Faculty Details proforma for DU Web-site

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 (Ext.141)				
Residence						
Mobile		9999330689				
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

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 Associate (*with Prof. H. B. Kagan*), University of Paris-Sud, France.

2000-2005: Research Scholar, Dept. of Organic Chemistry, Indian Institute of Science, Bangalore, India.

Administrative Assignments

Deputy Coordinator for centralized evaluation centre.

Areas of Interest / Specialization

- Asymmetric Catalysis
- Novel Strategies for Organic Reactions
- Heterocyclic Chemistry
- Transition Metal-Catalyzed Organic Transformations
- Synthesis of Biologically Active Compounds

Subjects Taught

M.Sc (Final), Semester III (Theory)

Paper 302-A: Photochemistry & Pericyclic Reactions

M.Sc (Final), Semester II (Theory)

Paper 202-B: Methods in Organic Synthesis

M.Sc (Final), Practicals

Paper 3202: Organic Chemistry

Paper 4205: Organic Chemistry

Research Guidance

Ph.D Awarded : 1

Supervision of Doctoral Thesis, under progress: 4

Publications Profile

- K. Gopalaiah, Anupama 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**, DOI 10.1007/s10562-016-1789-3.

- 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, 30th 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. 9th 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 15th – 17th December, 2014.

- Use of chiral iron catalysts for asymmetric synthesis. Department of Chemistry, Panjab University, Chandigarh, December 04-07, 2013.

Research Projects (Major Grants/Research Collaboration)

Name of the Project: Delhi University Scheme to Strengthen R & D Doctoral Research Programme
Period: 2010 - 2011; 2011 - 2012; 2012 – 2013; 2013 – 2014; 2014-15, 2015-16.
Funding Agency: DU, Grant: Rs. 15.8 lakhs

Name of the Project: DU/DST Purse Grant Phase-II; Period: Jan-2015 to March 2015; Grant: 2.2 Lakhs; DU/DST Purse Grant Phase-II; Period: June-2016 to September 2016; Grant: 2.48 Lakhs

Awards and Distinctions

- Prof. Banerjee Memorial Award - 2014
- Outstanding Manuscript, ACS

Association With Professional Bodies

Memberships

Life member: Indian Chemical Society
Life Member: Chemical Research Society of India

Reviewer
Chemical Reviews
Accounts of Chemical Research
Organic Letters
Journal of Organic Chemistry
RSC Advances
Other Activities