

Neelam Zeb

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Work experience

Women University Mardan
Lecturer

Oct, 2016 — Present

Education

PhD (Industrial Microbiology)

*National Institute for Biotechnology and Genetic Engineering (NIBGE),
Faisalabad*

In Progress

M.Phil Microbiology

Quaid-i-Azam University, Islamabad, pakistan

Aug, 2011 — Nov, 2013

Bachelor of Science (Biotechnology)

Center Of Biotechnology & Microbiology, University Of Peshawar

Dec, 2007 — Jun, 2011

Intermediate

Mardan Model School and College Mardan

Sept, 2004 — July,
2006

Secondary Education

Mardan Model School and College Mardan

— June, 2004

PhD Research Project

“Hyper production of thermostable Cellulase from Aspergillus Oryzae (Super Koji) strain and mutants and Immobilization on nano-porous support”.

- HEC approved Research Project

M.Phil Thesis

“Purification and characterization of thermophilic Amylase from Bacillus sp. TS9 isolated from Shadrah hot spring, Islamabad, Pakistan”.

Research Interests

- Enzyme Production from different microbial sources
- Optimization, Purification and Characterization.
- Immunization of Enzyme, Enzyme Kinetics.
- Microbial Growth Kinetics Determination.
- Genetics and Molecular studies of Microorganisms
- Fermentation processes

Distinctions

- Merit Scholarship in M.Phil
- Awarded with Fellowship for six months training in University of Manchester, UK by Higher Education Commission of Pakistan under International Research Support Initiative Program (IRSIP)

Publications

- Wasim Sajjad, Muhammad Rafiq, Sahib Zada, **Neelam Zeb**, Imran Khan, Aamer Ali Shah, Fariha Hasan. **“Phylogenetic analysis of newly isolated protease producing salt tolerant psychrophilic bacteria from Tirich Mir glacier, Pakistan”** *International Journal of Biosciences*. Vol. 7, No. 2, p. 159-169, 2015.
- M.Usman Munir, Ayesha Ihsan, Yasra Sarwar, Sadia Zafar Bajwa, Khizra Bano, Bushra tehseen, **Neelam Zeb**, Irsha Hussain, M.Tayyab Ansari, Madiha Saeed, Juan Li M, Zubair Iqbal, Aiguo Wu, Waheed S. Khan. **Hollow mesoporous hydroxyapatite nanostructures; smart nanocarriers with high drug loading and controlled releasing features.** *International Journal of Pharmaceutics*. Volume 544, Issue 1, 10 June 2018, Pages 112-120.
- Bushra Aleem, Muhammad Hamid Rashid, **Neelam Zeb**, Anam Saqib, Ayesha Ihsan, Mazhar Iqbal and Hazrat Ali. Random Mutagenesis of Super Koji (*Aspergillus oryzae*): **Improvement in production and thermal stability of α -amylase for maltose syrup production.** *BMC Microbiology* (2018) 18:200

Presentations and Publications in Proceedings

- **“Purification and Characterization of thermophilic Amylase from *Bacillus* sp. TS9”** in proceeding of 10th Biennial International Conference of Pakistan Society for Microbiology. Exploring Microbes for Future Endeavour, 2015.
- **Production and Immobilization of Endoglucanases from Mutant Derivative of Super Koji (*Aspergillus oryzae*) on Nano-Porous Support** in Proceeding of 4th International Conference on Dairy Science Park and Industrial Exhibition, Konya, Turkey, 2017.
- **“Gamma Rays Mutagenesis of SuperKoji for the Enhanced production of Endoglucanase”** in Proceeding of 1st International Conference on Advancements in Biotechnology and Biocomputing” at International Islamic University, Islamabad, 2019.
- **“Immobilization of α -amylase from *Bacillus* species”** in Proceeding of 1st International Conference on Agricultural and Biological Sciences Haripur, Pakistan, 2019.

Laboratory Skills

- Basic microbiological procedures like inoculum preparation, streaking
- DNA extraction, PCR and other molecular techniques
- Enzyme Precipitation, Chromatography , Enzyme dialysis
- Lyophilization, FESM
- Synthesis of Enzymes entrapped nano- porous supports
- Bioinformatics tools Gaussian, Chemcraft, and Chimera.

Conferences/Training Workshops/Seminars

- 3rd International Conference on “Empowering the Nation Through Sciences” Organized by Women University Mardan at Margala Hotel Islamabad from 24th to 25th April, 2019.
- 1st International Conference on Advancements in Biotechnology and Biocomputing” at International Islamic University, Islamabad from 7th to 9th February, 2019.
- One day training Workshop on " Animal Use in Laboratory Science" on 23rd October 2018, At Khyber Medical University.
- One day Workshop on "Self-Assessment Report", on 11th October, 2018, organized by Quality Enhancement Cell of Women University Mardan.
- Two days training workshop on "Youth Led Change Making & Social Entrepreneurship" on 1-2nd March, 2018 at Women University Mardan.
- One day Workshop on "Self-Assessment Report", on 27th November, 2017, organized by Quality Enhancement Cell of Women University Mardan.
- 4th International conference on Dairy Science Park and Industrial Exhibition, 1st-3rd November, 2017, Konya, Turkey.
- “8th international Annual Health Conference” on 25th-26th April, 2017 at Khyber Medical University, Peshawar.
- Work Shop on "Tissue/Cell cultures of Cancer Samples and its Clinical Applications" on 24th April, 2017 at Khyber Medical University, Peshawar.
- “Cancer Awareness” Seminar on 16th Feb, 2017 at Abdul Wali Khan University, Mardan.
- “2nd National Training workshop on Enzyme Engineering: An efficient tool to increase the efficiency of industrial Biocatalysts”, 4th-6th December, 2016 at National institute for Biotechnology and Genetic Engineering.
- Symposium related to “Diabetes and Heart diseases” at National institute for Biotechnology and Genetic Engineering on 5th Novemeber, 2015.
- “1st National Training workshop on Enzyme Engineering: An efficient tool to increase the efficiency of industrial Biocatalysts”, 2nd-4th November, 2015 at National institute for Biotechnology and Genetic Engineering
- Conference on “2nd National student conference” at National institute for Biotechnology and Genetic Engineering 16th-18th September, 2015.

Computer Skills

·Operating Systems: Windows, Microsoft office (Power point, Excel, Word), Adobe Photoshop.

References

Dr. Muhammad Hamid Rashid. Principal Scientist National Institute for Biotechnology and Genetic Engineering, NIBGE, Faisalabad, Pakistan.

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Dr. Hazrat Ali. Senior scientist National Institute for Biotechnology and Genetic Engineering, NIBGE, Faisalabad, Pakistan.

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