




Faculty Details proforma for DU Web-site

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cc: 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	9999330689				
Email		gopal@chemistry.du.ac.in; gopalaiah@gmail.com				
Web-Page		http://work.du.ac.in/mrsd/uploads/faculty_cv/gopal@chemistry.du.ac.in_Faculty_Proforma_Dr.%20Gopalaiah%20Kovuru.pdf				
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: Ph.D., Department of Organic Chemistry, Indian Institute of Science, Bangalore, India.						
Administrative Assignments						
<ul style="list-style-type: none">• Deputy Coordinator for Centralized Evaluation Centre of M.Sc Chemistry II & IV Semesters and M.Tech. “Chemical Synthesis and Process Technologies” Theory examinations May 2016.• Convener for Organic Chemistry section for the academic year 2017-18.						

Areas of Interest / Specialization
<ul style="list-style-type: none"> • Asymmetric Catalysis • Novel Strategies for Organic Synthesis • C-H Bond Activation and Functionalization • Heterocyclic Chemistry • Synthesis of Biologically Active Molecules
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 (Previous), Practicals</u> Paper 104: Organic Chemistry Paper 204: Organic Chemistry</p>
Research Guidance
<p style="text-align: center;">Ph.D. Awarded : 2</p> <p style="text-align: center;">Supervision of Doctoral Thesis under progress: 4</p>
Publications Profile (Selected Papers)
<ul style="list-style-type: none"> • K. Gopalaiah, A. Saini, A. Devi “Iron-Catalyzed Cascade Reaction of 2-Aminobenzyl Alcohols with Benzylamines: Synthesis of Quinoxalines by Trapping of Ammonia” <i>Organic and Biomolecular Chemistry</i> 2017, <i>15</i>, 5781–5789. • 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> 2017, <i>15</i>, 2259–2268. • H. Yadav, N. Sinha, S. Goel, B. Singh, I. Bdikin, A. Saini, K. Gopalaiah, B. Kumar “Growth, Crystal Structure, Hirshfeld Surface, Optical, Piezoelectric, Dielectric and Mechanical Properties of Bis(L-Asparaginium Hydrogensquarate) Single Crystal” <i>Acta Crystallographica</i>, 2017, <i>B73</i>, 347-359.

- 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 Diodide 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)

- 36th Annual Conference of Indian Council of Chemists at School of Chemistry, Andhra University, Visakhapatnam (26th-28th December, 2017); Talk Title: “Bond Formations between Two Nucleophiles: Sustainable Metal-Catalyzed Oxidative Reactions”.
- 10th National Conference on Solid State Chemistry and Allied Areas at Delhi Technological University, Delhi (1-3 July 2017); Talk Title: “Sustainable Metal-Catalyzed Aerobic Oxidative Transformations for Synthesis of Nitrogen-Heterocycles”.
- National Conference on Industrial Materials at Sharda University, Noida (21-22 October 2016); Talk Title: “Iron-Catalyzed Oxidative Coupling Reactions: Novel Approaches to Nitrogen Heterocycles”.

Association With Professional Bodies

Memberships

Life member: Indian Chemical Society

Life Member: Him Science Congress Association

Life Member: Indian Association of Solid State Chemists and Allied Scientists

Reviewer

Chemical Reviews

Accounts of Chemical Research

Organic Letters

Journal of Organic Chemistry

Organic & Biomolecular Chemistry

RSC Advances

Other Activities

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.