Org. Lett.*, **2006**, 5101-5104. IF = 6.142
- 12 Muthusamy, S.; **Krishnamurthi, J.**; Suresh, E.  
"Highly Regio- and Stereoselective [3+2] Cycloaddition of Carbonyl Ylides to Imines: A Novel Entry to Oxa-Bridged Piperidinone Ring Systems"  
*Synlett* **2005**, 3002-3004. IF = 2.655
- 13 Muthusamy, S.; **Krishnamurthi, J.**; Nethaji, M.  
"Highly Regio-, Chemo- and Diastereoselective Synthesis of Oxa-Bridged Spirocycles: A Novel Observation of Reverse Selectivity"  
*Chem. Commun.*, **2005**, 3862-3864. IF = 6.378
- 14 Muthusamy, S.; **Krishnamurthi, J.**; Suresh, E.  
"Chemospecific and Diastereoselective Synthesis of Bis-Dioxabicyclo[2.2.1]heptanone Ring Systems"  
*ARKIVOK*, **2005**, (X), 146-160.
- 15 Muthusamy, S.; **Krishnamurthi, J.**; Nethaji, M. "Chemoselective Synthesis of Multiple Epoxy-Bridged Tetrahydropyranone Ring Systems"  
*Tetrahedron Lett* **2004**, 6485-6488. IF = 1.1

**1 Book Chapter**Muthusamy, S.; **Krishnamurthi, J.**

"Heterocycles by Cycloadditions of Carbonyl Ylides Generated from Diazoketones"

*Topics in Heterocyclic Chemistry* Vol. 12; *Synthesis of Heterocycles via Cycloadditions I*;Hassner, Alfred (Ed.), 2008, *XII*, pp. 147-192. <http://dx.doi.org/10.1007/978-3-540-78371-8>**Research and Development Details**

1. No. of Research Projects Completed : **One** (DST-SERB) UNDER YOUNG SCIENTISTS SCHEME  
SB/FT/CS/020/2014 : Dated 12/09/2014

**Topic** :Catalytic asymmetric synthesis of bioactive natural products via Rhodium(II)-bound carbonyl ylide formation and cyloaddition process

Grant Received & Utilized : 17,70,000 /- & 17,60,139 /-  
Duration : 27-10-2014 to 31-03-2017

2. No. of Patents Filed : Three

3. No. of Ph.D candidates guiding : One

**Other Particulars**

- |   |  |
|---|--|
| 1 | <p><b>No. of STTP/FDP Attended:</b></p> <ol style="list-style-type: none"> <li>1. NPTEL-AICTE-FDP-"Introductory Organic chemistry-II", July-September-2021.</li> <li>2. 5-day online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education(AICTE) from 25 th October, 2021 to 29 th October, 2021.</li> </ol>  |
| 2 | <p><b>Guest Lecture Organized:</b></p> <ul style="list-style-type: none"> <li>➤ Webinar conducted on Disaster Management by Dr. S. Angayarkanny, AP-Anna University, Chennai, on Monday, 26-April-2021.</li> </ul>   |
| 3 | <p><b>Research</b></p> <ul style="list-style-type: none"> <li>➤ Qualified in Graduate Aptitude Test in Engineering (GATE)-2001 with 86.61 percentile.</li> <li>➤ Qualified for Lectureship in CSIR-UGC-NET, Dec 2000, India.</li> <li>➤ Junior Research Fellowship in 2002 (CSIR-NET-JRF, July-2001, India).</li> <li>➤ Senior Research Fellowship in 2005 (CSIR-SRF, India).</li> </ul> <p><b>Award</b></p> <ul style="list-style-type: none"> <li>➤ Best poster award at Indo-US Conference, November 13 &amp; 14, 2006. IICT, Hyderabad.</li> </ul> <p><b>Distinction &amp; Honors</b></p> <ul style="list-style-type: none"> <li>➤ Global COE Postdoctoral Research Fellowship in 2007, Kyushu University, Japan.</li> <li>➤ Postdoctoral Research Fellowship in 2011, Hokkaido University, Japan.</li> <li>➤ JSPS (Japan Society for the Promotion of Science) Postdoctoral Research Fellowship (2008-2010).</li> </ul> <p><b>Recognition</b></p> <ul style="list-style-type: none"> <li>➤ Chemistry Department Advisory Board Member of Sri Sai Ram Institute of Technology for the year 2020-21.</li> <li>➤ Act as mentor for the NPTEL online course -"Introductory Organic chemistry-II", July-September-2021.</li> </ul> |