

Kalpataru Das



Research Area: “Pt-Catalyzed Development of Environmentally Benign Process for the Direct Amination of Allylic Alcohols”

Key words: Pt-catalysis, direct allylic amination

Education:

2008: Ph.D. in Organic Chemistry from Indian Institute of Technology Kanpur, India.

Advisor: Professor Manas K. Ghorai

2001: M.Sc. in Chemistry from Calcutta University, India.

1999: B.Sc. in Chemistry from Calcutta University, India.

Employment Experience:

Nov. 2009-Present: Global COE Post-doctoral Fellow

Advisor: Professor Kazushi Mashima

Graduate School of Engineering Science,

Osaka University, Japan.

Feb. 2008- Aug. 2009: Post-doctoral Research Associate

Advisor: Professor Michael Schmittel

University of Siegen, Germany.

Awards:

- **2009-Present:** Global COE Post-doctoral Fellowship, Department of Chemistry, Graduate School of Engineering Science, Osaka University, Japan.
- **2008-2009:** Post-doctoral Fellowship, Department of Chemistry, University of Siegen, Germany.
- **2004-2007:** Senior Research Fellowship, Department of Chemistry, IIT Kanpur, India.
- **2002-2004:** Junior Research Fellowship, Department of Chemistry, IIT Kanpur, India.

Selected Publications:

1. Manas K. Ghorai, Kalpataru Das, Amit Kumar, Koena Ghosh, "An efficient route to regioselective opening of *N*-tosylaziridines with zinc(II) halides", *Tetrahedron Lett.*, **46**, (23), 4103-4106 (2005).
2. Manas K. Ghorai, Amit Kumar, Kalpataru Das, "Lewis acid mediated novel ring-opening rearrangement of 2-aryl-*N*-sulfonyl azetidines to enantiopure (*E*)-allylamines", *Org. Lett.*, **9**, (26), 5441-5444 (2007).
3. Manas K. Ghorai, Kalpataru Das, Dipti Shukla, "Lewis acid mediated highly regioselective S_N2-type ring-opening of 2-aryl-*N*-tosylazetidines and aziridines by alcohols", *J. Org. Chem.*, **72**, (15), 5859-5862 (2007).
4. Manas K. Ghorai, Dipti Shukla, Kalpataru Das, "Enantioselective syntheses of morpholines and their homologues *via* an S_N2-type ring opening of aziridines and azetidines with haloalcohols" *J. Org. Chem.*, **74**, (18), 7013-7022 (2009).

Research Statement:

Transition metal-catalyzed amination of allylic compds is on-going.

Research Goal:

Development of direct amination of allylic alcohols is targeted.