

Shubhangi Kaushik
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PROFESSIONAL BACKGROUND AND EDUCATION

- 2018-Present **DBT-Women Scientist**
National Institute of Pharmaceutical Education & Research (NIPER), Guwahati,
Assam, India
- 2016 (03 months) **Assistant Professor**
Biyani Group of Colleges,
Affiliated to University of Rajasthan, Jaipur, India
- 2012 – 2015 **Postdoctoral Fellow**
Loschmidt laboratories, Department of Experimental Biology,
Masaryk University, Czech Republic
Advisor: Prof. Jiri Damborsky
*Impact of access tunnel engineering in haloalkane dehalogenases on binding
kinetics and catalysis.*
- 2007 – 2012 **PhD in Pharmaceutical Biotechnology**
National Institute of Pharmaceutical Education & Research (NIPER), Mohali,
India
Advisor: Prof. U.C. Banerjee
Thesis: *Protein engineering studies on Pseudomonas putida nitrilase to gain an
insight into sequence-function relationship*
- 2005 – 2007 **Master of Science in Biotechnology**
University of Rajasthan, Jaipur, India
Marks: *80% with distinction*
Dissertation: *Protection of lipid peroxidation and reduced glutathione
concentration in erythrocytes subjected to oxidative stress.*
- 2002 – 2005 **Bachelor of Science in Biology**
University of Rajasthan, Jaipur, India
Marks: *79% with distinction*

AWARDS & FELLOWSHIPS

- 2013-2015 **OPVK postdoctoral fellowship** for employment of best young scientists from
European Social Fund and Ministry of Education, Czech Republic.
- 2009 – 2012 Awarded Senior Research fellowship from Department of Biotechnology (**DBT-
SRF**), India.
- 2007-2009 Awarded Junior Research fellowship from Department of Biotechnology (**DBT-
JRF**), India.
- 2009 **Best poster award** at the Annual Conference of Association of Microbiologists of

India (AMI).

- 2007 Qualified **National Eligibility Test (NET)** by Department of Biotechnology, Ministry of Science and Technology, India.
- 2007 Qualified All India **Graduate Aptitude Test in Engineering (GATE)**, by Ministry of Human Resource and Development, Government of India, New Delhi.

TEACHING ASSISTANTSHIP

- 2016 Teaching courses to Bachelor's and Master's students
- 2014-2015 Supervision of student and technical staff for experimental work
- 2009-2011 Assisted in supervising, experimental design of Master's thesis entitled:
2010-2011 Molecular evolution of *Pseudomonas putida* nitrilase for enhanced activity.
2010-2011 Engineering *Pseudomonas putida* for improved oxidative stability.
- 2009-2010 Engineering *Pseudomonas putida* arylacetone nitrilase for the enhanced substrate promiscuity.
- 2009-2010 Cloning and overexpression of *Bacillus megaterium* Cytochrome P450 in *E.coli*.

PUBLICATIONS

- **Kaushik S**, Marques S, Khirsariya P, Prokop Z, Paruch K, Brezovsky J, Chaloupkova R, Damborsky J. Impact of access tunnel engineering on catalysis is ligand-specific. *FEBS J.* 2018.
- **Kaushik S**, Prokop Z, Damborsky J, Chaloupkova R. Kinetics of binding of fluorescent ligands to enzymes with engineered access tunnels. *FEBS J.* 2017.284:134-148.
- **Kaushik S**, Mohan U, Banerjee UC. Exploring residues crucial for nitrilase function by site-directed mutagenesis to gain better insight into sequence-function relationships. *Int. J. Biochem. Mol. Biol.* 2012. 3: 384-391.
- Jain D, Meena VS, **Kaushik S**, Kamble A, Chisti Y, Banerjee UC. Production of nitrilase by recombinant *Escherichia coli* in a laboratory scale bioreactor. *Fermentat. Technol.* 2012. 1:103.
- Pawar S, Meena VS, **Kaushik S**, Kamble A, Kataria S, Chisti Y, Banerjee UC. Stereoselective conversion of mandelonitrile to (R)-(-)-mandelic acid using immobilized cells of a recombinant *Escherichia coli*. *3Biotech.* 2012.

- Mohan U, **Kaushik S**, Banerjee UC. Development of a random mutagenesis approach with mutagenic potential of oxidized nucleotides products. *Open Biotechnol. J.* 2011.5: 21-27.
- Luqman S, **Kaushik S**, Srivastava S, Kumar R, Bawankule DU, Pal A, Darokar MP, Khanuja SPS. Protective effect of medicinal plant extracts on biomarkers of oxidative stress on erythrocytes. *Pharm. Biol.* 2009. 47: 483-490.
- Luqman S, Kumar R, **Kaushik S**, Srivastava S, Darokar MP, Khanuja SPS. Antioxidant potential of root of *Vetiveria zizanioides* (L.) Nash. *Indian J. Biochem. Biophys.* 2009, 46: 122-125.

PRESENTATIONS AT CONFERENCES & SEMINARS

- Kaushik S et.al. 12th Biotrans conference. Vienna, Austria, 2015 (**Poster**)
 - Kaushik S et.al. 15th Workshop of Physical Chemists and Electrochemists. Czech Republic, 2015 (**Talk**)
 - Kaushik S et. al. 59th Annual meeting of Biophysical society. Baltimore, USA, 2015 (**Poster accepted**)
 - Kaushik S et.al. Annual conference of Association of Microbiologists of India. Pune, India, 2009 (**Poster**)
 - Kaushik S et.al. Indian Chemical Engineering Congress “CHEMCON”. Chandigarh, India, 2008 (**Talk**)
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