

**Dr. Rushikesh G. Joshi**



Assistant Professor  
CGBIBT  
[rushikesh.joshi@utu.ac.in](mailto:rushikesh.joshi@utu.ac.in)

**Education**

**Doctor of Philosophy, Biochemistry**

The Maharaja Sayajirao University of Baroda, Vadodara

2009- 2016

**Master of Science, Biochemistry**

Saurashtra University, Rajkot

2007-2009

**Bachelor of Science, Biochemistry**

Sardar Patel University, Vallabhvidhyanagar

2004-2007

**Specialization**

**Biochemistry, Molecular Biology and Proteomics**

**Professional/Teaching Experience**

**Assistant Professor**

Uka Trasadiya University

Aug 2016 to at present

**Assistant Professor (Temporary)**

The Maharaja Sayajirao University of Baroda

Jul 2016 to Aug 2016

**Research Interest**

- **Protein structural and functional relationship**
- **Protein folding and structural biology**
- **Medical Microbiology**



Resolving Double Helix For Life

## **Research Experience**

**Ph.D. Research work** Aug 2009 to Feb 2016

Thesis Title: "Structural and Functional characterizations of degradation determinant signals of Ornithine Decarboxylase (ODC)"

Ph.D. Guide: Prof. C. Ratna Prabha, The Maharaja Sayajirao University of Baroda, India.

**Senior Research Fellowship** Aug 2013 to Jan 2016

Funding agency: Centre for Scientific and Industrial Research (CSIR), Govt. of India.

Project title: Studies on the effects of mutations in parallel  $\beta$ -bulge of ubiquitin on protein translation, sorting and lysosomal degradation.

**Junior Research fellow** Jul 2009 to Dec 2011

Funding agency: Department of Biotechnology (DBT), Govt. of India

Project title: Structural studies on the Degradation Determinant Signals of Ornithine Decarboxylase and redesigning of Ornithine Decarboxylase for efficient targeted protein degradation

**Dissertation research during Masters study (M.Sc.)** Jun 2008 to Jun 2009

Project title: Superiority of herbal and natural antioxidants mix therapy over their individual application in methylmercury induced stressed chick.

Mentor: Prof. P. P. Sood, UGC-Emeritus Scientist, Saurashtra University, India.

## **Creditable position**

- **Member of The Protein Society**
- **Member of Alumni Association of Biochemistry Department (ABCD)**
- **Member of Society for Biological Chemist**
- **Supervised 9 M.Sc. students on 6months dissertation projects(2009-15) during PhD tenure**

## **Presentations**

### **International**

- 1) Poster presentation on "Targeted protein degradation achieved through a combination of degrons from yeast and mammalian ornithine decarboxylase" at 29th Annual symposium of The Protein Society-2015, Barcelona, Spain. Travel award from DST-SERB, DBT & CICS.

- 2) Poster presentation on “Structural studies on degradation determinant signals of ODC” in INDO-US symposium at IIT, Bombay, 2011.

### **National**

- 3) Oral presentation on “Structural characterization of degron peptides from ODC” in XXVI-Gujarat Science congress-2012, The M. S. University of Baroda.
- 4) Oral presentation on “Effect of C-terminal degron tail on the stability of ubiquitin” in Regional Science congress-2012 at The M. S. University of Baroda.
- 5) Oral presentation on “Fluorescence studies on degradation determinant signals of ODC” at I2IT, Pune, 2010
- 6) Poster presentation on “Oxidative stress induced by methylmercury and its amelioration with Curcumin, Vitamin B complex, Glutathione and their Combination” in National symposium on “Recent trends in cellular research” at Saurashtra University, Rajkot, 2009.
- 7) Poster presentation on Ebola viruses at M. B. Patel Science College, Anand, 2007.

### **Professional/Research Training**

- 1) Two day national seminar on “Molecular Basis of Diseases” at The M. S. University of Baroda, Vadodara in 2014.
- 2) Three day National symposium on “Emerging Trends in Biochemical Sciences” at The M. S. University of Baroda, Vadodara in 2014.
- 3) Workshop on “DNA damage & Repair Mechanism” at The M. S. University of Baroda, Vadodara in 2011.
- 4) Workshop on “Essential of cell biology: Cytoskeleton” at The M. S. University of Baroda, Vadodara in 2011.
- 5) National seminar on “Global approach of Biochemistry: Molecule to cell” at Saurashtra University, Rajkot in 2010.
- 6) Workshop on “Intellectual Property Management for Biotechnology Industry” Jointly organized by BIRAP, BCIL & GSBTM in 2010.
- 7) National conference on “Spectroscopy & Stereochemistry” at Saurashtra University, Rajkot in 2009.
- 8) National conference on “CME in Immunology” at The M.S. University of Baroda, Vadodara in 2009.
- 9) National seminar on “Silencing the message: mi and si RNAs” at The M.S. University of Baroda, Vadodara in 2008.

## Publications

### RESEARCH PAPER/S

- 1) **Joshi R. G.** and Prabha C. R. (2016) Degrons of Yeast and Mammalian Ornithine Decarboxylase Enzymes Make Potent Combination for Regulated Targeted Protein Degradation. *Applied Microbiology and Biotechnology*: Accepted for publication. (IF: 3.337)
- 2) **Joshi R. G.**, Kulkarni S., Prabha C. R. (2015) Engineering Degrons of Yeast Ornithine Decarboxylase as Vehicles for Efficient Targeted Protein Degradation. *Biochimica et Biophysica Acta (BBA) - General Subjects*: 1850(12): 2452–2463. (IF: 5.081)
- 3) Jadeja R. N., Vyas K. M., Gupta V. K., **Joshi R. G.**, Prabha C. R. (2012) Syntheses, characterization and molecular structures of calcium(II) and copper(II) complexes bearing O2-chelate ligands: DNA binding, DNA cleavage and anti-microbial study. *Polyhedron*: 31(1):767–778. (IF: 2.108)
- 4) Vyas K. M., **Joshi R. G.**, Jadeja R. N., Prabha C. R., Gupta V. K. (2011) Synthesis, spectroscopic characterization and DNA nuclease activity of Cu(II) complexes derived from pyrazolone based NSO-donor Schiff base ligands. *Spectrochimica Acta Part A*: 15(84): 256–268. (IF: 2.653)
- 5) Sood P. P., Gupte K., **Joshi R.**, Vekariya V., Vekaria P., Delvadiya C., Ankola P., Barchha S., Manvar R., Joshi K. K. and Shah A. (2010) Superiority of herbal and natural antioxidants mix therapy over their individual application in methylmercury induced stressed chick: Ashwagandha, Vitamin E and Glutathione combinations. *Journal of Cell and Tissue Research*: 10(1): 2049-2058.
- 6) Sood P. P., **Joshi R.**, Gupte K., Vekariya V., Vekaria P., Delvadiya C., Ankola P., Barchha S., Manvar R., Kundu R. S., Joshi K. K. and Shah A. (2009) Superiority of herbal and natural antioxidants mix therapy over their individual application in methylmercury induced stressed chick: Curcumin, Vitamin B complex and Glutathione combinations. *Journal of Cell and Tissue Research*: 9(2): 1803-1810.

Date: 11<sup>th</sup> September 2016

Place: Tarsadi (Bardoli)