

## Detailed CV

**Name:** Dr. Mahagundappa Rachappa Maddani

**Educational Qualification:**

M.Sc. (2003-Karnatak University Dharwad, Karnataka)

Ph.D. (2010-IISc., Bengaluru, Karnataka)

**Designation:** Assistant Professor

**Address for Correspondence:**

Department of Chemistry

Mangalore University

Mangalagangothri -574199



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**Phone:** Office: +918242288628; +918242287262;

**Mobile:** 09964344543

**Academic achievements:**

- 1) CSIR-UGC, NET – December 2009
- 2) The Guha Research Medal (Best thesis award) for the year 2009 – 2010

Area of Specialization: **Organic Chemistry**

Research Areas - **Synthetic Methodologies and Catalysis**

Research Activities: Nature and type of research - The most fundamental expedition in the organic synthesis is to explore new synthetic methods for preparing biologically active molecules in an efficient and elegant manner. In this context, our research is mainly focused on design and exploitation of novel organic/organometallic/metal reagents and catalysts in organic synthesis. Development of new synthetic methodologies through the formation of C-C and C-heteroatom bonds for the preparation of biologically and pharmaceutically important molecules. Research is also directed towards employing green reaction conditions for the synthesis of new molecules and development of Multi Component Reactions (MCR). Interested in testing the efficiency of new chiral reagents and catalysts in asymmetric transformations and examining their applications in organic synthesis.


In addition, we are also involved in C-C and C-hetero bond formations through C-H activation/functionalization strategies using green chemistry principles.

## Professional Teaching / Research Experience

- Assistant Professor** Mar 2014 – Present  
Department of Chemistry, Mangalore University, INDIA,
- Advinus Therapeutics Ltd., Bangalore** Oct 2011 - Feb 2014  
**Designation:** Principal Scientist
- Postdoctoral research:** June 2010 - May 2011  
**Research Topic:** *"Stereoselective synthesis of enantiopure compounds for biological studies"*  
Institut de Chimie Moléculaire et des Matériaux d'Orsay, University of Paris Sud-XI, France  
**Advisor:** Professor HENRI B. KAGAN
- Ph.D programme:** August 2005 - June 2010  
**Research Topic:** *"Chemistry of Molybdenum Xanthate (MoO<sub>2</sub>/Et<sub>2</sub>NCS<sub>2</sub>/2): Applications in Organic Synthesis"*  
Department of Organic Chemistry, Indian Institute of Science, Bangalore, INDIA  
**Supervisors:** Dr. K. R. PRABHU and Prof. S. CHANDRASEKARAN
- Aurigene (Accelerating discovery) Ltd., Bangalore** Jan 2005 – June 2005  
**Designation:** Science Associate
- CIPLA Ltd, Bangalore** June 2003 – Dec 2004  
**Designation:** Synthetic Organic Chemist

## Research Guidance (M.Phil. / Ph.D.):

### Research Scholars – Ph.D. Degree awarded:

Sl. No.	Research Scholar	Title of Thesis	Year of Award
1	 <b>Dr. Ganesh S. Sorabad</b>	<b>“Design and Development of C-X, C-S and C-Se Bonds on Electron Rich Systems via Oxidative C-H Functionalization”</b>	<b>Feb 2020</b>

### Research Scholars - Ongoing



**Ms. Vishakha Rai P.**  
**(2017 - Present)**



**Ms. Lavina G. Serrao**  
**(2018 - Present)**



**Ms. Kavyashree K. Gond**  
**(2019 - Present)**



**Mrs. Shwethambika P.**  
**(2014 - Present)**

## Research Group @ 2018-2019



### Research Projects: Completed

- 1. UGC-BSR Startup Research Grant:** From Oct-2015 to Sep-2017  
**Title of the Project:** *Novel synthetic strategy for easy access to proline derivatives.* **Funding Agency:** UGC; **Amount:** Rs. 6 Lacs.
- 2. SERB-DST, Early Career Research Award. Restructured Start up Research Grant:**  
From 17-06-2016 to 16-06-2019  
**Title of the Project:** *Investigation of reactivities and applications of new electrophile components for Morita-Baylis-Hillman reaction.*  
**Funding Agency:** SERB-DST, Govt. of INDIA; **Amount:** Rs. 32.67 Lacs

## Book Chapter:

1. Separation of Enantiomers: New methods and Applications – Chapter II: Stoichiometric Kinetic Resolution reactions, Mahagundappa R. MADDANI, JeanClaude FIAUD, and Henri B. KAGAN, Wiley-VCH Publication. Published online: 2nd May 2014, Print ISBN-9783527330454, online ISBN-9783527650880

## Patents:

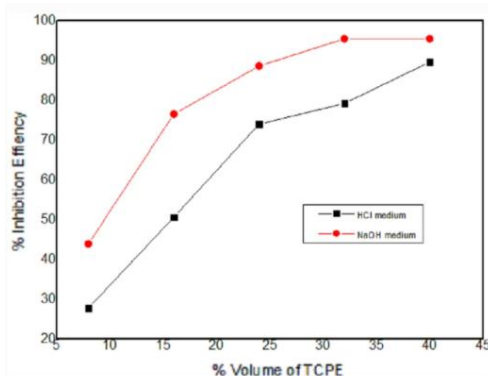
1. "Process for preparing fluoxastrobin", Rama Mohan Hindupur, Avinash Sheshrao Mane, Sankar Balakrishnan, Jivan Dhanraj Pawar, Mahagundappa Rachappa Maddani, Sandeep Wadhwa, WO2015006203 (A1), Publication date: 15/01/2015.
2. "Process for preparing fluoxastrobin", Rama Mohan Hindupur, Avinash Sheshrao Mane, Sankar Balakrishnan, Jivan Dhanraj Pawar, Mahagundappa Rachappa Maddani, Sandeep Wadhwa, Vic Prasad, US20150011753 (A1), Publication date: 08/01/2015, also published as WO2015006203 (A1).

## Research Journal Publications

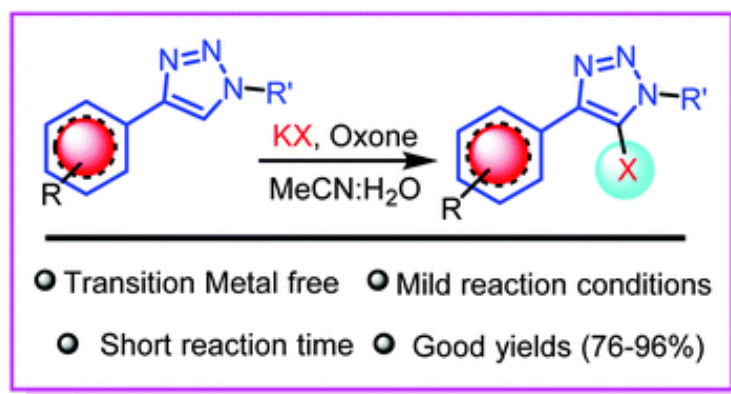
1. Efficient and Direct Selenocyanation of Ketene Dithioacetals Using Malononitrile-SeO<sub>2</sub> Under Transition-Metal-Free Conditions, Vishakha Rai, Ganesh Shivayogappa Sorabad and Mahagundappa Rachappa Maddani, [ChemistrySelect, 2021, 6, 6468-6471](#)



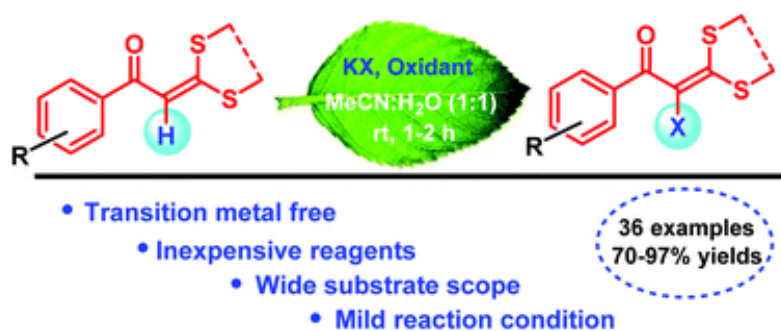
2. Chemical and Electrochemical Investigation on Mitigation of Acidic and Alkaline Corrosion for Al-63400 Alloy Using Tender Cocoa Pod Extract, Shwethambika Pernaje, Ishwara J. Bhat, Mahagundappa R. Maddani, [Journal of Bio and Tribo Corrosion, 2021, 7\(3\)](#)



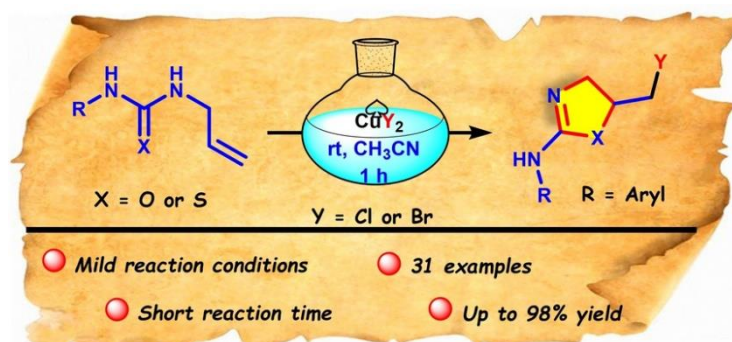
3. Facile and direct halogenation of 1,2,3-triazoles promoted by a KX–oxone system under transition metal free conditions, Vishakha Rai, Ganesh Shivayogappa Sorabadi and Mahagundappa Rachappa Maddani, [New J. Chem., 2021, 45, 3969-3973](#)



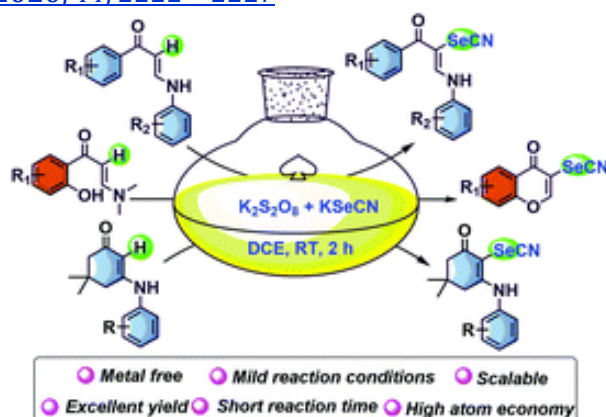
4. Transition metal free, green and facile halogenation of ketene dithioacetals using a KX–oxidant system, Vishakha Rai, Ganesh Shivayogappa Sorabadi and Mahagundappa Rachappa Maddani, [New J. Chem., 2021, 45, 1109-1113](#)



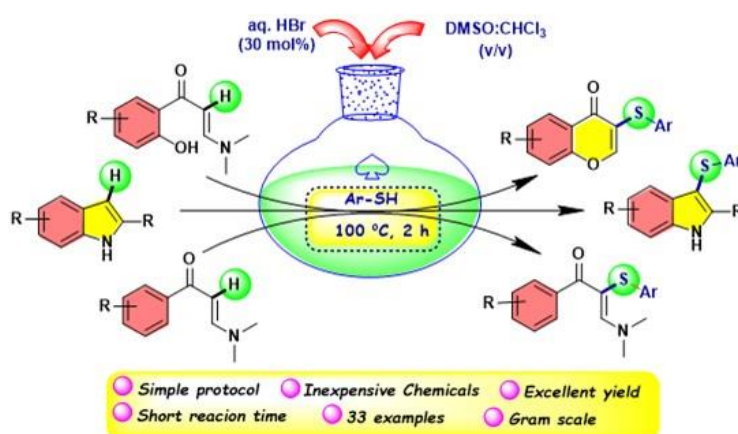
5. CuX<sub>2</sub> Mediated Facile Halocyclization of *N*-Allyl Thioureas, Vishakha Rai, Ganesh Shivayogappa Sorabadi and Mahagundappa Rachappa Maddani, [ChemistrySelect, 2020, 5, 6565-6569](#)



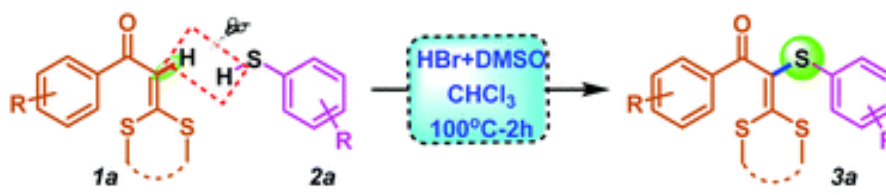
6. Facile, regioselective oxidative selenocyanation of *N*-aryl enaminones under transition-metal-free conditions, Ganesh Shivayogappa Sorabadi and Mahagundappa Rachappa Maddani, *New J. Chem.*, **2020**, *44*, 2222 - 2227



7. Metal free, facile synthesis of sulfenylated chromones and indoles promoted by an aqueous HBr–DMSO system, Ganesh Shivayogappa Sorabadi and Mahagundappa Rachappa Maddani, *Asian Journal of Organic Chemistry*, **2019**, *8*, 1336-1343



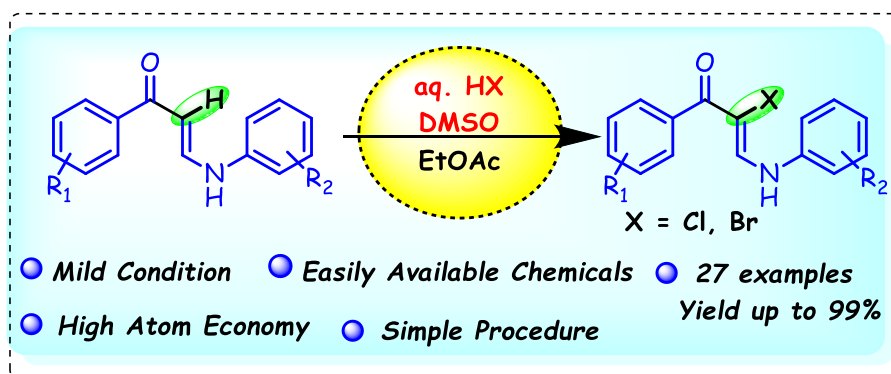
8. Metal free, facile sulfenylation of ketene dithioacetals catalyzed by an HBr–DMSO system, Ganesh Shivayogappa Sorabadi and Mahagundappa Rachappa Maddani, *New J. Chem.*, **2019**, *43*, 5996 - 6000



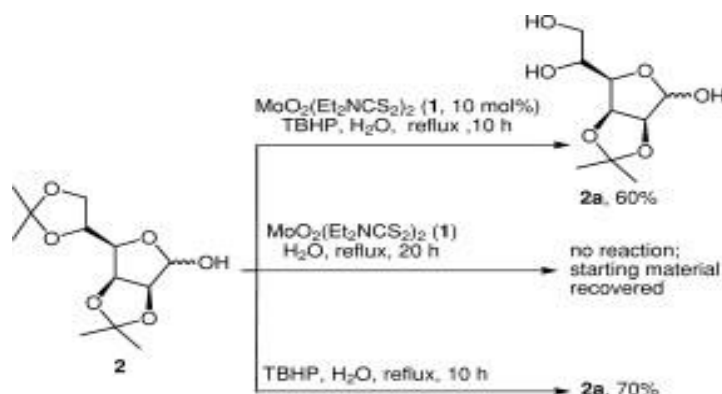
#### Highlights of Work

- ✓ Short reaction time
  - ✓ Simple and convenient protocol
  - ✓ No Metals and Ligands
  - ✓ Wide Substrate Scope
  - ✓ Atom economy
- 36 examples  
96 - 99% yield

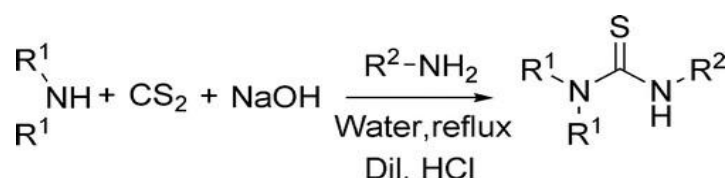
9. Metal-free, green and efficient oxidative a halogenation of enamines by halo acid and DMSO, Ganesh Shivayogappa Sorabadi and Mahagundappa Rachappa Maddani, *New J. Chem.*, 2019, 43, 6563 – 6568



10. Chemistry of Macrocyclic  $\beta$ -Lactam: An Overview, Vijaya Bhaskar Vangala, Mahagundappa Rachappa Maddani, Rama Mohan Hindupur, and Hari Narayan Pati, The Japan Institute of heterocyclic Chemistry publication (Japan), *Heterocycles*, 2015, 91, 707 – 717
11. Metal free deprotection of terminal acetonides by using tert-Butylhydroperoxide in aqueous medium, Mahagundappa R. Maddani, Kandikere R. Prabhu, Georg Thieme Verlag KG (Germany) publication, *Synlett*, 2011, 821 – 825



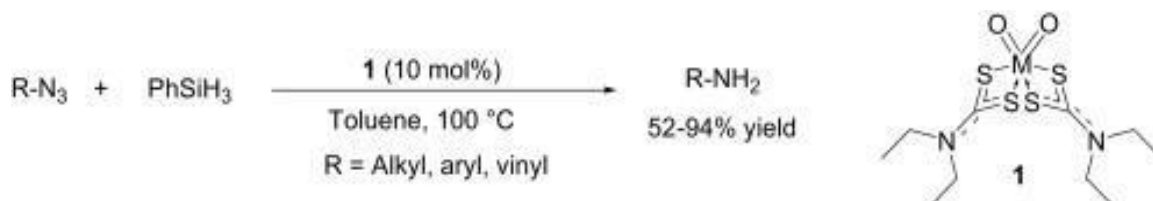
12. A convenient method for the synthesis of substituted thioureas in aqueous medium, Mahagundappa R. Maddani and Kandikere R. Prabhu, American Chemical Society (US) publication, *J. Org. Chem.* 2010, 75, 2327 – 2332



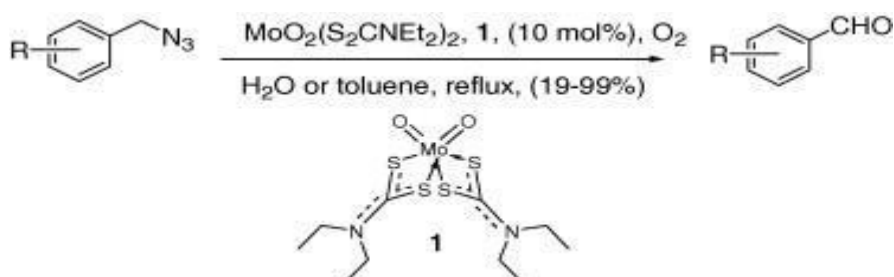
13. Dioxomolybdenum reagents in organic synthesis: utility of redox capability to design reduction and oxidation, Mahagundappa R. Maddani and Kandikere R. Prabhu, Indian Institute of Science (India) publication, *Journal of the Indian Institute of Science*, 2010, 90, 287 – 297



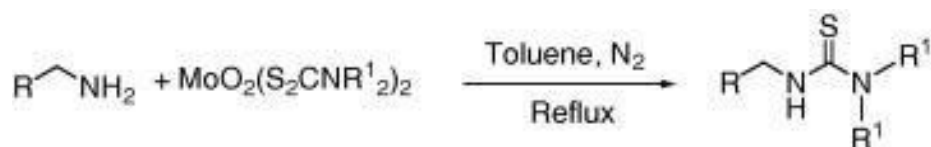
14. Chemoselective reduction of azides catalyzed by molybdenum xanthate by using phenylsilane as the hydride source, Mahagundappa R. Maddani, Saravan K. Moorthy and Kandikere R. Prabhu, Elsevier publication (UK), [Tetrahedron 2009, 66, 329 – 333](#)



15. A chemoselective aerobic oxidation of benzylic azides catalyzed by molybdenum xanthate in an aqueous medium, Mahagundappa R. Maddani and Kandikere R. Prabhu, Elsevier publication (UK), [Tetrahedron Lett., 2008, 49, 4526-4530](#)



16. A convenient method for the synthesis of substituted thioureas, Mahagundappa R. Maddani and Kandikere R. Prabhu, Elsevier publication (UK), [Tetrahedron Lett., 2007, 48, 7151-7154](#)



Impact of publications in terms of (Non-science faculty can leave out this item, if unable to fill up).

**Google Scholar Citations:**

<https://scholar.google.com/citations?user=HjAyHzUAAAAJ&hl=en>

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