




## Faculty Details proforma for DU Web-site

(PLEASE FILL THIS IN AND Email it to [websiteDU@du.ac.in](mailto:websiteDU@du.ac.in) and  
cc: [director@ducc.du.ac.in](mailto:director@ducc.du.ac.in))

Title	Dr	First Name	Gopalaiah	Last Name	Kovuru	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					
	Mobile					
Email		gopal@chemistry.du.ac.in; gopalaiah@gmail.com				
Web-Page						
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						
<p>July 2010-Present: Assistant Professor (Organic Chemistry), University of Delhi, Delhi, India.</p> <p>2009-2010: Associate Research Scientist, AstraZeneca India Pvt. Ltd., Bangalore, India.</p> <p>2006-2008: Post-doctoral Research (<i>with Prof. Henri B. Kagan</i>), University of Paris-Sud, France.</p> <p>2000-2005: Research Scholar, Dept. of Organic Chemistry, Indian Institute of Science, Bangalore, India.</p>						
Administrative Assignments						
<ul style="list-style-type: none"><li>• <b>Deputy Coordinator</b> for Centralized Evaluation Centre of M.Sc Chemistry I &amp; III Semesters and M.Tech. “Chemical Synthesis and Process Technologies” Theory examinations November/December 2013.</li><li>• <b>Member of Committee of Courses – 2014</b></li><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></ul>						

Areas of Interest / Specialization
<ul style="list-style-type: none"> <li>• Asymmetric Catalysis</li> <li>• Novel Strategies for Organic Synthesis</li> <li>• Heterocyclic Chemistry</li> <li>• C-H Bond Activation and Functionalization</li> <li>• Synthesis of Biologically Active Compounds</li> </ul>
Subjects Taught
<p><u>M.Sc (Final), Semester III (Theory)</u> Paper 302-A: Photochemistry &amp; Pericyclic Reactions</p> <p><u>M.Sc (Final), 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, 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 Enecarbamates in Asymmetric Synthesis. Department of Applied Chemistry, Indian School of Mines, Dhanbad on 15<sup>th</sup> – 17<sup>th</sup> December, 2014.
- Use of chiral iron catalysts for asymmetric synthesis. Department of Chemistry, Panjab University, Chandigarh, December 04-07, 2013.

<b>Awards and Distinctions</b>
<ul style="list-style-type: none"> <li>• Prof. S. K. Banerjee Memorial Award - 2014</li> <li>• Prof. Bhaskar Reddy Excellency Award - 2016</li> </ul>
<b>Association With Professional Bodies</b>
<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>
<b>Other Activities</b>

Signature of Faculty Member

- You are also requested to also give your complete resume as a DOC or PDF file to be attached as a link on your faculty page.