

## 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



**E-mail:** [mahagundappa@mangaloreuniversity.ac.in](mailto:mahagundappa@mangaloreuniversity.ac.in);  
[mahagundappa@gmail.com](mailto:mahagundappa@gmail.com)

**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
- 3) **Award for Research Publications for the year 2021-22** (ARP 2021-22), VGST, Government of Karnataka

**Area of Specialization:** **Organic Chemistry**

**Research Areas - Synthetic Methodologies and Catalysis**

**Research Activities:** The most fundamental expedition in the organic synthesis is to explore new synthetic methods for preparing biologically and pharmaceutically important 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. 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

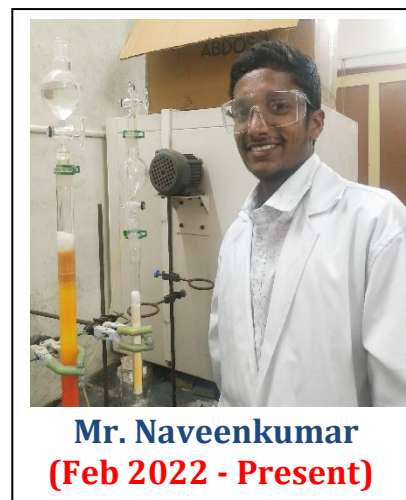
1. **Assistant Professor** Mar 2014 – Present  
Department of Chemistry, Mangalore University, INDIA,
2. **Advinus Therapeutics Ltd., Bangalore, INDIA** Oct 2011 - Feb 2014  
**Designation:** Principal Scientist
3. **Postdoctoral research:** June 2010 - May 2011  
**Research Topic:** "*Stereoselective 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
4. **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>]<sub>2</sub>): Applications in Organic Synthesis*"  
Department of Organic Chemistry, Indian Institute of Science, Bangalore, INDIA  
**Supervisors:** Dr. K. R. PRABHU and Prof. S. CHANDRASEKARAN
5. **Aurigene (Accelerating discovery) Ltd., Bangalore** Jan 2005 - June 2005  
**Designation:** Science Associate
6. **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>
2	 <b>Dr. Vishakha Rai P.</b>	<b>“Design and Development of C-Heteroatom Bonds on Electron Rich Systems via Oxidative C-H Functionalization and 1,6-Addition Reactions”</b>	<b>Mar 2022</b>
3	 <b>Dr. Shwethambika P.</b>	<b>“A Study on the Effectiveness of Plant Extracts as Corrosive Inhibitors on Mild Steel and Aluminium”</b>	<b>Mar 2023</b>

### Research Scholars - Ongoing



## Research Group @ 2019



## Research Group @ 2022



### 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, INDIA; **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

### Research Projects: Ongoing - As Co PI

- 1. VGST, Government of Karnataka, INDIA**  
From 2020-21 to 2022-23  
**Title of the Project:** *Areca husk fiber as thermal insulator and acoustical absorber: Conversion of agricultural waste into useful product.*  
**Funding Agency:** VGST, Govt. of Karnataka, INDIA; **Amount:** Rs. 30 Lacs

## Book Chapter:

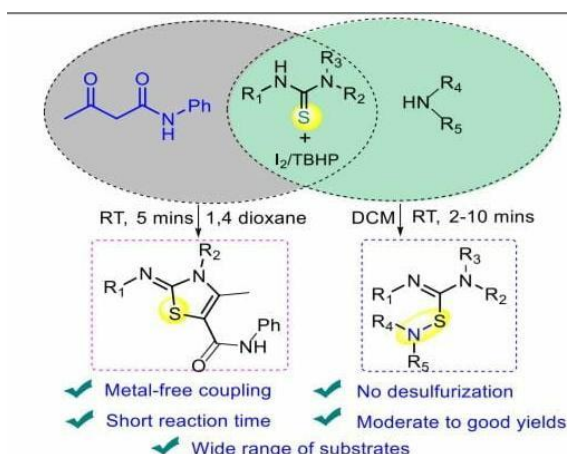
1. Separation of Enantiomers: New methods and Applications – Chapter II: Stoichiometric Kinetic Resolution reactions, Mahagundappa R. MADDANI, Jean Claude FIAUD, and Henri B. KAGAN, Wiley-VCH Publication. Published online: 2nd May 2014, Print ISBN-9783527330454, online ISBN-9783527650880

## Patents:

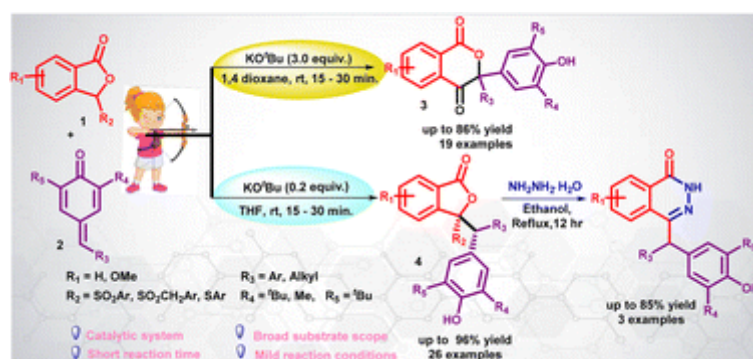
1. "Process for preparing fluoxastrobin", Rama Mohan Hindupur, Avinash Sheshrao Mane, Sankar Balakrishnan, Jivan Dhanraj Pawar, Mahagundappa Rachappa Maddani, Sandeep Wadhwa, WO2015006203 (A1), Publication date: 15/01/2015.
2. "Process for preparing fluoxastrobin", Rama Mohan Hindupur, Avinash Sheshrao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

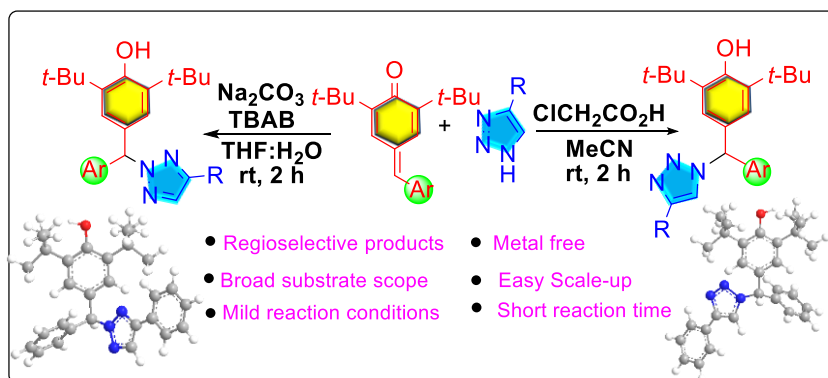
20. Iodine catalysed oxidative cross coupling of thioureas and amines without desulfurization, Lavina Gladis Serrao, Vishaka Rai, Ganga Periyasamy, Mahagundappa Rachappa Maddani, *Asian J. Org. Chem.*, <https://doi.org/10.1002/ajoc.202300032>



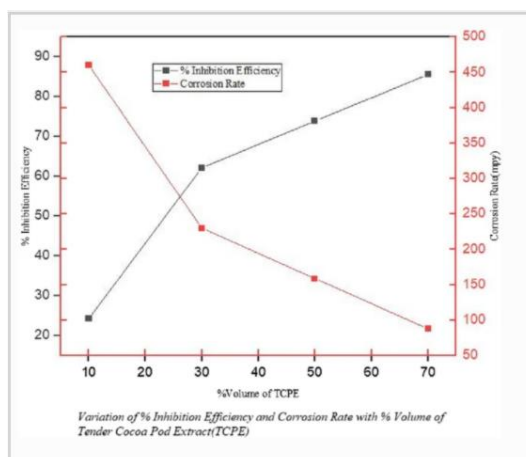
19. Addition of Sulfonylphthalides to *para*-Quinone methides: Selective 1,6 additions and Oxidative annulations, Kavyashree K. Gond, and Mahagundappa R. Maddani, *Org. Biomol. Chem.*, <https://doi.org/10.1039/D2OB02134J>



18. 1,6-Addition of 1,2,3-NH triazoles to para-quinone methides: Facile access to highly selective N<sup>1</sup> and N<sup>2</sup> substituted triazoles, Vishakha Rai, Kavyashree P., Sarvesh S. Harmalkar, Sunder N. Dhuri and Mahagundappa R. Maddani, [Org. Biomol. Chem., 2022, 20, 345-351](#)



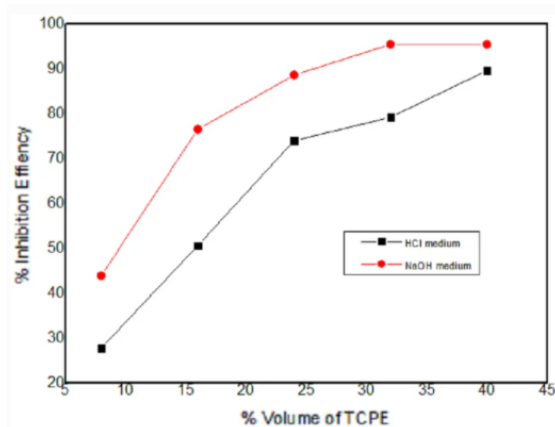
17. Spectroscopic characterization and evaluation of tender Theobroma cacao pod extract as ecofriendly inhibitor for mild steel in 1 M HCl, Shwethambika Pernaje, Ishwara J. Bhat, Mahagundappa R. Maddani, [Research on Chemical Intermediates, 2021, 47, 5369–5388](#)



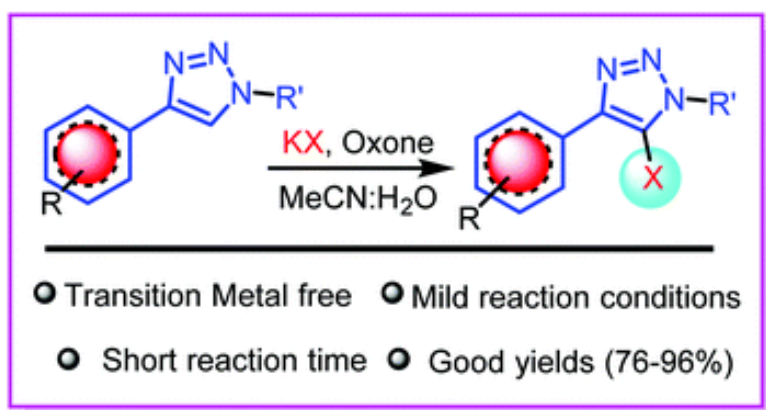
16. Efficient and Direct Selenocyanation of Ketene Dithioacetals Using Malononitrile-SeO<sub>2</sub> Under Transition-Metal-Free Conditions, Vishakha Rai, Ganesh Shivayogappa Sorabab and Mahagundappa Rachappa Maddani, [ChemistrySelect, 2021, 6, 6468-6471](#)



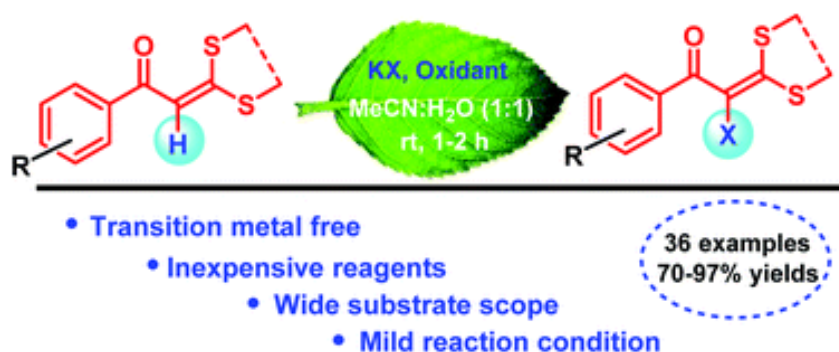
15. Chemical and Electrochemical Investigation on Mitigation of Acidic and Alkaline Corrosion for Al-63400 Alloy Using Tender Cocoa Pod Extract, Shwethambika Pernaje, Ishwara J. Bhat, Mahagundappa R. Maddani, [Journal of Bio and Tribo Corrosion, 2021, 7\(3\), Article No-120](#)



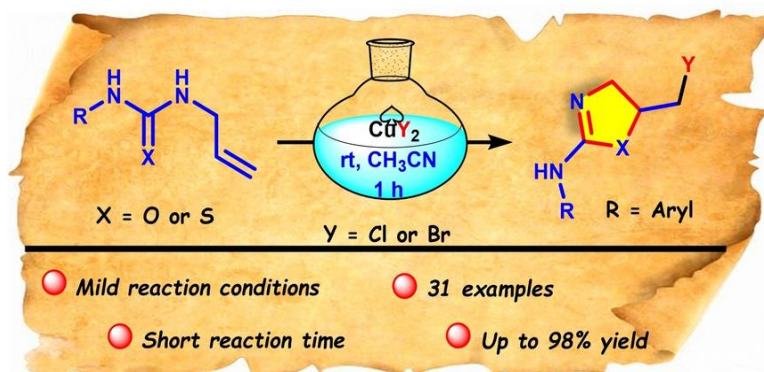
14. Facile and direct halogenation of 1,2,3-triazoles promoted by a KX–oxone system under transition metal free conditions, Vishakha Rai, Ganesh Shivayogappa Sorabadi and Mahagundappa Rachappa Maddani, [New J. Chem., 2021, 45, 3969-3973](#)



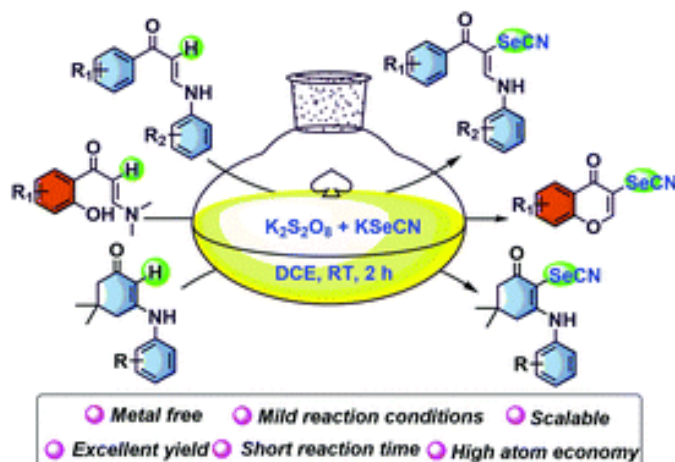
13. Transition metal free, green and facile halogenation of ketene dithioacetals using a KX–oxidant system, Vishakha Rai, Ganesh Shivayogappa Sorabadi and Mahagundappa Rachappa Maddani, [New J. Chem., 2021, 45, 1109-1113](#)



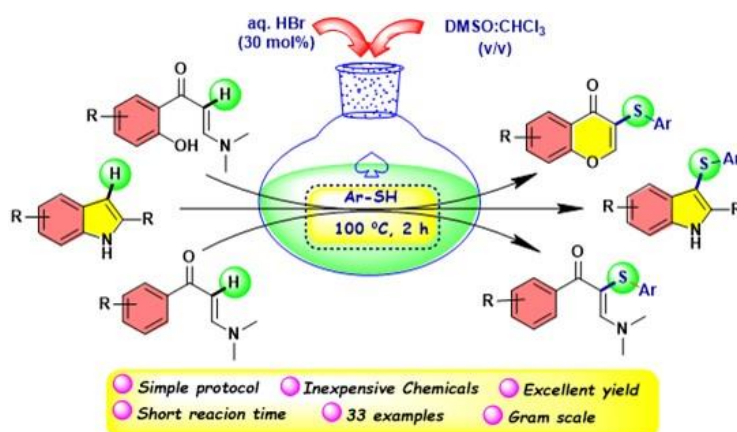
12.  $\text{CuX}_2$  Mediated Facile Halocyclization of *N*-Allyl Thioureas, Vishakha Rai, Ganesh Shivayogappa Sorabadi and Mahagundappa Rachappa Maddani, *ChemistrySelect*, **2020**, *5*, 6565-6569



11. 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

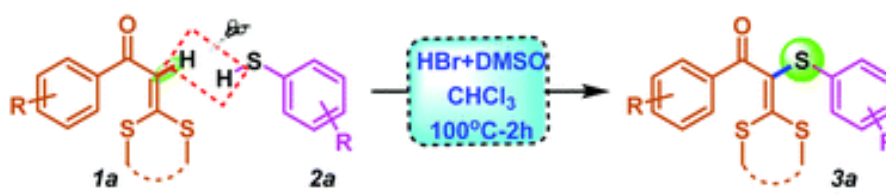


10. Metal free, facile synthesis of sulfenylated chromones and indoles promoted by an aqueous HBr–DMSO system, Ganesh Shivayogappa Sorabadi and Mahagundappa Rachappa Maddani, *Asian Journal of Organic Chemistry*, **2019**, *8*, 1336-1343





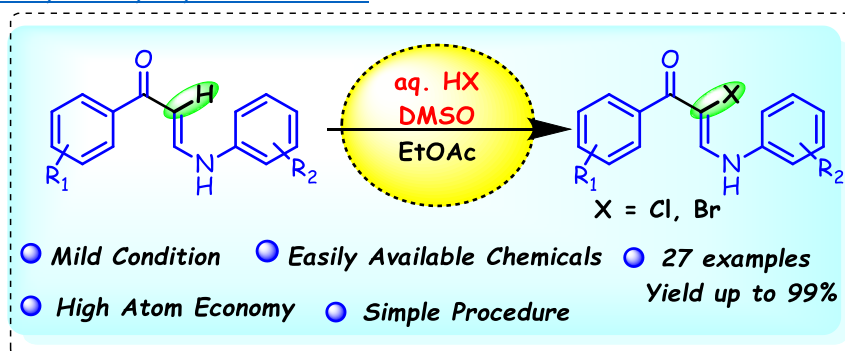
9. Metal free, facile sulfenylation of ketene dithioacetals catalyzed by an HBr–DMSO system, Ganesh Shivayogappa Sorabadi and Mahagundappa Rachappa Maddani, *New J. Chem.*, **2019**, *43*, 5996 – 6000



**Highlights of Work**

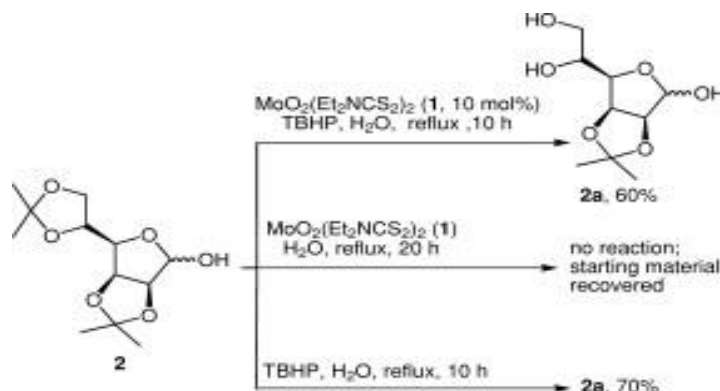
- ✓ Short reaction time
  - ✓ Simple and convenient protocol
  - ✓ No Metals and Ligands
  - ✓ Wide Substrate Scope
  - ✓ Atom economy
- 36 examples  
96 - 99% yield

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

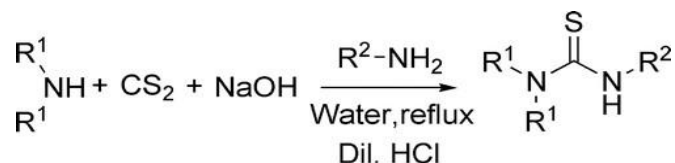


7. Chemistry of Macrocyclic  $\beta$ -Lactam: An Overview, Vijaya Bhaskar Vangala, Mahagundappa Rachappa Maddani, Rama Mohan Hindupur, and Hari Narayan Pati, The Japan Institute of heterocyclic Chemistry publication (Japan), *Heterocycles*, **2015**, *91*, 707 – 717

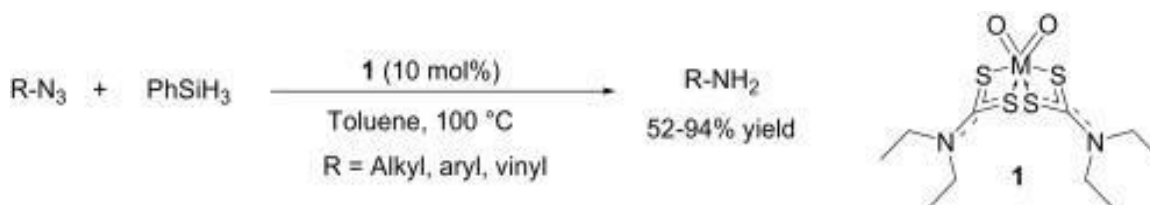
6. Metal free deprotection of terminal acetonides by using *tert*-butylhydroperoxide in aqueous medium, Mahagundappa R. Maddani, Kandikere R. Prabhu, Georg Thieme Verlag KG (Germany) publication, *Synlett*, **2011**, 821 – 825



5. 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](#)

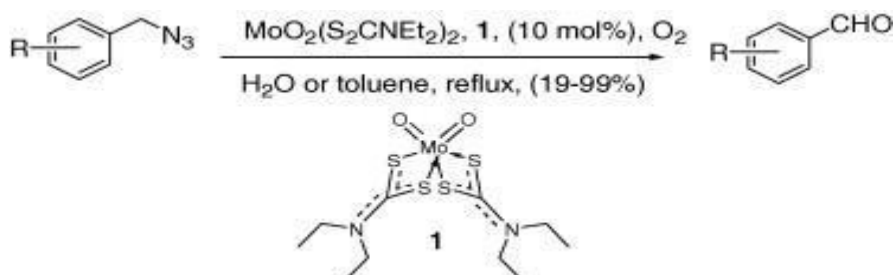


4. Dioxomolybdenum reagents in organic synthesis: utility of redox capability to design reduction and oxidation, Mahagundappa R. Maddani and Kandikere R. Prabhu, Indian Institute of Science (India) publication, [Journal of the Indian Institute of Science, 2010, 90, 287 – 297](#)
3. Chemoselective reduction of azides catalyzed by molybdenum xanthate by using phenylsilane as the hydride source, Mahagundappa R. Maddani, Saravan K. Moorthy

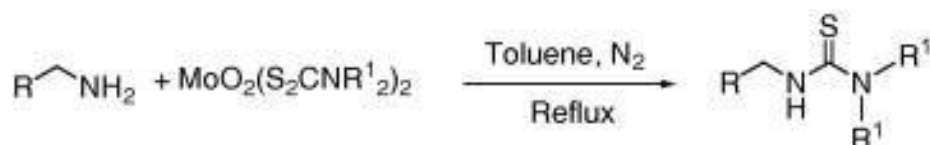


and Kandikere R. Prabhu, Elsevier publication (UK), [Tetrahedron 2009, 66, 329 – 333](#)

2. 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](#)



1. 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**

### **Google Scholar Citations:**

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

h-index

i10 index

Citation index