

Educational Qualification:

- Ph.D. (Biotechnology), Indian Institute of Technology (IIT) Roorkee, India
- Master's in technology (Integrated) in Biotechnology, GGSIP University Delhi, India

Post doctoral research Experience (Six years)

- Post doctoral researcher, University of Antwerp, Belgium
- Marie-Curie Postdoctoral fellow, Bioprocess Pilot facility (BPF) Delft and Technical University of Delft (TU Delft), Netherlands.
- Post doctoral researcher, Swedish University of Agricultural Sciences (SLU) Umeå, Sweden.
- Post-doctoral fellow, Trinity College Dublin, Ireland

Areas of Interest

- Bioprocess and Fermentation technology
- Biorefinery, Bio-based chemicals and Biomass conversion technologies
- Enzyme technology
- Bioenergy and biofuels production
- Microbial and Industrial Biotechnology
- Plants based proteins studies

I am working for more than thirteen years in the field of Industrial Biotechnology. The major working areas include lignocellulosic biomass pretreatment (laboratory, bench scale, pilot scale and continuous pretreatment), Detoxification of lignocellulosic hydrolysate, Development of toxic resistant yeast strains for ethanol production, Enzymatic hydrolysis, Cellulolytic enzyme production (cellulase and xylanase) from fungal strains, Bacterial and yeast fermentation, Utilisation of lignocellulosic waste biomass to renewable chemicals (bioethanol and bioplastics etc.), bioprocess development. I also worked with different plant-based commercially important proteins and characterisation for the same.

Fellowships and grants

- Ramalingaswami re-entry fellowship 2017-18
- Marie-Curie fellowship for post doctoral research in Netherlands (March 2015-May 2017)
- Awarded COST EUBis travel grant for attend workshop in Portugal (July 2014)
- Aailed Institutional (IIT) MHRD fellowship for Ph.D. IIT Roorkee, India.
- Qualified Graduate Aptitude Test of Engineering (GATE)-2004

Research Articles

- **Rashmi Kataria**, Trevor Woods, William Casey, Federico Cerrone, Reeta Davis, Kevin O'Connor, Rohit Ruhel and Ramesh Babu "Surfactant mediated hydrothermal pretreatment of Ryegrass followed by enzymatic saccharification for polyhydroxyalkanoate production. Industrial crop and products 111, 625-632 (2018) [IF:4.19]

- Daniel Eriksson, Mehrdad Arshadi, **Rashmi Kataria** and Urban Bergsten. Lipophilic extractives in different tree fractions and forestry assortments of *Pinus sylvestris* due for thinning or final cutting. *Scandinavian Journal of Forest Research*. in press (2018) [IF: 1.6]
- **Rashmi Kataria**, Annemerel Mol, Els Schulten, Anton Happel, Solange I. Mussatto Bench scale steam explosion pretreatment of acid impregnated elephant grass biomass and its impacts on biomass composition, structure and hydrolysis. *Industrial crop and products* 106, 48-58 (2017) [IF:4.19]
- Sara Johansson, Karin Carlqvist, **Rashmi Kataria**, Thomas Ulvcrona, Urban Bergsten, Mehrdad Arshadi, Mats Galbe, Gunnar Liden “Implications of differences in macromolecular composition of stem fractions for processing of Scots pine” *Wood Science and Technology*, 49, 1037-1054 (2015) [IF: 1.91]
- **Rashmi Kataria** and Sanjoy Ghosh “NaOH pretreatment and enzymatic hydrolysis of *Saccharum spontaneum* for reducing sugars production” (*Energy resources Part A: Recovery, Utilization, and Environmental Effects*, 36, 1028-1035, (2014) [IF: 0.75]
- **Rashmi Kataria**, Rohit Ruhel, Ramesh Babu and Sanjoy Ghosh “Saccharification of alkali treated biomass of Kans grass contributes higher sugar in contrast to acid treated biomass”. *Chemical Engineering Journal*, 230, 36–47 (2013). [IF: 8.35]
- Reeta Davis, **Rashmi Kataria**, Federico Cerrone, Anthonia O’Donovan, Maria G. Tuohy, Ramesh Padamati, Kevin O’Connor. Grass to Bioplastics: Conversion of grass biomass into fermentable sugars and its utilization for mcl PHA production by *Pseudomonas* strains. *Bioresource Technology*, 150,202-209 (2013) [IF: 6.66]
- Rohit Ruhel, **Rashmi Kataria** and Bijan Choudhury “Trends in Bacterial Trehalose metabolism and significant nodes of metabolic pathway in the direction of trehalose accumulation”. *Microbial Biotechnology* 5, 493-502 (2013) [IF: 4.85]
- **Rashmi Kataria** and Sanjoy Ghosh “Saccharification of Kans grass using enzyme mixture from *T.reesei* for bioethanol production”. *Bioresource technology*, 102, 9970–9975 (2011) [IF: 6.66]
- **Rashmi Kataria**, Gaurav Chaudhary and Sanjoy Ghosh “Potential of Bioenergy Production from grasses and its impact on environment”. *Research journal of biotechnology*, 4, 5-14 (2009) [IF: 0.23]

Presentations and Conferences

- Rohit Ruhel and **Rashmi Kataria**. Poster presentation: Significance of alkali pretreatment with subsequent sachharification over acid pretreatment for sugar extraction. Eco-Bio 2016, Rotterdam, **Netherlands**
- **Rashmi Kataria**, Els Schulten, Adrie Straathof, Solange Mussatto and Anton Happel, Poster presentation: A Steam Explosion Pretreatment Study for Acid Socked Elephant Grass. Eco-Bio 2016, **Rotterdam, Netherlands**
- Rashmi Kataria. Oral presentation, Marie Curie Initial Networks, Athens, Greece (14th October 20 Blomberg Saitton, D., SP Processum AB, Örnköldsvik; Christakopoulos, P., Luleå University of Technology (LTU); Clark, J., Kettemann, C. & Matharu, A. S., York University; Gebart, R., LTU; Holmbom, B., Åbo Akademi University; Ioannis, D., SLU, Uppsala; Janssen, J., Hasselt University; Lestander, T. A., SLU; Mäkelä, M., SLU; Rashmi, K. SLU. Final project report presentation co-author. Update on various traits of biotechnology in forestry to meet future needs in food, feed, fibre, and fuel. 55th meeting of the FAO Advisory Committee on Sustainable Forest-based Industries (ACSFI),10-11 **June 2014, St. Petersburg, Russia**
- **Rashmi Kataria**, Mehrdad Arshadi, I. Backlund, P. Geladi, U. Bergsten. Poster presentation: Analysis of fatty and resin acid content in different wood tissues of *Pinus Contorata* and *Pinus Sylvestris* for biorefinery application. *World Bioenergy* 2014 (3-5 June) Jönköping, **Sweden**.

- **Rashmi Kataria**, Luisa Lenzi and Ramesh Babu. Oral presentation: “Effect of surfactants pre-treatment on lignocellulosic biomass”. *Frontiers in Biorefining (30 October -2 November 2012)* St. Simons Island, **Georgia USA**.
- Reeta Davis, **Rashmi Kataria**, Federico Cerrone, Gearoid Duane, Eoin Casey, Ramesh Padamati, Kevin O’Connor. Co-author: Conversion of Cellulosic Biomass from Grass into Fermentable Sugars and its Effective Utilization for Biosynthesis of Medium Chain Length Polyhydroxyalkanoates (MCL-PHA) by *Pseudomonas* SPP. *Frontiers in Biorefining (30 October -2 November 2012)* **USA**
- Lalit Kumar Singh, Gaurav Chaudhary, **Rashmi Kataria** and Sanjoy Ghosh. Co-author: Production of reducing sugars from lignocellulosic biomass for fuel ethanol production. National conference on ‘Water, Energy and Biodiversity’ jointly organized by The Institute of Engineers (India), Tripura State Centre, Tripura and *National Institute of hydrology, Roorkee. Tripura, India (August 20-22, 2011)*.
- **Rashmi Kataria** and Sanjoy Ghosh. Poster presentation: Alkali pretreatment and Enzymatic hydrolysis of Kans grass to fermentable sugars for bioethanol production. Fourth International conference on Plant and environmental Pollution (8-11 December 2010) held at **NBRI Lucknow, India**
- **Rashmi Kataria**, Chaudhary Gaurav and Sanjoy Ghosh. Co-author: Potential for Bioenergy Production and its Impact on Environment. First International biotechnology conference ISBT-2008, **Sikkim, India (28th to 30th December 2008)**.
- **Rashmi Kataria** and Sanjoy Ghosh Poster presentation. Poster presentation: A Comparative study of physicochemical and biological methods for production of fermentable sugars from certain variety in switch grass. 49th AMI DU, **Delhi, India. (November 18-20, 2008)**

Meetings and Workshops

- Marie-Curie project, RENESENG workshop “Biorefinery Modelling: State-of-the-art tools in flow sheeting, property modelling, synthesis& optimization, DTU, Copenhagen, **Denmark (27-31 May 2015)**
- Food waste processing in the frame of the biorefinery” concept meeting **Lisbon, Portugal (14-18 July 2014)**
- Three days seminar and workshop on “Microscopy and analysis” Organized by CMA, Trinity College **Dublin, Ireland (April 2012)**
- Scanning electron microscope (SEM) working certificate on Carl Zeiss ultra plus microscope in AML, CRANN, Trinity College **Dublin, Ireland (2012)**
- Took part in three days symposium on “Excitement of Biotechnology-Past, Present and future” organized by Department of biotechnology, GGSIP University (10-12 January 2003), **Delhi, India**.
- Took part in a two days workshop “Indraprastha Regional Workshop in Intellectual Property Rights” organized by Department of Science and Technology, Govt. of India in 2005 in GGSIP University, **Delhi, India**