Faculty Details proforma for DU Web-site

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

2000-2005: Ph.D., Department of Organic Chemistry, Indian Institute of Science, Bangalore, India.

Administrative Assignments

- **Convener**, Organic Chemistry Section, Department of Chemistry, Delhi University: May 2017 to May 2018.

- ***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.

- ***Deputy Coordinator*** for Centralized Evaluation Centre of M.Sc Chemistry I & III Semesters and M.Tech. "Chemical Synthesis and Process Technologies" Theory examinations November/December 2013.

Areas of Interest / Specialization

- C-H Bond Activation and Functionalization
- Development of Novel Strategies in Organic Synthesis
- Sustainable Metal-Catalyzed Organic Transformations
- Synthesis of Novel Heterocycles and Biologically Active Molecules

Subjects Taught

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

Paper 3201-B: Heterocyclic Chemistry

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

Paper 202-B: Methods in Organic Synthesis

M.Sc (Previous), Practicals

Paper 104: Organic Chemistry

Paper 204: Organic Chemistry

Research Guidance

Ph.D. Awarded : 3

Ph.D. Thesis Submitted: 1

Supervision of Doctoral Thesis under progress: 3

Publications Profile (Selected Papers)

26) Straightforward Access to 3,4-Dihydro-2H-1,2,4-benzothiadiazine 1,1-dioxides and Quinazolines via Iron-Catalyzed Aerobic Oxidative Condensation of Amines

Kovuru Gopalaiah, Ankit Tiwari, Renu Choudhary, Kuldeep Mahiya

ChemistrySelect **2019**, *4*, 5200-5205.

25) Iron-Catalyzed Aerobic Oxidative Cleavage and Construction of C-N Bonds: A Facile Method for Synthesis of 2,4,6-Trisubstituted Pyridines

Kovuru Gopalaiah, D. Chenna Rao, K. Mahiya, Ankit Tiwari

Asian J. Org. Chem. **2018***, 7*, 1872-1881.

- *Very Important Paper*

24) Iron-Catalyzed Cascade Reaction of 2-Aminobenzyl Alcohols with Benzylamines: Synthesis of Quinazolines by Trapping of Ammonia

Kovuru Gopalaiah, Anupama Saini, Alka Devi

Organic and Biomolecular Chemistry **2017**, *15*, 5781–5789.

23) Copper-Catalyzed Aerobic Oxidative Coupling of *o*-Phenylenediamines with 2-Aryl/Heteroarylethylamines: Direct Access to Construct Quinoxalines

Kovuru Gopalaiah, A. Saini, S. N. Chandrudu, D. C. Rao, H. Yadav, B. Kumar

Organic and Biomolecular Chemistry **2017**, *15*, 2259–2268.

22) An Insight into the Synthesis, Crystal Structure, Geometrical Modelling of Crystal Morphology, Hirshfeld Surface Analysis and Characterization of *N*-(4-Methylbenzyl)benzamide Single Crystals

Sahil Goel, Harsh Yadav, Nidhi Sinha, Budhendra Singh, Igor Bdikin, Devarapalli Chenna Rao, **Kovuru Gopalaiah**, Binay Kumar

Journal of Applied Crystallography, **2017**, *50*, 1498–1511.

21) Growth, Crystal Structure, Hirshfeld Surface, Optical, Piezoelectric, Dielectric and Mechanical Properties of Bis(L-Asparaginium Hydrogensquarate) Single Crystal

Harsh Yadav, Nidhi Sinha, Sahil Goel, Budhendra Singh, Igor Bdikin, Anupama Saini, **Kovuru Gopalaiah**, Binay Kumar

Acta Crystallographica, **2017**, *B73*, 347-359.

20) 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

Kovuru Gopalaiah, Anupama Saini

Catalysis Letters **2016**, *146*, 1648–1654.

19) Iron-Catalyzed Oxidative Coupling of Benzylamines and Indoles: Novel Approach for Synthesis of Bis(indolyl)methanes

Kovuru Gopalaiah, S. N. Chandrudu, Alka Devi

Synthesis **2015**, *47*, 1766-1774.

- *Invited Article*

18) Iron(II) Bromide-Catalyzed Oxidative Coupling of Benzylamines with *ortho*- Substituted Anilines: Synthesis of 1,3-Benzazoles

Kovuru Gopalaiah, S. N. Chandrudu

RSC Advances **2015**, *5*, 5015-5023.

17) Anion (Fluoride)-Doped Ceria Nanocrystals: Synthesis, Characterization, and its Catalytic Application to Oxidative Coupling of Benzylamines

Shahzad Ahmad, **Kovuru Gopalaiah**, S. N. Chandrudu, Rajamani Nagarajan

Inorganic Chemistry **2014**, *53*, 2030–2039.

16) Chiral Iron Catalysts for Asymmetric Synthesis

Kovuru Gopalaiah

Chemical Reviews **2013**, *113*, 3248–3296 (*Impact Factor: 52.613*).

- *Most Read Article in* 2013

15) Recent Developments in Samarium Diiodide Promoted Organic Reactions

Kovuru Gopalaiah, Henri B. Kagan

The Chemical Record **2013**, *13*, 187–208.

- *Invited Review*

14) Use of Nonfunctionalized Enamides and Enecarbamates in Asymmetric Synthesis

Kovuru Gopalaiah, Henri B. Kagan

Chemical Reviews **2011**, *111*, 4599–4657 (*Impact Factor: 52.613*).

13) Early History of Asymmetric Synthesis: Who Are the Scientists Who Set Up the Basic Principles and the First Experiments ?

Henri B. Kagan, **Kovuru Gopalaiah**

New Journal of Chemistry **2011**, *35*, 1933–1937.

- *Focus Article*

12) Equilibrium of Homochiral Oligomerization of a Mixture of Enantiomers. Its Relevance to Nonlinear Effects in Asymmetric Catalysis

Masaki Tsukamoto, **Kovuru Gopalaiah**, Henri B. Kagan

Journal of Physical Chemistry B **2008**, *112*, 15361–15368.

11) Use of Samarium Diiodide in the Field of Asymmetric Synthesis

Kovuru Gopalaiah, Henri B. Kagan

New Journal of Chemistry **2008**, *32*, 607–637.

- *Perspective*

10) The Generalized Anomeric Effect in the 1,3-Thiazolidines: Evidence for Both Sulphur and Nitrogen as Electron Donors. Crystal Structures of Various *N*-Acylthi- azolidines Including Mercury(II) Complexes. Possible Relevance to Penicillin Action

Sosale Chandrasekhar, Deepak Chopra, **Kovuru Gopalaiah**, T. N. Guru Row
Journal of Molecular Structure **2007**, *837*, 118–131.

9) A Simple and Effective Glycine-Catalysed Procedure for the Preparation of Oximes
M. Maheswara, V. Siddaiah, **Kovuru Gopalaiah**, V. Madhava Rao, C. Venkata Rao
Journal of Chemical Research (S) **2006**, *6*, 362–363.

8) Oxalic Acid: A Very Useful Brønsted Acid in Organic Synthesis
Kovuru Gopalaiah
Synlett **2004**, 2838–2839.

7) 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
Sosale Chandrasekhar, **Kovuru Gopalaiah**
Tetrahedron Letters **2003**, *44*, 7437–7439.

6) Beckmann Reaction of Oximes Catalysed by Chloral: Mild and Neutral Procedures
Sosale Chandrasekhar, **Kovuru Gopalaiah**
Tetrahedron Letters **2003**, *44*, 755–756.

5) Juspurpurin, an Unusual Secolignan Glycoside from Justicia Purpurea
Jakka Kavitha, **Kovuru Gopalaiah**, Dodda Rajasekhar, Gottumukkala V. Subbaraju
Journal of the Natural Products **2003**, *66*, 1113–1115.

4) Effective 'Non-Aqueous Hydrolysis' of Oximes with Iodic Acid in Dichloromethane under Mild, Heterogeneous Conditions
Sosale Chandrasekhar, **Kovuru Gopalaiah**
Tetrahedron Letters **2002**, *43*, 4023–4024.

3) Beckmann Rearrangement of Ketoximes on Solid Metaboric Acid: A Simple and Effective Procedure
Sosale Chandrasekhar, **Kovuru Gopalaiah**
Tetrahedron Letters **2002**, *43*, 2455–2457.

2) Beckmann Rearrangement in the Solid State: Reaction of Oxime Hydrochlorides
Sosale Chandrasekhar, **Kovuru Gopalaiah**
Tetrahedron Letters **2001**, *42*, 8123–8125.

1) *Justicia* lignans: Part 9 – Two New lignans from *Justicia neesii*
Kovuru Gopalaiah, Jakka Kavitha, R. V. Kanumuri, D. Rajasekhar, G. V. Subbaraju
Indian Journal of Chemistry **2001**, *40B*, 596–600.

Conference Organization/ Presentations (in the last four years)

- *National Conference on Recent Trends and Advancements in Chemical Sciences*, organized by University of Delhi (29-31 March 2019); Title of the Talk: "Construction of *N*-Heterocycles by Sustainable Metal-Catalyzed Oxidative Reactions"
- *36th Annual Conference of Indian Council of Chemists*, organized by School of Chemistry, Andhra University, Visakshpatnam (26-28 December 2017); Title of the Talk: "Bond Formations between Two Nucleophiles: Metal-Catalyzed Oxidative Reactions"
- *10th National Conference on Solid State Chemistry and Allied Areas*, organized by Delhi Technological University, Delhi (1-3 July 2017); Title of the Talk: "Sustainable Metal-Catalyzed Aerobic Oxidative Transformations for Synthesis of Nitrogen-Heterocycles"
- *National Conference on Industrial Materials*, organized by Sharda University, Noida

(21-22 October 2016); Title of the Talk: "Iron-Catalyzed Oxidative Coupling Reactions: Novel Approaches to Nitrogen Heterocycles"

- *National Conference on Emerging Trends in Pharmaceutical and Chemical Sciences*, organized by Sri Venkateswara University, Tirupati (28-29 March 2016); Title of the Talk: "Synthesis of Nitrogen-Heterocycles by Oxidative Coupling Methods"

- *International Conference on Materials Science & Technology*, organized by University of Delhi, Delhi (01-04 March 2016); Title of the Talk: "Synthesis of Nitrogen Heterocycles Using Sustainable Metal-Catalysts

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.