

# Curriculum Vitae

## Dr. Jaya Prakash Das

Lecturer

Department of Chemistry

Ravenshaw University

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## Professional Experience:

- 2011 (May-continuing)      **Lecturer in Chemistry**, Ravenshaw University
- 2010 (July-April)          **Assistant Professor**  
Bhubaneswar Institute of Technology, Bhubaneswar
- 2010 (April-June)         **Assistant Professor**  
C. V. Raman College of Engineering, Bhubaneswar
- 2006 – 2010                **Schulich Postdoctoral Fellow**  
Schulich Faculty of Chemistry,  
Technion-Israel Institute of Technology, Haifa, Israel.  
*"Enantioselective synthesis of all-carbon quaternary stereo centers in acyclic systems"*  
**Advisor: Prof. Ilan Marek**
- 2006 (Mar-Oct)            **CSIR-SRF (Extended)**  
Indian Institute of Science, Bangalore, India.  
**Advisor: Prof. Goverdhan Mehta**
- 2000–2006                 **CSIR Research Fellow**  
Indian Institute of Technology, Kharagpur, India  
**Advisor: Prof. Sujit Roy**

## Education:

- 1993-1996                 **B. Sc. in Chemistry**  
Utkal University, Orissa, India.  
Passed with 1st Class Honors
- 1996-1998                 **M. Sc. in Chemistry (Organic Chemistry Specialization)**  
Utkal University, Orissa, India
- 2000 – 2006               **Ph.D.**  
Indian Institute of Technology, Kharagpur, India  
Thesis title: *"Modified Hunsdiecker Reactions: Halo-, Nitro- and Seleno-Decarboxylation of Aromatic  $\alpha$ ,  $\beta$ -Unsaturated Carboxylic Acids"*  
**Thesis advisor: Prof. Sujit Roy**

## Area (s) of specialization:

**Organic Chemistry, Organometallic Chemistry, Asymmetric synthesis:** My research interests are focused on the discovery of novel metal/organo-catalyzed transformations, new methods for

efficient stereo- and enantioselective strategies for the synthesis of important complex molecular structures.

I am particularly interested in developing carbon-carbon and carbon-heteroatom bond forming processes, which efficiently create multiple stereocenters and their applications in the synthesis of valuable building blocks for organic chemistry, biologically important and structurally interesting organic compounds.

I would like to pursue a research career involving studies in chemistry, biology, and medicine with a special emphasis on synthesis and on the utilization of synthesis and mechanistic studies to address problems of biochemical and medicinal significance in a long term.

The goal of my multidisciplinary research plan for the next 5 years is to discover, develop and understand (1) new multicomponent reaction strategies for the creation of multiple stereocenters including the extremely difficult all-carbon quaternary stereocenters and (2) synthesis of complex molecular architecture for broad synthetic application.

### **Publications:**

#### **Research Papers in Peer Reviewed Journals:**

1. Enantioselective Synthesis of All-Carbon Quaternary Stereogenic Centers in Acyclic Systems.  
Jaya Prakash Das; Ilan Marek *Chem. Commun.* **2011**, 47 (16), 4593 - 4623.
2. A Unique Approach to Aldol Products for the Creation of All-Carbon Quaternary Stereocenters.  
Jaya Prakash Das, Helena Chechik, Ilan Marek *Nature Chem.* **2009**, 1, 128  
☞ Highlighted in *Synform* **2009**, 5, A43  
☞ Highlighted in *Angew. Chem. Int. Ed.* **2009**, 48, 2-5
3. Synthesis of Alkynyl and Vinyl Selenides via Selenodecarboxylation of Arylpropionic and Cinnamic Acids.  
Jaya Prakash Das, Ujjal Kanti Roy, Sujit Roy *Organometallics* **2005**, 24, 6136
4. A Nitro-Hunsdiecker Reaction: From Unsaturated Carboxylic Acids to Nitrostyrenes and Nitroarenes.  
Jaya Prakash Das, Pradipta Sinha, Sujit Roy *Organic Letters* **2002**, 4, 3055
5. Catalytic Hunsdiecker Reaction of  $\alpha$ ,  $\beta$ -Unsaturated Carboxylic Acids: How Efficient is the Catalyst?  
Jaya Prakash Das, Sujit Roy *Journal of Organic Chemistry* **2002**, 22, 7861
6. Highly Enantioselective Approach to Aldol Products for the Creation of All-Carbon Quaternary Stereocenters.  
Jaya Prakash Das; Helena Chechik; Ilan Marek (**Manuscript under preparation**)

#### **Conference Presentations:**

##### **As Poster Presentations:**

1. An Efficient New Approach to Aldol product with the Creation of All-Carbon Quaternary Stereocenters.  
Jaya Prakash Das; Helena Chechik, Ilan Marek  
**The 12<sup>th</sup> European Symposium on Organic Reactivity**, September 6-11, 2009  
Technion-Israel Institute of Technology, Haifa, Israel
2. A Unique Approach to Aldol Products for the Creation of All-Carbon Quaternary Stereocentres.  
Jaya Prakash Das; Helena Chechik, Ilan Marek

*Symposium of the Lise Meitner-Minerva Center*, November 13-14, 2008  
Hebrew University, Jerusalem, Israel. (**Best Poster Award**)

&

*The 74th Annual Meeting of the Israel Chemical Society*, February 8-9, 2009,  
Tel Aviv, Israel.

3. A Multicomponent Addition Approach Towards an Efficient Route to Aldol Surrogate.  
Jaya Prakash Das; Helena Chechik, Ilan Marek  
*The 73rd Annual Meeting of the Israel Chemical Society*, February 4-5, 2008  
International Convention Center (Binyanei Ha'Uma), Jerusalem, Israel  
Hebrew University, Jerusalem, Israel,  
&  
*Symposium of the Lise Meitner-Minerva Center*, June, 2007  
*Schulich Mini-Symposium*, 22nd November, 2007  
Schulich Faculty of Chemistry, Technion, Haifa, Israel.
4. Catalytic Hunsdiecker Reaction (CHR): Breaking the Barrier?  
Jaya Prakash Das; Sujit Roy  
*Recent Perspectives in Organic Chemistry*, Jan 24-25, 2002, IACS, Kolkata.
5. Catalytic Hunsdiecker Reaction: How Efficient a Catalyst is?  
Jaya Prakash Das; Sujit Roy  
*National One-Day Symposium*, Oct 13, 2001  
Chemistry Department, IIT, Kharagpur.

#### **Research Projects, Evaluation Research, Consultancies:**

A proposal has been considered and Recommended for support under Fast Track Proposals for Young Scientists scheme of DST-New Delhi. (Registration No. 221/2010)

#### **Honours, Fellowships:**

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|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 2008      | Won the <b>Best Poster Presentation</b> Award at the <b>Symposium of the Lise Meitner-Minerva Center</b> , Hebrew University, Jerusalem, Israel. |
| 2008-2010 | <b>Schulich Postdoctoral Fellowship</b> of the Technion-Israel Institute of Technology, Israel.                                                  |
| 2006-2008 | <b>VATAT post doctoral fellowship</b> of the Israel Council for Higher Education                                                                 |
| 2006      | Awarded Senior Research Fellowship ( <b>SRF-Extended</b> ) of the Council of Scientific and Industrial Research ( <b>CSIR</b> ), India.          |
| 2003      | Awarded Senior Research Fellowship ( <b>SRF</b> ) of the Council of Scientific and Industrial Research ( <b>CSIR</b> ), India                    |
| 2000      | Qualified All India Graduate Aptitude Test ( <b>GATE</b> ) Examination.                                                                          |
| 1996-1998 | Recipient of the <b>National Scholarship of Post-Graduate Studies</b> .                                                                          |
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