



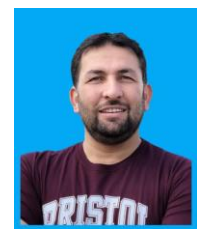
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Designation	Assistant Professor			
Department	Department of Microbiology			
Faculty	Life Sciences and Informatics			
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Qualification				
Year	Degree/Certificate	Name of the Institute/ University	Field of study	
2019	Post Doctorate	University of Bristol, UK	Microbiology	
2016	PhD	Quaid i Azam University, Islamabad	Microbiology	
2011	MS/ Mphil	Quaid i Azam University, Islamabad	Microbiology	
2009	Graduation	Federal Urdu University of Arts, Science and Tech	Microbiology	
Publications in HEC Recognized journals				
S. No	Title of Paper	Name of Journal	National/ International	Publication date
1.	Prevalence and abundance of antibiotic-resistant genes in culturable bacteria inhabiting a non-polar passu glacier, karakorum mountains range, Pakistan	World Journal of Microbiology and Biotechnology	International	2023
2.	Glaciochemistry and Pigment Producing Ability of Bacteria from the Roof of the World, the Glaciers of Karakoram, Pakistan	Geomicrobiology Journal	International	2023
3.	<u>The SARS-CoV-2 differential genomic adaptation in response to varying UVindex reveals potential genomic resources for better COVID-19 diagnosis and prevention</u>	Frontiers in microbiology	International	2022
4.	<u>Calcium carbonate precipitation by cave bacteria isolated from Kashmir Cave, Khyber Pakhtunkhwa, Pakistan</u>	Microscopy Research and Technique	International	2022
5.	<u>Phosphate solubilizing epilithic and endolithic bacteria isolated from clastic sedimentary rocks, Murree lower Himalaya, Pakistan</u>	Archives of Microbiology	International	2022
6.	<u>Composition and functional profiles of microbial communities in two</u>	Applied Microbiology and Biotechnology	International	2022

	<u>geochemically and mineralogically different caves</u>			
7.	<u>Cave microbes as a potential source of drugs development in the modern era</u>	Microbial Ecology	International	2021
8.	<u>Microbial characterisation and Cold-Adapted Predicted Protein (CAPP) database construction from the active layer of Greenland's permafrost</u>	FEMS Microbiology Ecology	International	2021
9.	<u>Geochemistry and insights into the distribution of biotechnological important fungi from the third pole of the world, Karakoram Mountains Range</u>	Geomicrobiology Journal	International	2021
10.	<u>Calcium carbonate precipitation by rock dwelling bacteria in Murree Hills, lower Himalaya range Pakistan</u>	Geomicrobiology Journal	International	2021
11.	<u>Screening of Lipase-Producing Bacteria and Optimization of Lipase-Mediated Biodiesel Production from <i>Jatropha curcas</i> Seed Oil Using Whole Cell Approach</u>	BioEnergy Research	International	2021
12.	<u>Soil fungal taxonomic diversity along an elevation gradient on the semi-arid Xinglong Mountain, Northwest China</u>	Archives of Microbiology	International	2021
13.	<u>Resurrection of inactive microbes and resistome present in the natural frozen world: Reality or myth?</u>	Science of The Total Environment	International	2020
14.	<u>Pigment production by cold-adapted bacteria and fungi: colorful tale of cryosphere with wide range applications</u>	Extremophiles	International	2020
15.	<u>Purification and Characterization of Lipase from Psychrophilic Bacteria <i>Pseudomonas mandelii</i> HTB2 from Batura Glacier, Pakistan.</u>	Applied Ecology & Environmental Research	International	2020
16.	<u>Temperature driven membrane lipid adaptation in glacial psychrophilic bacteria</u>	Frontiers in Microbiology	International	2020
17.	<u>Fungal recovery and characterization from Hindu Kush mountain range, Tirich Mir glacier, and their potential for biotechnological applications</u>	Journal of basic microbiology	International	2020
18.	<u>Characterization of Organic Acid Producing <i>Aspergillus tubingensis</i> FMS1 and its Role in Metals Leaching from Soil</u>	Geomicrobiology Journal	International	2020
19.	<u>Fungi from the extremes of life: An untapped treasure for bioactive compounds</u>	Applied microbiology and biotechnology	International	2020
20.	<u>Dissolution of Cu and Zn-bearing ore by indigenous iron-oxidizing bacterial consortia supplemented with dried bamboo sawdust and variations in bacterial structural dynamics: A new concept in bioleaching</u>	Science of the Total Environment	International	2020
21.	<u>Antibacterial Activity and Tolerance</u>	Pakistan Journal	International	2020

	<u>towards Heavy Metals by Endolithic and Epilithic Bacteria Isolated from Rocks of Nathiagali, Lower Himalaya, Pakistan.</u>	of Zoology		
22.	<u>Cell membrane fatty acid and pigment composition of the psychrotolerant cyanobacterium <i>Nodularia spumigena</i> CHS1 isolated from Hopar glacier, Pakistan</u>	Extremophiles	International	2019
23.	<u>Analysis of the cell membrane fatty acids and characterization of the psychrotolerant <i>Serratia marcescens</i> HI6 isolated from Hopar (Bualtar) glacier, Pakistan.</u>	Applied Ecology & Environmental Research	International	2019
24.	<u>Isolation of magnetotactic bacteria from environmental samples and optimization and characterization of extracted magnetosomes.</u>	Applied Ecology & Environmental Research	International	2019
25.	<u>Geochemistry and bacterial recovery from Hindu Kush Range glacier and their potential for metal resistance and antibiotic production</u>	Geomicrobiology Journal	International	2019
26.	<u>Metals extraction from sulfide ores with microorganisms: the bioleaching technology and recent developments</u>	Transactions of the Indian institute of metals	International	2019
27.	<u>Culture-dependent hunt and characterization of iron-oxidizing bacteria in Baiyin Copper Mine, China, and their application in metals extraction</u>	Journal of Basic Microbiology	International	2019
28.	<u>Fungi in acidic fire: A potential source of industrially important enzymes</u>	Fungal Biology Reviews	International	2019
29.	<u>Community analysis and characterization of fungi from Batura glacier, Karakoram mountain range, Pakistan.</u>	Applied Ecology & Environmental Research	International	2018
30.	<u>Diversity of prokaryotic communities indigenous to acid mine drainage and related rocks from Baiyin open-pit copper mine stope, China</u>	Geomicrobiology Journal	International	2018
31.	<u>Ectoine: a compatible solute in radio-halophilic <i>Stenotrophomonas</i> sp. WMA-LM19 strain to prevent ultraviolet-induced protein damage</u>	Journal of applied microbiology	International	2018
32.	<u>Effects of ultra-violet radiation on cellular proteins and lipids of radioresistant bacteria isolated from desert soil</u>	Folia Biologica	International	2018
33.	<u>Improvement in thermostability of xylanase from <i>Geobacillus thermodenitrificans</i> C5 by site directed mutagenesis</u>	Enzyme and microbial technology	International	2018
34.	<u>Bacterial biofilm and associated infections</u>	Journal of the chinese medical association	International	2018
35.	<u>Morphological, biochemical and molecular characterization of culturable epilithic and endolithic bacteria from rocks of Ayubia</u>	Applied Ecology & Environmental Research	International	2018

	<u>(Murree), lower Himalaya, Pakistan.</u>			
36.	<u>Recovery of metallo-tolerant and antibiotic resistant psychrophilic bacteria from Siachen glacier, Pakistan</u>	PloS one	International	2017
37.	<u>Potential of psychrotrophic fungi isolated from Siachen glacier, Pakistan, to produce antimicrobial metabolites.</u>	Applied Ecology & Environmental Research	International	2017
38.	<u>Biodegradation of polyethylene by bacterial strains isolated from Kashmir cave, Buner, Pakistan.</u>	Journal of Cave & Karst Studies	International	2017
39.	<u>Geochemical and mineralogical analysis of Kashmir cave (smast), Buner, Pakistan, and isolation and characterization of bacteria having antibacterial activity.</u>	Journal of Cave & Karst Studies	International	2016
40.	<u>Proteogenomics: New Emerging Technology</u>	HAYATI Journal of Biosciences	International	2016
41.	<u>Psychrophilic and psychrotrophic fungi: a comprehensive review</u>	Reviews in Environmental Science and Bio/Technology	International	2016
42.	<u>Performance efficiency of an integrated stone media fixed biofilm reactor and sand filter for sewage treatment</u>	Desalination and Water Treatment	International	2015
43.	<u>Sequential application of plastic media-trickling filter and sand filter for domestic wastewater treatment at low temperature condition</u>	British Biotechnology Journal	International	2012
44.	<u>Antibiotic resistance profile of clinical gram negative bacteria</u>	Journal of Biological Food Science and Research	International	2012

Paper Presented

S. No	Title of Paper	Name of Conference	National/ International	Date

Books Authored/ Edited

S. No	Name of book chapter	Publisher	ISBN
1.	<u>Adaptation mechanisms and applications of psychrophilic fungi</u>	Springer International Publishing	

Work Experience				
S. No	From (year)	To (year)	Name of the Institution/ Organization	Position held
1	Jan 2017	March 2018	Abdul Wali Khan University, Mardan	Assistant Professor
2	March 2018	March 2019	University of Bristol, UK	Commonwealth Fellow
3.	September 2019	To date	Balochistan University of IT, Engineering and Management Sciences, Quetta	Assistant Professor
Area of specialization			Microbiology, Basic and applied microbiology, Environmental microbiology	
Research Interest			Extremophiles, Taxonomic and functional diversity of extreme habitats, their potential biotechnological applications.	
Future Research Plans			Diversity of extreme habitats and possible biotechnological and industrial applications	
HEC Approved supervisor			Yes	
If Yes, provide HEC URL				
Research grants/ Projects				
Additional Information				