



School of Life Science

Name: Dr. Anita Singh

Designation: Assistant Professor

Department: Environmental Sciences

E-Mail: anita.evs@cuammu.ac.in

Phone: 9419294912



Academic Profile:

- Post doctoral research from the University of Georgia, Athens, Georgia, USA
- PhD in Environmental Sciences, Guru Jambheshwar University of Science & Technology, Hisar, November, 2012
- Assistant Professor in Department of Environmental Sciences, Central University of Jammu, Jammu (08, July 2013 – Till Date)
- CSIR-RA, Guru Jambheshwar University of Science & Technology, Hisar (1st April, 2013-6th June, 2013)
- UGC-NET in Environmental Sciences (December-2005)
- M.Sc. Environmental Sciences, Guru Jambheshwar University of Science & Technology, Hisar (2004-2006)

Awards/Fellowship

International

- ❖ UGC Raman Post-doctoral fellowship for USA (2015-2017)

National

- ❖ CSIR-RA (Earth Science)- April-2013
- ❖ CSIR-SRF (Earth Science) April-2011

Research Interests:

- Biofuels (liquid and gaseous)
- Ethanol/ butanol production from lignocellulosic biomass
- Bioremediation

RESEARCH PROJECT

<i>Title of the project and duration</i>	<i>Amount sanctioned</i>	<i>Status</i>	<i>Funding Agency</i>
Selective removal of inhibitors found in lignocellulosic hydrolysates and simultaneous conversion of mixed sugars into bio-ethanol using microbial consortium (03 Years)	27.5	Ongoing (2019-2021)	DST SERB
Cellulase Enzyme Production from Local Thermophilic Fungi by Using agro-Industrial Residues as Substrate (02 Years)	6.0	Completed (2015-2017)	UGC Start-up-Grant

Selected Publications:

1. **Anita Singh**, Stacy R. Bedore, Nilesh K. Sharma, Sarah A. Lee, Mark A. Eiteman, and Ellen L. Neidle. "Removal of aromatic inhibitors produced from lignocellulosic hydrolysates by *Acinetobacter baylyi* ADP1 with formation of ethanol by *Kluyveromyces marxianus*." *Biotechnology for biofuels* 12, no. 1 (2019): 91. **(IF 5.4)**
2. **Anita Singh**, and Somvir Bajar. "Optimization of cellulolytic enzyme production by thermophilic fungus *Thermoascus aurantiacus* using response surface methodology." *Indian Journal of Biochemistry and Biophysics (IJBB)* 56, no. 5 (2019): 399-403. **(IF 0.3)**
3. **Anita Singh**, Somvir Bajar, and Narsi R. Bishnoi. "Physico-chemical pretreatment and enzymatic hydrolysis of cotton stalk for ethanol production by *Saccharomyces cerevisiae*." *Bioresource technology* 244 (2017): 71-77. **(IF 5.8)**
4. Somvir Bajar, **Anita Singh**, C. P. Kaushik, and Anubha Kaushik. "Statistical assessment of dumpsite soil suitability to enhance methane bio-oxidation under interactive influence of substrates and temperature." *Waste Management* 63 (2017): 188-195. **(IF 5.4)**
5. Somvir Bajar, **Anita Singh**, C. P. Kaushik, and Anubha Kaushik. "Evaluation and statistical optimization of methane oxidation using rice husk amended dumpsite soil as biocover." *Waste management* 53 (2016): 136-143. **(IF 5.4)**
6. **Anita Singh**, Somvir Bajar, and Narsi R. Bishnoi. "Enzymatic hydrolysis of microwave alkali pretreated rice husk for ethanol production by *Saccharomyces cerevisiae*, *Scheffersomyces stipitis* and their co-culture." *Fuel* 116 (2014): 699-702. **(IF 5.1)**
7. **Anita Singh** and Narsi R. Bishnoi, "Comparative study of various pretreatment techniques for ethanol production from water hyacinth". *Industrial Crops and Products* 44 (2013) 283-289 **(IF 4.1)**
8. **Anita Singh**, Punita Sharma, Alok Kumar Saran, Namita Singh and Narsi R. Bishnoi. Comparative study on Ethanol production from pretreated sugarcane bagasse using immobilized *Saccharomyces cerevisiae* on various matrices". *Renewable Energy* 50 (2013)488-493. **(IF 5.4)**
9. **Anita Singh** and Narsi R. Bishnoi. "Ethanol production from pretreated wheat straw hydrolyzate by *Saccharomyces cerevisiae* via sequential statistical optimization". *Industrial Crops and Products* 41 (2013)221-226 **(IF 4.1)**
10. **Anita Singh**, Manju, Anurag Yadav and Narsi R Bishnoi. "Statistical screening and optimization of process variables for xylanase production utilizing alkali pretreated rice husk". *Annals of Microbiology* 63 (2013) 353-361. **(IF 1.4)**
11. Anamika Verma, Shalu, **Anita Singh**, Narsi R. Bishnoi and Asha Gupta. "Biosorption of Cu (II) using free and immobilized biomass of *Penicillium citrinum*". *Ecological engineering*, 61 (2013) 486-490 **(IF 3.4)**
12. **Anita Singh**, Manju, Suman Rani and Narsi R. Bishnoi. "Malachite green dye decolorization on immobilized dead yeast cells employing sequential design of experiments". *Ecological Engineering* 47 (2012)291-296 **(IF 3.4)**
13. **Anita Singh** and Narsi R. Bishnoi. "Enzymatic hydrolysis optimization of microwave alkali pretreated wheat straw and ethanol production by yeast". *Bioresource Technology* 108(2012) 94-101 **(IF 5.8)**
14. **Anita Singh** and Narsi R. Bishnoi. "Optimization of Ethanol production from microwave alkali pretreated rice straw using statistical experimental designs by *Saccharomyces cerevisiae*". *Industrial Crops and Products* 37(2012)334-341 **(IF 4.1)**

15. **Anita Singh** and Narsi R. Bishnoi. "Optimization of enzymatic hydrolysis of pre-treated rice straw and ethanol production". Applied Microbiology and Biotechnology 93(2012)1785-1793 (**IF 3.6**)
16. **Anita Singh**, Shuchi Tuteja, Narsi R. Bishnoi and Namita Singh. Enhanced saccharification of rice straw and hulls by microwave- alkali pretreatment and lignocellulolytic enzyme production". Bioresource Technology 102(2011) 1773-1782 (**IF 5.8**)
17. **Anita Singh**, Somvir Bajar, Narsi R. Bishnoi and Namita Singh. Laccase production by *Aspergillus heteromorphus* using distillery spent wash and lignocellulosic biomass. Journal of Hazardous Materials 176(2010)1079-82 (**IF 7.6**)
18. **Anita Singh**, Namita Singh and Narsi R. Bishnoi. "Enzymatic hydrolysis of chemical pretreated rice straw by *Aspergillus niger* and *Aspergillus heteromorphous*". Journal of Scientific and Industrial Research, 69 (2010) 232-237 (**IF 0.735**)