

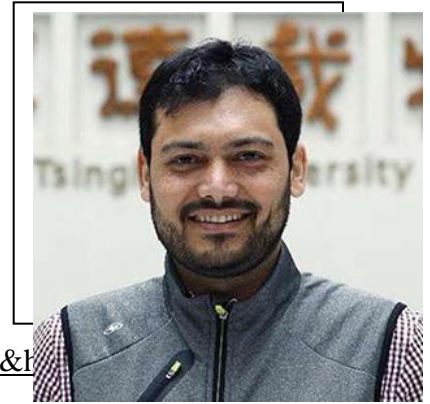
Dr. Nasir Ali

Assistant professor (Department of Biological and Health Sciences)

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Google Scholar link: <https://scholar.google.com/citations?user=omyUck0AAAAJ&hl>



Biography

Nasir Ali completed his Master's study in 2012 at the Institute of Biotechnology and Genetic Engineering, Agricultural University Peshawar. From 2012 to 2015, He joined the School of Life Science, the Xiamen University to pursue his Ph.D. study majoring in Biochemistry and Molecular Biology. Right after completion of his doctorate, he joined the Department of Biochemistry, at Abdul-Wali Khan University Mardan, as a visiting faculty for 06 months. Later 2016, he joined the School of Environment, at Tsinghua University as a postdoctoral fellow for two years. He was awarded a CAS presidential international fellowship initiative (PIFI) at CAS Qingdao Institute of Bioenergy and Bioprocess Technology, later 2018. He got another postdoctoral fellowship at Bioproduct and Biosystem Engineering, University of Minnesota in 2023. He working on several research themes including Sustainable Microbial Engineering: integrating process engineering and microbiological science for water remediation and waste-to-chemicals, mainly focusing on i) innovative carbon-cycle transformations and assembling rare function genomes in extreme environment(s), and ii) producing bioenergy (CH₄, Biofuels) and biomaterials (pharmaceuticals, food-addition) from waste streams. Overall, his current research works circulate 'Environmental Technology Innovation and Application', aiming to understand the interactions between environments and human societies and develop new methods for sustainability. His outcomes have been published in more than 40 articles in several international peer-reviewed academic journals.

Education (Last Two Academic Details)

- 1: Degree Title with Specialization: **PhD in Biochemistry and Molecular Biology**
- University: **Xiamen University**
- Graduation Year: **2012-2015**
- 2: Degree Title with Specialization: **M.Phil. in Biotechnology and Genetic Engineering**
- University: **Agricultural University Peshawar**
- Graduation Year: **2010-2012**

Experience

1: Teaching Experience:

From Year -To Year	Designation	Institute name
2024-present	Assistant professor	Pak Austria PAF-IAST
2022-2023	Postdoctoral fellow	University of Minnesota
2018-2020	Postdoctoral fellow	CAS Qingdao Institute of Bioenergy and Bioprocess Technology
2016-2018	Postdoctoral fellow	Tsinghua University
2015-2016	Teaching visiting faculty	Abdul wali Khan University Mardan

2: Research Supervision Experience:

List the number and levels of scholars you have supervised, the specific departments, and the institution.

- Four Master students have been supervised at the School of Environment, Tsinghua University
- Two master's students have been supervised at CAS Qingdao Institute of Bioenergy and Bioprocess Technology.
- One master's student has been supervised at Department of Bioproduct and Biosystem Engineering, University of Minnesota

Projects & Awards

- **Projects**
- Projects: *Fungal-bacterial interactions facilitating lignin mineralization*. Funded by U.S. DOE, Biological and Environmental Research Program 2022.
- “Bacterial association in methane generation pathways of an anaerobic digesting sludge via metagenomic sequencing” Kaijun wang and ALI NASIR. Tsinghua University. Funded by Major science and technology program for water pollution and control (2017ZX07102-004) 01/01/2017- 6/30/2018 (CoPI; CNY400,000)
- “Study on Cellulose degradation enzymes and gene expression of *Aspergillus niger* BE-2”. Minnan Long and ALI NASIR; Funded by the Research fund of Fujian Provincial Natural Science Foundation (2012J05029), (CoPI; CNY200, 000)

Publications

1. A two-stage anaerobic bioconversion of corn stover: Impact of pure bacterial pretreatment on methane production, *Environmental Technology & Innovations*. 2020.
<https://www.sciencedirect.com/science/article/abs/pii/S2352186420314413>
2. Combinations of alkaline hydrogen peroxide and lithium chloride/N,N-dimethylacetamide pretreatments of corn stalk for improved bio-methanation. *Environmental Research*. 2020.
<https://www.sciencedirect.com/science/article/abs/pii/S0013935120304564>
3. Alkaline hydrogen peroxide pretreatment of Bamboo culm for improved enzymatic release of reducing sugars, *Cellulose*, 2019. <https://link.springer.com/article/10.1007/s10570-019-02829-8>.
4. Metagenomic analysis and characterization of acidogenic microbiome and effect of pH on organic acids production, *Archives of Microbiology*, 2019.
<https://link.springer.com/article/10.1007/s00203-019-01676-2>
5. Evaluation of bacterial association in methane generation pathways of an anaerobic digesting sludge via metagenomic sequencing, *Archives of Microbiology*. 2020.
<https://pubmed.ncbi.nlm.nih.gov/31456050/>.