




## Faculty Details proforma for DU Web-site

Title	<b>Dr</b>	First Name	<b>Gopalaiah</b>	Last Name	<b>Kovuru</b>	Photograph
Designation	Assistant Professor					
Address	Room No.:3, Block-C Department of Chemistry University of Delhi, North Campus Delhi-110007, India					
Phone No	Office	91-11-27666646				
	Residence					
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Web-Page	<a href="http://work.du.ac.in/mrsd/uploads/faculty_cv/gopal@chemistry.du.ac.in_Faculty_Proforma_Dr.%20Gopalaiah%20Kovuru.pdf">http://work.du.ac.in/mrsd/uploads/faculty_cv/gopal@chemistry.du.ac.in_Faculty_Proforma_Dr.%20Gopalaiah%20Kovuru.pdf</a>					
Educational Qualifications						
Degree	Institution				Year	
Ph.D (Organic Chemistry)	Indian Institute of Science (IISc), Bangalore				2005	
M.Sc (Organic Chemistry)	Sri Venkateswara University, Tirupati				1998	
B.Sc (M.P.C)	Sri Venkateswara University, Tirupati				1996	
Career Profile						
July 2010-Present: Assistant Professor (Organic Chemistry), University of Delhi, Delhi, India.						
2009-2010: Associate Research Scientist, AstraZeneca India Pvt. Ltd., Bangalore, India.						
2006-2008: Post-doctoral Research ( <i>with Prof. Henri B. Kagan</i> ), University of Paris-Sud, France.						
2000-2005: Research Scholar, Dept. of Organic Chemistry, Indian Institute of Science, Bangalore, India.						
Administrative Assignments						
<ul style="list-style-type: none"><li>• <b>Deputy Coordinator</b> for Centralized Evaluation Centre of M.Sc Chemistry II &amp; IV Semesters and M.Tech. “Chemical Synthesis and Process Technologies” Theory examinations May 2016.</li><li>• <b>Convener</b> for Organic Chemistry section for the academic year 2017-18.</li></ul>						

Areas of Interest / Specialization
<ul style="list-style-type: none"> <li>• Asymmetric Catalysis</li> <li>• Novel Strategies for Organic Synthesis</li> <li>• C-H Bond Activation and Functionalization</li> <li>• Heterocyclic Chemistry</li> <li>• Synthesis of Biologically Active Molecules</li> </ul>
Subjects Taught
<p><u>M.Sc (Previous), Semester I (Theory)</u> Paper 102-A: Organic Stereochemistry</p> <p><u>M.Sc (Previous), Semester II (Theory)</u> Paper 202-B: Methods in Organic Synthesis</p> <p><u>M.Sc (Final), Practicals</u> Paper 3202: Organic Chemistry Paper 4205: Organic Chemistry</p>
Research Guidance
<p>Ph.D Awarded : 1</p> <p>Ph.D Thesis Submitted: 1</p> <p>Supervision of Doctoral Thesis, under progress: 4</p>
Publications Profile (Selected Papers)
<ul style="list-style-type: none"> <li>• K. Gopalaiah, A. Saini, A. Devi “ Iron-catalyzed cascade reaction of 2-aminobenzyl alcohols with benzylamines: synthesis of quinazolines by trapping of ammonia ” <i>Organic and Biomolecular Chemistry</i> <b>2017</b>, DOI: 10.1039/C7OB01159H.</li> <li>• K. Gopalaiah, A. Saini, S. N. Chandrudu, D. C. Rao, H. Yadav, B. Kumar “ Copper-Catalyzed Aerobic Oxidative Coupling of <i>o</i>-Phenylenediamines with 2-Aryl/Heteroarylethylamines: Direct Access to Construct Quinoxalines ” <i>Organic and Biomolecular Chemistry</i> <b>2017</b>, <i>15</i>, 2259-2268.</li> </ul>

- K. Gopalaiah, A. Saini “A Solvent-Free Process for Synthesis of Imines by Iron-Catalyzed Oxidative Self- or Cross-Condensation of Primary Amines Using Molecular Oxygen as Sole Oxidant” *Catalysis Letters* **2016**, *146*, 1648–1654.
- K. Gopalaiah, S. N. Chandrudu, Alka Devi “Iron-Catalyzed Oxidative Coupling of Benzylamines and Indoles: Novel Approach for Synthesis of Bis(indolyl)methanes” *Synthesis* **2015**, *47*, 1766-1774.  
\* *Invited Article*
- K. Gopalaiah, S. N. Chandrudu “Iron(II) Bromide-Catalyzed Oxidative Coupling of Benzylamines with *ortho*-Substituted Anilines: Synthesis of 1,3-Benzazoles” *RSC Advances* **2015**, *5*, 5015-5023.
- S. Ahmad, K. Gopalaiah, S. N. Chandrudu, R. Nagarajan “Anion (Fluoride)-Doped Ceria Nanocrystals: Synthesis, Characterization, and Its Catalytic Application to Oxidative Coupling of Benzylamines” *Inorganic Chemistry* **2014**, *53*, 2030–2039.
- K. Gopalaiah “Chiral Iron Catalysts for Asymmetric Synthesis” *Chemical Reviews* **2013**, *113*, 3248–3296.  
\* *Most Read Article* (2013)
- K. Gopalaiah, H. B. Kagan “Recent Developments in Samarium Diiodide Promoted Organic Reactions” *The Chemical Record* **2013**, *13*, 187–208.  
\* *Invited Article*
- H. B. Kagan, K. Gopalaiah “Early history of asymmetric synthesis: who are the scientists who set up the basic principles and the first experiments ?” *New Journal of Chemistry* **2011**, *35*, 1933–1937.  
\* *Focus Article*  
\* *The most popular NJC article in Top 10* (2011)

- K. Gopalaiah, H. B. Kagan “Use of Nonfunctionalized Enamides and Enecarbamates in Asymmetric Synthesis” *Chemical Reviews* **2011**, *111*, 4599–4657.
- M. Tsukamoto, K. Gopalaiah, H. B. Kagan “Equilibrium of homochiral oligomerization of a mixture of enantiomers. Its relevance to nonlinear effects in asymmetric catalysis” *Journal of Physical Chemistry B* **2008**, *112*, 15361–15368.
- K. Gopalaiah, H. B. Kagan “Use of samarium diiodide in the field of asymmetric synthesis” *New Journal of Chemistry* **2008**, *32*, 607–637.  
\* *Perspective, 30<sup>th</sup> Anniversary Article*
- S. Chandrasekhar, D. Chopra, K. Gopalaiah, T. N. Guru Row “The generalized anomeric effect in the 1,3-thiazolidines: Evidence for both sulphur and nitrogen as electron donors. Crystal structures of various *N*-acylthiazolidines including mercury(II) complexes. Possible relevance to penicillin action” *Journal of Molecular Structure* **2007**, *837*, 118–131.
- M. Maheswara, V. Siddaiah, K. Gopalaiah, V. M. Rao, C. V. Rao “A simple and effective glycine-catalysed procedure for the preparation of oximes” *Journal of Chemical Research (S)* **2006**, 362–363.
- K. Gopalaiah “Oxalic acid: A very useful Brønsted acid in organic synthesis” *Synlett* **2004**, 2838–2839.
- S. Chandrasekhar, K. Gopalaiah “Ketones to amides via a formal Beckmann rearrangement in ‘one pot’: A solvent-free reaction promoted by anhydrous oxalic acid. Possible analogy with the Schmidt reaction” *Tetrahedron Letters* **2003**, *44*, 7437–7439.
- S. Chandrasekhar, K. Gopalaiah “Beckmann reaction of oximes catalysed by chloral: Mild and neutral procedures” *Tetrahedron Letters* **2003**, *44*, 755–756.

- J. Kavitha, K. Gopalaiah, D. Rajasekhar, G. V. Subbaraju “Juspurpurin, an Unusual Secolignan Glycoside from *Justicia Purpurea*” *Journal of the Natural Products* **2003**, *66*, 1113–1115.
- S. Chandrasekhar, K. Gopalaiah “Effective ‘non-aqueous hydrolysis’ of oximes with iodic acid in dichloromethane under mild, heterogeneous conditions” *Tetrahedron Letters* **2002**, *43*, 4023–4024.
- S. Chandrasekhar, K. Gopalaiah “Beckmann rearrangement of ketoximes on solid metaboric acid: A simple and effective procedure” *Tetrahedron Letters* **2002**, *43*, 2455–2457.
- S. Chandrasekhar, K. Gopalaiah “Beckmann rearrangement in the solid state: reaction of oxime hydrochlorides” *Tetrahedron Letters* **2001**, *42*, 8123–8125.

#### Conference Organization/ Presentations (in the last three years)

- Synthesis of Nitrogen-Heterocycles by Oxidative Coupling Methods. National Conference on Emerging Trends in Pharmaceutical and Chemical Sciences, organized by Sri Venkateswara University, Tirupati on 28-29 March 2016.
- Iron-Catalyzed Oxidative Condensation Reactions. 9<sup>th</sup> National Conference on Solid State Chemistry and Allied Areas, May 8-10, 2015.
- Synthesis of Biologically Active Five and Six-Membered Heterocyclic Compounds. International Conference on Current Challenges in Drug Discovery Research, organized by Malaviya National Institute of Technology Jaipur on 23-25 November 2015.
- Role of Non-Functionalized Encarbamates in Asymmetric Synthesis. Department of Applied Chemistry, Indian School of Mines, Dhanbad on 15<sup>th</sup> – 17<sup>th</sup> December, 2014.

Awards and Distinctions
<ul style="list-style-type: none"><li>• Prof. S. K. Banerjee Memorial Award - 2014</li><li>• Prof. Bhaskar Reddy Excellency Award - 2016</li></ul>
Association With Professional Bodies
<p><b><i>Memberships</i></b></p> <p>Life member: Indian Chemical Society Life Member: Chemical Research Society of India Life Member: Him Science Congress Association Life Member: Indian Association of Solid State Chemists and Allied Scientists</p> <p><b><i>Reviewer</i></b></p> <p>Chemical Reviews Accounts of Chemical Research Organic Letters Journal of Organic Chemistry RSC Advances</p>
Other Activities