

# ***CURRICULUM VITAE***

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**COMPLETE NAME:** Prof. Dr. Muhammad Ishtiaq Ali

**POSTAL ADDRESS:** Department of Microbiology, Quaid-i-Azam  
University Islamabad-45320, Pakistan

**PERMANENT ADDRESS:** Village & Post Office Ghungrilla, Tehsil.  
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## □ **ACADEMIC PROFILE:**

- 2012- 2013**    **Post Doctorate (Microbiology)**  
University of New South Wales Sydney, Australia
- 2005-2009**    **Ph.D. (Doctor of Philosophy in Microbiology)**  
Quaid-i-Azam University, Islamabad
- 2003**            **Master of Sciences (Zoology)**  
University of Arid Agriculture Rawalpindi
- 2001**            **Bachelor of Sciences (Botany, Zoology, Chemistry)**  
University of Punjab, Lahore
- 1999**            **FSc (Pre-Medical)**  
**BISE Mirpur**

## Research and Employment History:

<b>Director ORIC</b> Feb-2024-todate	Quaid-i-Azam University Islamabad
<b>Director Academics</b> Feb-2019 to-date	Quaid-i-Azam University Islamabad
<b>Professor</b> March 2021-to-date	Department of Microbiology, Quaid-i-Azam University
<b>Associate Professor</b> Jan 2016- March 2021	Department of Microbiology, Quaid-i-Azam University
<b>Visiting Academic fellow</b> Feb 2012 – December 2012	School of biotechnology and bimolecular Sciences University of New South Wales, Sydney, Australia
<b>Assistant Professor</b> Sep 2011- Jan 2016	Department of Microbiology, Quaid-i-Azam University
<b>Lecturer (Aug. 2009- Aug. 2011)</b>	Department of Microbiology, Quaid-i-Azam University
<b>Visiting Research Fellow</b> June 07- Dec 2007	Faculty of Life Sciences, University of Manchester, UK
<b>Research Associate:</b> 2004-2005	Microbiology Research Lab, Department of Microbiology Quaid-I-Azam University, Islamabad.
<b>Ph.D. Research Fellow</b> 2005-2009	Four-year post-graduation research project for Ph.D. under HEC Indigenous Fellowship at Microbiology Research Lab. Quaid-i-Azam University Islamabad.

### Administrative Responsibilities

- **Director** ORIC at Quaid e Azam University Islamabad. (February 14,2024 till date).
- **Director** Academics at Quaid e Azam University Islamabad. (February 14,2019 till date).
- **Director** Undergraduate Programs Quaid e Azam University Islamabad.
- **Focal Person** QAU Alumni Internal Office (December 2021 till date).
- **Focal Person** International Students/International Linkages at Quaid e Azam University Islamabad. (March 2019 till date).
- **Focal Person** Antinarcotics Force at Quaid e Azam University Islamabad (March 2021 till date)
- **Focal Person** Covid Management at Quaid e Azam University Islamabad. (April 2020 till date)
- **Focal Person** Kamyab Nowjawan student facilitation center at QAU
- Monitoring, assessment and improvement of research and academic programs.
- **Member Admission** Committee Quaid e Azam University Islamabad.
- **Member** Advanced Studies & Research Board (AS&RB)
- **Member** QAU Affiliation Committee.
- **Member** Rule Review committee, Quaid e Azam University Islamabad.
- **Member Admission** Committee Microbiology (MSc, MPhil and PhD).
- **Student Advisor** at Quaid e Azam University Islamabad (2010-2012).
- **Member** Scholarship Committee Quaid e Azam University Islamabad.
- **Member** Academic Council Quaid e Azam University Islamabad (March 2019 till date).
- **President** Academic Staff Association (2016-2017).
- **Member** Medical Committee Quaid e Azam University Islamabad.
- **Member** QAU project and development work advisory committee.
- **Member** Foreign Faculty Housing Society, Quaid e Azam University Islamabad.

- **Member** House Building Finance Committee, Quaid e Azam University Islamabad.
- **Member** Campus/Colony Maintenance Committee, Quaid e Azam University Islamabad.
- **Member** Resident Officer Committee, Quaid e Azam University Islamabad.
- **Member** HEC Faculty Development Program.
- **Focal** Person/Reviewer HEC Competitive Grants (NRPU, Peridot, PAK-US, TDF, LCF, GCF)
- **Member** Technical Committee Pakistan Science Foundation for competitive research grants.
- **Reviewer** Pakistan Science Foundation Competitive Grants (NSLP, CRP SPECIAL GRANTS)
- **Secretary** ASA QAU (2014-2015)
- **President** FAPUASA (2015-2016)
- **Executive** Member ASA (2015-2016)
- **Member** BOS microbiology Quaid e Azam University Islamabad.
- **Member** BOS department of zoology Mirpur university AJK
- **Member** BOS department of zoology Sargodha University
- **Member** Board of Faculty biological sciences, Quaid e Azam University Islamabad.
- **Member** board of DTC committee microbiology, Quaid e Azam University Islamabad
- **Member** DTC environmental science, Quaid e Azam University Islamabad
- **Member** DTC Hazara university.
- **Member** DTC Haripur university.
- **Member** DTC Abbottabad University of Science and Technology.
- **External Examiner** for MPhil; Ph.D. (NUST, PMAS-UUAR. IIUI, AUST, UOG, Hazara university, Sargodha University)

## Teaching & Research interest:

**Courses Taught:** Microbial biotechnology, Advances in Microbial Genetics Solid waste management, Microbial Metabolism, Molecular Microbiology, General Microbiology, Industrial Microbiology, Bioremediation, Water and wastewater treatment system

**Research Interest:** Applied and Environmental Microbiology/ Biotechnology, Renewable Bioenergy, Molecular Microbiology, Bioremediation of organochlorinated compounds, Biodegradation of synthetic polymers, Food Microbiology, Waste to energy, Biogenic conversion of coal to methane

## Honors/Awards

1. Indigenous Fellowship for the Ph.D Programme (Batch 1) awarded by Higher Education Commission, Pakistan (2005-2009)
2. International research support initiative program at University of Manchester UK by Higher Education Commission, Pakistan (June 07- December 2007).
3. Post-Doctoral Fellowship Phase II (batch V) awarded by Higher Education Commission, Pakistan (2012-2013)
4. Microbiology Gold medal Pakistan Society of Applied Zoology
5. Member Pakistan Academy of Sciences Islamabad

## Research Grants

Sr. #	Title	Donor Agency	Amount (Rs.)	Duration		Role as	
				From	To	PI	Co. PI
1	Cloning and characterization of plastic degrading microbial isolates funded by Pakistan Science foundation	PSF <b>(Completed)</b>	2.14 M	2012	2015	PI	
2	Characterization of food and vegetable waste for energy production by microorganism funded by HEC	HEC <b>(Completed)</b>	0.5 M	2012	2013	PI	
3	Targeting the Hidden Natural Resource for Alternative Energy Source. Screening and Optimization of Microbial Bio gasification Techniques for Methane Production using Low to High Grade Coal	HEC <b>(Completed)</b>	5.6M	2015	2018	PI	
4	Characterization of Biochar for Remediation of Contaminated Soils	HEC <b>(Completed)</b>	7.0 M	2017	2020	PI	
5	Development of Biological Treatment System for Pulp and Paper Industry Effluent	HEC	5.1M	2021	2024		CO-PI
6	Production of microalgal biomass, as potential biofertilizer, using wastewater leading to removal of pollutants and pathogenic loads	NSLP-PSF	4.4M	2022	2024	PI	
7	Use of Biochar as Catalyst for Contaminant Removal, Water Recycling and Fabrication of Nutrient Enriched Fertilizer	PAS	.1.0 M	20024	2005	PI	

## Research Supervision

MPhil Completed: 71

MPhil in process: 5

Ph.D. Completed: 11

PhD in Process. 05

### Research Supervision

PhD's Produced\*

11

Under supervision:

05

S.No	Student's Name	Thesis title	Year
1.	Bushra Fatima	Biochar production potential of Pakistan and its high value applications	2022
2.	Javed Khan	Microbial Desulfurization of Organosulfur	2022

		Containing Coal	
3.	Noreen Fatima	Enhancement of Microbial Solubilization and Biogenic Methane Potential of Low to High Grade Coal of Pakistan	2022
4.	Farhana Bibi	Optimization of Indigenous Microalgae for High Biomass and Lipids Productivity and Utilization of Algal Biomass in Biorefinery Approach	2022
5.	Saeed Ullah Jan	Synergetic Effects of Different Biochar and Fungi ( <i>Glomus Mosseae</i> ) in Bioremediation of Metals Contaminated Soil and their Impact on Plant Growth	2021
6.	Sadia Aziz	Production and characterization of Biochar from organic waste and its application for bioremediation in Diesel contaminated soils	2019
7.	Hassan Waseem	Evaluation of Antimicrobial Resistance Dissemination in the Environment	2019
8.	Jafir Hussain Shirazi	Clinical and Epidemiological Studies of Oropharyngeal Candidiasis in Various Hospitals of Pakistan	2019
9.	Aneela Younis Malik	Isolation and Characterization of Coal solubilizing Microorganism	2018
10.	Nazia Khatoon	Molecular Characterization of Microbial Oxidoreductases and their Application in Polymer Biodegradation	2018
11.	Rabia Liaquat	Anaerobic digestion of organic waste for biogas production	2016

\* A student recommended for the award of degree by the Advanced Studies and Research Board.

### M.Phil. Produced

**Total Number: 71**

S. No	Name	Title	Year
1.	Rafia Tariq	Comparative studies for municipal wastewater treatment by selected microorganism isolates	2023
2.	Laiba Mumtaz	Microbial extraction of fulvic and humic acid from different indigenous coal types	2023
3.	Iqra Ashraf	Study on of biofilm mediated biochar reactors for rainwater reclamation	2023
4.	Rija Asif	Production of microalgal biomass for heavy metals remediation and using as potential bio fertilizer	2023
5.	Amna Saffi	Studies on the bioremediation of heavy metals from harvested rainwater by using biochar amended biosand filter	2023
6.	Maria Riaz	Evaluation of coal and soil derived fulvic acid as an antimicrobial agent against MDR bacteria in combination with different antibiotics and its application as potential biofertilizer	2023

7.	Rimsha Tallat	Exploring the potential of microalgal based iron and silver nanoparticles as a biofertilizer for the enhancement of plant growth	2023
8.	Hafiza Sehrish Kiyani	Quantification of class 1 Integron and 16s RNA gene in hospital wastewater before and after anaerobic digestion	2022
9.	Umay Hani	Comparative analysis of low density polyethylene (LDPE) and Bioplastic using microbial consortium	2022
10.	Tayyaba Afzal	Production and characterization of bioplastic using indigenous microalgae	2022
11.	Syeda Ayesha bukhari	Coliform reduction from fecal contaminated wastewater by using surface modified woodchip based biochar.	2022
12.	Usman Ahmad Khalid	Evaluation of Indigenous Microalgal Strain for Production of Various Useful Byproducts	2022
13.	Shama Zahra	Assessment Of Bioactive Metabolites for Antioxidant and Antimicrobial Activities Using Indigenous Green Microalgae	2022
14.	Aroosa Khan	Biochar Adsorption of Antibiotics and its ability for the Bioremediation of Antibiotic Resistant Microbiome in Contaminated Soil and Water Ecosystems	2022
15.	Saleeha Jamil	Assessment of the Potential of Microalgae as Biostimulant and Biofertilizer on Wheat Crop Production	2021
16.	Rabia Asghar	Studies on Agronomic Impact of Banana Peel Derived Biochar in Combination with Organic fertilizer	2021
17.	Iqra Khan	Study of Peanut Husk Biochar Potential to Enhance <i>Brassica campestris</i> Growth and Immobilization of Lead Metal	2021
18.	Akhlaq Ahmed	Efficacy of Poultry Based Biochar on Wheat Growth and its Application as Organic Fertilizer	2021
19.	Sania Fatima	Stimulation of methane generation from lignite coal samples through co-digestion of different substrates	2019
20.	Samia Anjum	Enhanced solubilization of bituminous coal through indigenous fungal strain for the extraction of humic acid	2019

21.	Momina Mansha	Comparative analysis of Tea spent and sludge waste derived biochar for remediation of Cadmium polluted soils	2019
22.	Muqadas Zafar	Evaluation of biomethane potential of microalgae and enhancement by co-digestion with eucalyptus leaves	2019
23.	Adeela Abbas	Characterization of Fruit and Vegetable-Based Biochar for Remediation of Diesel Oil Contaminated Soils	2019
24.	M Adnan Sabir	Bio Gasification Potential of Indigenous Low Rank Coal by <i>Rhizopus oryzae</i>	2019
25.	Anab Mujtaba	Studies on Enzymatic Desulphurization of Coal from Salt Range Coal Mine	2019
26.	Merium Sandhu	A Field Scale Study for Remediation of Crude Oil by Agriculture Waste Biochar	2019
27.	Tehmina Ahmad	Studies on Optimization of Native Micro-Algal Strain for Biodiesel Production	2018
28.	Rida Riaz	Applications of Agricultural Waste Mediated Biochar for the Remediation of Crude Oil Contaminated Soil	2018
29.	Marya Khan	Biosolubilization and Gasification Potential of Selected Microbial Strains from Balochistan Coal	2018
30.	Shahpal Malik	Comparative Molecular Analysis of Indigenous Microbial Diversity of Cherat, Dara and Duki Coal	2018
31.	Saira Bano	Some studies on indigenous high carbohydrates accumulating microalgal strain and its potential for bioethanol production	2018
32.	Sana Bari	Studies on Coal Desulphurization of Cherat Coal Mine by Native microbial flora	2017
33.	Aamna Kiyani	Cost Effective and Eco Friendly Production of Bio Diesel using Microalgae as a Feed Stock	2017
34.	Laiba Yaseen	Effect of Different Types of Bio-char on Plant Growth and Soil Microflora	2017
35.	Hira Alam	Bio- desulphurization and Bio- solubilization of Coal Sample of Dara Adam Khel Coal Mines by Indigenous Microbial Flora	2017
36.	Afsheen Nawaz	Study on Endosulfan Bioremediation in Aqueous Medium and Soil Microcosm by Fungal Strains Isolated from Pesticide Contaminated Fields	2017
37.	Huma Nawaz	Biological pretreatment and Enzymatic Hydrolysis of Paper Waste	2016
38.	Bushra Fatima	Studies on pretreatment of poultry slaughter house Waste for biogas enhancement by ammonia Inhibition	2016
39.	M Usman	Isolation and characterization of Chirat coal mine (KPK) microorganisms for coal solubilization and methane production	2016

40.	Noreen Fatima	Heterologous expression of ligninolytic peroxidases for the biodegradation of synthetic polymers	2016
41.	Aeman Sehar	Production and characterization of biochar from organic waste	2016
42.	Muslima Afnan	Studies on Bioremediation of Endosulfan by Microbial Oxidoreductases Enzymes	2016
43.	Beenish Sadaqat	Decolourization Of Synthetic And Human Hair Melanin By Lignin Peroxidases of Fungal Origin	2016
44.	Samreen Zaidi	Isolation and Characterization of Microalgae from Natural Habitats and Local Bodies for Bio-Molecule Production	2016
45.	Hifsa Shafiat	Development of Microbial Consortium for the Bioremediation of Endosulfan	2016
46.	Javed Khan	Cloning and molecular characterization of laccases and lignin peroxidase for polymer biodegradation	2015
47.	Moona Karim	Role of natural Zeolite for biogas production from organic solid waste	2015
48.	Tehseen Usman	Microbial desulphurization of Butimonous coal samples from salt range Pakistan	2015
49.	Tooba Hayat	Studies on effect of charcoal on microbial diversity of soil and their combined impact on soil fertility	2015
50.	Aneesa dawood	Production and characterization of versatile peroxidase from fungal isolates	2015
51.	Sidra Kaleem	Molecular and enzymatic characterization of microbial community in fruit and vegetable digester	2014
52.	Najam-e- Sahar	Biosynthesis of lignin peroxidase by white rot fungi for plastic degradation	2014
53.	Sundus Rani	Some studies on endosulphan degrading microbial isolates	2014
54.	Iram Fatima	Isolation and screening of coal degrading anaerobic microorganism	2014
55.	Gul Dasta	Biodegradability studies of polystyrene by fungal manganese peroxidases	2014
56.	Haider Ali	Production and characterization of fungal lignin peroxidases and laccases for biodegradation of polyvinyl chloride	2014
57.	Aqeela Azeem	Effect of co-digestion and operating parameters on bio-gas production by anaerobic digestion of fruit and vegetable waste	2014
58.	M. Ali	Isolation and screening of coal solubilizing aerobic microorganisms	2014
59.	Sumera Naz	Prevalence of Methicillin-resistant Staphylococcus aureus (MRSA) and Extended	2013



		spectrum $\beta$ lactamases (ESBL) in post operative wound infections	
60.	Mishal Subhan	Biosurfactant production by newly isolated fungal strain and its application in microbial enhanced oil recovery	2012
61.	Urooj Kiran	An investigation of Antimicrobial activity of Silver Nanoparticles against Multidrug resistant Microorganisms	2012
62.	Nazia Khatoon	Characterization and activity analysis of biofilm formation on polymer exposed to waste water	2012
63.	Shumaila Ashfaq	Studies on Microbial degradation of Paints.	2012
64.	Muneeba Maryem	Extracellular Myco-synthesis of metal nanoparticles by <i>Aspergillus niger</i> .	2012
65.	Maryam Idress	DNA methylation analysis of major DNA components of Banana Bunchy Top virus Genome	2012
66.	M. Rafiq	Cloning, sequencing and phylogenetic analysis of DNA-A of cotton leaf curl disease associated Begomovirus	2011
67.	Hajra Haneef	Isolation and Molecular Characterization of <i>Clostridium tetani</i>	2011
68.	Imran Khan	Role of fungal peroxidases in the degradation of Polyvinyl chloride	2011

### Research Publications: Impact factor ( 330 +)

1. Tabassum Rasool, Muhammad Ansar, Irfan Ali, **Muhammad Ishtiaq Ali**, Asif Jamal, Malik Badshah, Zaixing Huang & Michael Urynowicz (2024). Performance evaluation of gravity-driven bioreactor (GDB) for simultaneous treatment of black liquor and domestic wastewater. Environ Sci Pollut Res. doi.10.1007/s11356-023-31576-4 (**Impact factor 5.8**)
2. Afsheen Mansoor, Emaan Mansoor, Mazhar Mehmood, Syed Mujtaba Ul Hassan, Atta Ullah Shah, Uzma Asjid, **Muhammad Ishtiaq**, Asif Jamal, Akhilesh Rai, Paulo J. Palma (2024). Novel microbial synthesis of titania nanoparticles using probiotic *Bacillus coagulans* and its role in enhancing the microhardness of glass ionomer restorative materials. Odontology. doi.org/10.1007/s10266-024-00921-5 (**Impact Factor 2.5**)
3. Sadia Aziz, Bushra Uzair, **Muhammad Ishtiaq Ali**, Sundas Ambreen, Fatiha Umer; Muneeba Khalid, Alaa AA. Aljabali, Yachana Mishra, Vijay Mishra, Ángel Serrano-Aroca, Gowhar A. Naikoo, Mohamed El-Tanani, Shafiul Haque, Abdulmajeed G Almutary (2023). Synthesis and Characterization of Nanobiochar from Rice Husk Biochar for the Removal of Safranin and Malachite Green from Water. Environmental Research. Doi. 10.1016/j.envres.2023.116909

**(Impact Factor 8.43)**

4. Tabassum Rasool , **Muhammad Ishtiaq Ali**, Asif Jamal , Zaixing Huang, Michael Urynowicz **(2023)**. Performance evaluation and microbial profiling of integrated vertical flow constructed wetland (IVFCW) for simultaneous treatment of domestic and pulp and paper industry waste water. Saudi Journal of Biological Sciences. doi.10.1016/j.sjbs.2023.103850 **(Impact Factor 4.4)**
5. Xiao Feng, Panpan Zhang, Zizhong Zhang, Hongguang Guo, Zhigang Li, Zaixing Huang, Michael Urynowicz & **Muhammad Ishtiaq Ali (2023)**. The effect of organics transformation and migration on pore structure of bituminous coal and lignite during biomethane production. Environ Sci Pollut Res. doi.org/10.1007/s11356-023-27945-8 **(Impact Factor 5.8)**
6. Weiting Zhang, Zaixing Huang , Dan Zhang , Gordana Medunić , Michael Urynowicz , Fang-Jing Liu , Hongguang Guo , Rizwan Haider, **Muhammad Ishtiaq Ali**, Asif Jamal, Huan He **(2023)**. Enhancement of biomethane production by huminite-enriched lignite pretreated with hydrogen peroxide. International Journal of Coal Geology . 274, 104284. doi.org/10.1016/j.coal.2023.104284 **(Impact Factor 6.3)**
7. Weiting Zhang, Qianyun Mo, Zaixing Huang , Muhammad Muhammad Sabar, Gordana Gordana Medunić , Tatjana Tatjana Ivošević, Huan He , Muhammad Sabar, Fangjing Liu, Hongguang Guo, Rizwan Haider, **Muhammad Ishtiaq Ali** and Asif Jamal **(2023)**. Corrigendum: Contaminants from a former Croatian coal sludge dictate the structure of microbiota in the estuarine (Raša Bay) sediment and soil. Frontier in Microbiology. 10.3389/fmicb.2023.1175748**(Impact Factor 5.64)**
8. Sulaiman , Sami Ullah , Shah Saud b, Ke Liu , Matthew Tom , Shah Hassan , Taufiq Nawaz , Muhammad Zeeshan, Jamal Nasar , Imran Khan , Haitao Liu , Muhammad Adnan , Sunjeet Kumar, **Muhammad Ishtiaq Ali**, Asif Jamal , Mo Zhu, Naushad Ali , Sardar Ali , Khaled El-Kahtany , Shah Fahad **(2023)**. Germination response of Oat (*Avena sativa* L.) to temperature and salinity using halothermal time model. Plant Stress. DOI: 10.1016/j.stress.2023.100263 **(Impact Factor 5)**
9. Afsheen Mansoor, Mazhar Mehmood, **Muhammad Ishtiaq Ali**, Asif Jamal **(2023)**. Synthesis of TiO<sub>2</sub> nanoparticles and demonstration of their antagonistic properties against selected dental caries promoting bacteria. Pakistan Journal of Medical Sciences. 10.12669/pjms.39.5.7851 **(Impact Factor 2.2)**
10. Sadia Aziz,Shabana Bibi,Mohammad Mehedi Hasan,Partha Biswas, **Muhammad Ishtiaq Ali**,Muhammad Bilal,Hitesh Chopra,Nobendu Mukerjee Icon and Swastika Maitra **(2023)**. A

review on influence of biochar amendment on soil processes and environmental remediation. *Biotechnology and Genetic Engineering Reviews*. doi.org/10.1080/02648725. (Impact Factor 4.375).

11. Afsheen Qamar, **Muhammad Ishtiaq Ali**, Malik Badshah, Asif Jamal (2023). Antibacterial effect of Titanium-Oxide nanoparticles and their application as alternative to antibiotics. *Pakistan Veterinary Journal*. 43(2/3) (Impact factor 2.3).
12. Javed Khan, **Muhammad Ishtiaq Ali**, Asif Jamal, Jahangir Khan Achakzai, Jafir Hussain Shirazi, Abdul Haleem (2023). Assessment of the dibenzothiophene desulfurization potential of indigenously isolated bacterial consortium IQMJ-5: A different approach to safeguard the environment. *Archives of Microbiology*. 205, 95. <https://doi.org/10.1007/s00203-023-03429-8> (Impact factor 2.53)
13. Khadim Dawara , Ishaq Ahmad Miana , Shadman Khana , Anwar Zamana , Subhan Danishb , Ke Liuc , Matthew Tom Harrisonc , Shah Saudd , Shah Hassane , Taufiq Nawazf , Imran Khang , Haitao Liuh , Mushtaq Ahmad Khani , Sana Ullahj , **Muhammad Ishtiaq Ali** , Asif Jamalk , Mo Zhul,m,n , Shah Masaud Khano , Khaled El-Kahtanyp , Shah Fahad (2023). Alleviation of cadmium toxicity and fortification of zinc in wheat cultivars cultivated in Cd contaminated soil. *South African Journal of Botany*. 162 (2023) 611-621 (Impact Factor 3.1)
14. Bushra Fatima , Farhana Bibi , **Muhammad Ishtiaq Ali** , Jeremy Woods , Mushtaq Ahmad , Muhammad Mubashir , Mohd Shariq Khan , Awais Bokhari , Kuan Shiong Khoo (2022). Accompanying effects of sewage sludge and pine needle biochar with selected organic additives on the soil and plant variables. *Waste management*. 153(25):197-208 (Impact factor 8.9).
15. Yue Cao,Huan He,Di Zhan,Hua-Zhou Huang,Yong Zhang,Bo Fu,Zhi-Min Xu, **Muhammad Ishtiaq Ali**,Fang-Jing Liu,Xiu-Xiang Tao &Huang Zaixing (2022). Changes of Permeability and Porosity of Tiefs Anthracite after Treatment with an Acetogenic Bacterium *Clostridium* sp. *Geomicrobiology*. doi.org/10.1080/01490451.2022.2158252 (Impact Factor 2.308)
16. Zhigang Li, Zaixing Huang, Jiaqi Cheng, Kaixin Duan, Michael Urynowicz, Yatong Cheng, **Muhammad Ishtiaq Ali**, Hongguang Guo (2022). The succession of microorganisms and organics in the process of methane generation by co-degradation of anthracite and rice straw. *International Journal of Energy Research*. 10.1002/er.8210 (Impact Factor 5.164)
17. Saleha Parveen , **Muhammad Ishtiaq Ali** , Maryam Aslam , Irfan Ali , Asif Jamal, Mysoon M. Al-Ansari , Latifah Al-Humaid, Michael Urynowicz ,Zaixing Huang (2022). Optimizing

- biocatalytic potential of *Dipodascus australiensis* M-2 for degrading lignin under laboratory conditions. *Microbiological Research*. doi: 10.1016/j.micres.2022.127179 (**Impact factor 5.07**)
18. Javed Khan, **Muhammad Ishtiaq Ali**, Asif Jamal, Mushtaq Ahmad, Jahangir Khan Achakzai, Zafar Mehmood (2022). Response of mixed bacterial culture towards dibenzothiophene desulfurization under the influence of surfactants and microscopically characterized magnetic Fe<sub>3</sub>O<sub>4</sub> nanoparticles. *Microscopy Research and Technique*. Doi. 10.1002/jemt.24230 ( **Impact factor 2.89**).
  19. Farhana Bibi, **Muhammad Ishtiaq Ali**, Mushtaq Ahmad, Awais Bokhari, Kuan Shiong Khoo, Muhammad Zafar, Saira Asif, Muhammad Mubashir, Ning Han, Pau-Loke Show (2022). Production of lipids biosynthesis from *Tetrademus nygaardii* microalgae as a feedstock for biodiesel production. *FUEL*. doi.org/10.1016/j.fuel.2022.124985 (**Impact Factor 8.035**)
  20. Kashaf Khalid, Umar Saeed, Mohammed Aljuaid, **Muhammad Ishtiaq Ali**, Awais Anjum, Yasir Waheed (2022). Immunoinformatic approach to contrive a next generation multi-epitope vaccine against *Achromobacter xylosoxidans* infections . *Frontiers in Medicine*. DOI: 10.3389/fmed (**Accepted Impact Factor 5.091**)
  21. Kaiyi Gong, Yixuan Zhang, Hongguang Guo , Zaixing Huang, Michael Urynowicz, **Muhammad Ishtiaq Ali** (2022). Enhancing biomethane production from lignite by an anaerobic polycyclic aromatic hydrocarbon degrading fungal flora enriched from produced water. *Frontiers in Microbiology*. doi: 10.3389/fmicb.2022.899863 (**Impact Factor 6.064**)
  22. Javed Khan, Asif Jamal, Zaixing Huang, Jahangir Khan Achakzai, **Muhammad Ishtiaq Ali** (2022). Optimizing the metabolic performance of mixed bacterial culture towards dibenzothiophene desulfurization under the effect of varying nutrient and environmental factors. *Polish Journal of Environmental Studies*. 31(5): 1-9. 10.15244/PJOES/147650 (**Impact Factor 1.87**)
  23. Farhana Bibi, Asif Jamal, Zaixing Huang, Michael Urynowicz, **Muhammad Ishtiaq Ali** (2022). Advancement and role of abiotic stresses in microalgae biorefinery with a focus on lipid production. *FUEL*. 316,123192 <https://doi.org/10.1016/j.fuel.2022.123192> (**Impact Factor 8.035**)
  24. Farhana Bibi , Humaira Yasmin, Asif Jamal , Mohammad S Al-Harbi , Mushtaq Ahmad , Muhammad Zafar , Bashir Ahmad , Bassem N Samra , Atef F Ahmed , **Muhammad Ishtiaq Ali** (2021). Deciphering role of technical bioprocess parameters for bioethanol production using microalgae. *Saudi J Biol Sci*. 28(12):7595-7606 ( **Impact Factor 4.22**)
  25. Muhammad Musaddiq Shah, Wen Ren ,Joseph Irudayaraj ,Abdulrahim A. Sajini , **Muhammad Ishtiaq Ali** and Bashir Ahmad (2021). Colorimetric Detection of Organophosphate Pesticides

- Based on Acetylcholinesterase and Cysteamine Capped Gold Nanoparticles as Nanozyme. *Sensors*. 21(23), 8050 doi.org/10.3390/s21238050 ( **Impact Factor 3.85**)
26. Ramla Rehman, **Muhammad Ishtiaq Ali**, Naeem Ali, Malik Badshah, Mazhar Iqbal, Asif Jamal, Zaixing Huang (2021). Crude oil biodegradation potential of biosurfactant producing *Pseudomonas aeruginosa* and *Meyerozyma* sp. *Journal of Hazardous Materials*. doi.org/10.1016/j.jhazmat.2021.126276 (**Impact Factor 14.224**)
  27. Dan Zhang, Huan He, Yi Ren, Rizwan Haider, Michael Urynowicz, Paul H. Fallgren, Song Jin, **Muhammad Ishtiaq Ali**, Asif Jamal, Muhammad Adnan Sabar, Hongguang Guo, Fang-Jing Liu, Zaixing Huang (2021). A mini review on biotransformation of coal to methane by enhancement of chemical pretreatment. *Fuel* (308):121961 <https://doi.org/10.1016/j.fuel.2021.121961> (**Impact factor 8.05**)
  28. Chen, Z. Huang, X. He, H.; Tang, J. Tao, X.; Huang, H. Haider, R. **Ali, M.I.** Jamal, A. Huang, Z (2021). Bioleaching Coal Gangue with a Mixed Culture of *Acidithio bacillus ferrooxidans* and *Acidithiobacillus thiooxidans*. *Minerals* , 11,1043. <https://doi.org/10.3390/min11101043> ( **Impact Factor 2.82**)
  29. Zaixing Huang, Michael A Urynowicz, Rizwan Haiderd, Hamed Sattar, Mahmood Saleem, Lan Hoang, , Ngoc Tran Han , Kim Anh Toe , Hung Le Quoc , **Muhammad Ishtiaq Ali** , Honggunag Guo , Huan Hea , Fang-Jing Liua (2021). Biogenic methane generation from Vietnamese coal after pretreatment with hydrogen peroxide. *International Journal of Energy Research* DOI: 10.1002/er.6985 (**Impact Factor 5.164**)
  30. Noureen Fatima , Asif Jamal, Zaixing Huang, Rabia Liaquat, Rizwan Haider Bashir Ahmad, **Muhammad Ishtiaq Ali** (2021). Extraction and Chemical Characterization of Humic Acid from Lignite and Bituminous Coal using Nitric acid as pretreatment. *Sustainability*: 13(16), 8969 (**Impact Factor 3.89**)
  31. Muhammad Muddasar, Rabia Liaquat, Ali Abdullah, Asif Hussain Khojaa , Nadia Shahzad , Naseem Iqbal , **Muhammad Ishtiaq Ali** , Azhar Uddin , Sami Ullah (2021). Evaluating the use of unassimilated bioanode with different exposed surface areas for bioenergy production using solar-powered Microbial Electrolysis Cell. *International Journal of Energy Research* DOI: 10.1002/er.7091 (**Impact Factor 5.16**)
  32. Mamoon Munir, Mushtaq Ahmad, Muhammad Saeed, Amir Waseem, Abdul-SattarNizami, Shazia Sultana, Muhammad Zafar, Mohammad Rehan, Gokul Raghavendra Srinivasan, Arshid Mahmood Ali, **Muhammad Ishtiaq Ali** (2021). Biodiesel production from novel non-edible caper (*Capparis spinosa* L.) seeds oil employing Cu-Ni doped ZrO<sub>2</sub> catalyst. *Renewable &*

- Sustainable Energy Reviews. 138: 110558. doi.org/10.1016/j.rser.2020.110558 (**Impact factor 16.799, Q1**)
33. Hongguang Guo, Yujie Zhang, Yiwen Zhang, Xingfeng Lia, Zhigang Lia, Weiguo Liang, Zaixing Huang, Michael Urynowicz, **Ali Ishtiaq Muhammad (2021)**. Feasibility study of enhanced biogenic coalbed methane production by super-critical CO<sub>2</sub> extraction. Energy. 214, 118935 doi.org/10.1016/j.energy.2020.118935 (**Impact Factor 8.86, Q1**)
  34. Foqia khalid, Muhammad Zaffar Hashmi, **Muhammad Ishtiaq Ali**, Abdul Qadir (**2021**). Enzymatic and microbial degradation of PCBs from E-waste contaminated sites. Environmental Science and Pollution Research. doi.org/10.1007/s11356-020-11996-2 (**Impact Factor 5.19, Q1**)
  35. Hongguang Guo, Qing Han, Jinlong Zhang, Weiguo Liang, Zaixing Huang, Michael Urynowicz, **Muhammad Ishtiaq Ali (2021)**. Available methane from anthracite by combining coal seam microflora and H<sub>2</sub>O<sub>2</sub> pretreatment. International Journal of Energy Research. doi.org/10.1002/er.5890 (**Impact Factor 5.164, Q1**)
  36. Lubna, Muhammad Zafar, Mushtaq Ahmad, Ghulam Mujtaba Shah, Amir Muhammad Khan, Omer Kilic, Erkan Yilmaz, Fethi A. Ozdemir, **Muhammad Ishtiaq Ali**, Muhammad Ajmal Shah, Shazia Sultana, Shabir Ahmad (**2021**). Application and implication of scanning electron microscopy for evaluation of palyno-morphological features of Vitaceae from Pakistan. Microscopy Research and Technique. 84(4) 608-617 doi.org/10.1002/jemt.23619 (**Impact Factor 2.89, Q1**)
  37. Jafir Hussain Shirazi, **Muhamamd Ishtiaq Ali**, Asif Jamal, Zafeer Saqib, Abdul Rashid (**2021**). Effects of Seasonal Changes on the Patients flux to Basic Health Units in Pakistan. Iranian Journal of Public Health. 50(5) : 1065-67 (**Impact Factor 1.47, Q3**)
  38. Hongguang, Guo; Zhang, Yixuan; Huang, Zaixing; Liang, Weiguo; Urynowicz, Michael; **Ali, Muhammad (2020)**. High potential of methane production from coal by fungi and hydrogenotrophic methanogens from produced water. Energy & Fuels. 34, 9, 10958–10967 (**Impact factor 4.65, Q1**)
  39. Beenish Sadaqat, Nazia Khatoon, Aneela Younas Malik, Asif Jamal, Uzma Farooq, , Huan He, Fang-Jing, Liu, Hongguang Guo, Michael Urynowicz, Qiurong Wang, Zaixing Huang, **Muhammad Ishtiaq Ali (2020)**. Enzymatic decolorization of melanin by lignin peroxidase from Phanerocheate chrysosporium. Scientific Reports. 10, 20240 doi.org/10.1038/s41598-020-76376-9 (**Impact Factor 4.99, Q1**)

40. Muhammad Sabar; **Muhammad Ishtiaq Ali**, Noureen Fatima, Aneela Malik, Asif Jamal, Rabia Liaquat, Huan He, Fang-Jing Liu, Hongguang Guo, Michael Urynowicz, Zaixing Huang (2020). Evaluation of humic acids produced from Pakistani subbituminous coal by chemical and fungal treatments. *Fuel*. 278:118301 doi.org/10.1016/j.fuel.2020.118301 (**Impact Factor 8.05, Q1**)
41. Sadia Aziz , **Muhammad Ishtiaq Ali**, Uzma Farooq , Asif Jamal , Fang-Jing Liu , Huan He , Hongguang Guo , Zaixing Huang (2020). Enhanced bioremediation of diesel range hydrocarbons in soil using biochar made from organic wastes. *Environmental Monitoring and Assessment*. 192, 569. doi.org/10.1007/s10661-020-08540-7 (**Impact Factor 3.307, Q2**)
42. Bushra Fatima, **Muhammad Ishtiaq Ali**, Rabia Liaquat, Uzma Farooq, Asif Jamal, Fang-Jing Liu ,Huan He , Hongguang Guo , Michael Urynowicz , Zaixing Huang (2020). Enhanced biogas production at mesophilic and thermophilic temperatures from a slaughterhouse waste with zeolite as ammonia adsorbent. *International Journal of Environmental Science and Technology*. doi.org/10.1007/s13762-020-02822-w (**Impact Factor 3.519, Q2**)
43. Aneela Younas Malik, **Muhammad Ishtiaq Ali**, Asif Jamal, Uzma Farooq, Nazia Khatoon, William H. Orem, Elliott P. Barnhart, John R. SanFilipo, Zaixing Huang (2020). Coal biomethanation potential of various ranks from Pakistan: A possible alternative energy source. *Journal of Cleaner Production*. 255:120177 <https://doi.org/10.1016/j.jclepro.2020.120177> (**Impact Factor 11.072, Q1**)
44. Huan He, Qian Zhang, Long-Fei Tang, Kai-Yi Shi, Fen-Fen Hong, Xiu-Xiang Tao, **Muhammad Ishtiaq Ali**, Michael Urynowicz, Zaixing Huang (2020). Biodegradation of Concentrated Benzoic Acid Using White-Rot Fungus *Hypocrea lixii* AH. *Environmental Engineering Science*. 37 (7): 482-489. doi.org/10.1089/ees.2019.0477 (**Impact Factor 2.172, Q3**)
45. Huan he; Di Zhan; Fan Chen; ZaiXing Huang; Ai-kuan Wang; Hua-Zhou Huang; Guan-Hua Huang; **Ishtiaq A Muhammad**; Xiu-Xiang Tao (2020). Microbial Community Succession between Coal Matrix and Culture Solution in a Simulated Methanogenic System with Lignite. *Fuel*. 264: 116905 doi.org/10.1016/j.fuel.2019.116905 (**Impact Factor 8.05, Q1**)
46. Sadia Aziz, Laiba Yaseen, Asif Jamal, Uzma Farooq, Zahid Qureshi, **Muhammad Ishtiaq Ali** (2020). Fabrication of Biochar from organic wastes and its effect on wheat growth and soil microflora. *Polish Journal of Environmental Studies*. 29(2):1069–1076 (**Impact factor 1.871, Q4**)
47. Muhammad Ali Furqan, Rabia Liaquat, Zahid Qureshi, Uzma Farooq, Asif Jamal, **Muhammad Ishtiaq Ali** (2020). Catalytic efficiency of *Acidithiobacillus ferrooxidans* for bioleaching of

- Copper from Chalcocite Containing Sulfide Ore of Reko Diq Deposits of Balochistan, Pakistan. Polish Journal of Environmental studies. 29(2):1593–1600 (**Impact factor 1.871, Q4**)
48. Saeed Ullah Jan, Muhammad Adnan Sabar, Asif Jamal, Huda Ahmed Alghamdi, İbrahim Ortaş, Mehmet Işık, Veysi Akşahin, Bashir Ahmad and **Muhammad Ishtiaq Ali (2020)**. Impact of Zea Mays L Waste Derived Biochar on Cadmium Immobilization and Wheat Plant Growth. Pakistan Journal of Agricultural Sciences. 57(5), 1201-1210 (**Impact Factor 0.856, Q3**)
  49. Zeeshan Ahmad, Shujaul Mulk Khan, **Muhammad Ishtiaq Ali**, Noureen Fatima, Shahab Ali (**2019**). Pollution indicandum and marble waste polluted ecosystem; role of selected indicator plants in phytoremediation and determination of pollution zones. Journal of Cleaner Production. 236(1)117709 [doi.org/10.1016/j.jclepro.2019.117709](https://doi.org/10.1016/j.jclepro.2019.117709) (**Impact Factor 11.072, Q1**)
  50. Shafiq Ahmad, Muhammad Zafar, Mushtaq Ahmad, **Muhammad Ishtiaq Ali**, Shazia Sultana, Neelam Rashid, Maryam A. Butt, Syed N. Shah, Fethi A. Ozdemir, Mehmet A. Kutlu, Rabia Afza, Anwer Usma, Moona Nazish (**2019**). Seed morphology using SEM techniques for identification of useful grasses in Dera Ghazi Khan, Pakistan. Microscopy Research and Technique. 83 (3) 249-258 DOI: 10.1002/jemt.23408 (**Impact Factor 2.89, Q1**)
  51. Sana Ayaz, Mushtaq Ahmad, Muhammad Zafar, **Muhammad Ishtiaq Ali**, Shazia Sultana, Muhammad Raza Ul Mustafa, Omer Kilic, Duygu N. Çobanoğlu, Azize Demirpolat, Abdul Ghani, Rabia Afza, Khalid Ahmad, Mamoona Munir, Nomana Kalsoom, Jamil Raza (**2019**). Taxonomic significance of cypselae morphology in tribe Cichoreae (Asteraceae) using light microscopy and scanning electron microscopy. Microscopy Research and Technique. 83 (3) 239-248 (**Impact Factor 2.89, Q1**)
  52. Haleema Sadia, Muhammad Zafar, Mushtaq Ahmad, Muhammad P. Z. Khan, Ghulam Yaseen, **Muhammad I. Ali**, Shazia Sultana, Omer Kilic, Zeynep Şahan, Naveed Alam, Qamar Abbas, Abdul Ghani, Saeeda Naz, Lubna (2019). Foliar epidermal anatomy of some selected wild edible fruits of Pakistan using light microscopy and scanning electron microscopy. Microscopy Research and Technique. 83(3):259-267 (**Impact Factor 2.89, Q1**)
  53. Muhammad Adnan Sabar, **Muhammad Ishtiaq Ali**, Noreen Fatima, Aneela Younas Malik, Asif Jamal, Muhammad Farman, Zaixing Huang, Michael Urynowicz (**2019**). Degradation of low rank coal by *Rhizopus oryzae* isolated from a Pakistani coal mine and its enhanced releases of organic substances. FUEL. 253 (1) 257-265 (**Impact Factor 8.05, Q1**)
  54. Anwer Usma, Mushtaq Ahmad, Muhammad Zafar, **Muhammad I. Ali**, Omer Kilic, Fethi A. Ozdemir, Shazia Sultana, Abdul Nazir, Farida Anjum, Nomana Kalsoom (**2019**). Taxonomic significance of caryopsis in subfamily Panicoideae (Poaceae) using scanning electron microscopy



- and light microscopy. *Microscopy Research and Technique*. 82(10) 1649-1659 (**Impact Factor 2.89, Q1**)
55. Hassan Waseem, Jafar Ali, Fiza Sarwar, Aroosa Khan, Hamza Saleem, Mishal Choudri, Nooh Arif, Muhammad Subhan, Aansa Saleem, Asif Jamal, **Muhammad Ishtiaq Ali (2019)**. Assessment of knowledge and attitude trends towards antimicrobial resistance (AMR) among the community members, pharmacists/ pharmacy owners and physicians in district Sialkot, Pakistan. *Antimicrobial Resistance & Infection Control*. 8:67. doi: 10.1186/s13756-019-0517-3 (**Impact Factor 6.45, Q1**)
  56. Aisha Khan, Sadia Selim Khan, Muhammad Asif Gondal, Muhammad Sohail Afzal, Muhammad Umer, Muhammad Inam Afzal, Muhammad Isthiaq Ali, Majid Mehmood, Haroon Ahmed. An overview of dengue fever in Pakistan (**2019**). *Asian Pacific Journal of Tropical Medicine*. 12(10):18 DOI: 10.4103/1995-7645.243094 (**Impact Factor 3.04, Q2**)
  57. Sumreen Dawood, Mushtaq Ahmad, Muhammad Zafar, **Muhammad I. Ali**, Khalid Ahmad, Shazia Sultana, Anwer Usma, Moona Nazish, Maryam A. Butt, Fethi A. Ozdemir, Omer Kilic (**2019**). Identification of novel nonedible oil seeds via scanning electron microscopy for biodiesel production. *Microscopy Research and Technique*: 83(2) 165-175 (**Impact Factor 2.89, Q1**)
  58. Hassan Waseem, Sana Jameel, Jafar Ali, Hamza Saleem, Isfahan Tauseef, Uzma Farooq, Asif Jamal, **Muhammad Ishtiaq Ali (2019)**. Contributions and Challenges of High throughput qPCR for determining antimicrobial resistance in the environment: A critical review. *Molecules*. 24(1) 163 (**Impact Factor 4.92, Q2**)
  59. Aisha Khan, Sadia Selim Khan, Muhammad Sohail Afzal, Muhammad Asif Gondal, **Muhammad Ishtiaq Ali**, Naveeda Riaz, Majid Mehmood, Haroon Ahmed (**2019**). An overview of chikungunya in Pakistan. *Asian Pacific Journal of Tropical Medicine*. 12(10) 10.4103/1995-7645.243080 (**IF:3.04, Q2**)
  60. Hassan Waseem, Jafar Ali, Asif Jamal, **Muhammad Ishtiaq Ali (2019)**. Potential dissemination of antimicrobial resistance from small scale poultry slaughterhouses in Pakistan. *Applied Ecology and Environmental Research*. 17(2):3049-3063 (**impact factor 0.82, Q4**)
  61. Aisha Khan, Muhammad Sohail Afzal, **Muhammad Ishtiaq Ali**, Naveeda Riaz, Haroon Ahmed (**2019**). Emerging trend of leishmaniosis in Pakistan: Current status and future prospects. *Asian Pacific Journal of Tropical Medicine*. 12(Suppl 1): 23 (**Impact Factor 3.04, Q2**)
  62. Farah Nawaz, Muhammad Nadeem Khan, Naeem Ali, **Muhammad Ishtiaq Ali**, Syeda M. Bakhtiar and Muhammad Imran (**2019**). Genomic and Functional Characterization of

- Enterococcus mundtii QAUEM2808 Isolated from Artisanal Fermented milk product Dahi. *Frontiers in Microbiology*. 10, 434, doi: 10.3389/fmicb.2019.00434 (**Impact factor 6.06, Q2**)
63. Aisha Khan, Qudsia Rasib, Sajida Riaz, Ishtiaq Ali, Naveeda Riaz, Muhammad Sohail Afzal, Muhammad Asif Gondal, Haroon Ahmed (2019). An update on HIV in transgenders of Pakistan. *Asian Pacific Journal of Tropical Medicine*. 12 (Suppl 1): 21 (**Impact Factor 3.04, Q2**)
64. Jafir Hussain Shirazi, **Muhammad Ishtiaq Ali**, Asif Jamal, Abdul Rashid (2019). Pediatric oropharyngeal candidiasis: A comprehensive study on risk factors and most prevalent species of *Candida*. *Pakistan Journal of Pharmaceutical Sciences*. 32(6):2873-2878 (**Impact Factor 0.86, Q4**)
65. Ramla Rehman, **Muhammad Ishtiaq Ali**, Umar Masood Qureshi, Asif Jamal (2019). Characterization of brownfield: Ex-Situ detection of hydrocarbon degrading and biosurfactants producing Microflora. *Pakistan Journal of Agricultural Sciences*. 56(4) 953-961 **Impact Factor 0.856, Q3**)
66. Abubakar Muhammad, Bokhari Syed Ali Imran, Vernoux Jean-Paul, **Ishtiaq Ali Muhammad**, Rani Faryal, Desmaures Nathalie, IMRAN MUHAMMAD (2019). Purification, Characterization and Thermodynamic Assessment of an Alkaline Protease by *Geotrichum candidum* of Dairy Origin. *Iranian Journal of Biotechnology*.17(2) 30-37. (**Impact factor 1.67, Q4**)
67. Abida Bano, Mushtaq Ahmad, Sofia Rashid, Muhammad Zafar, Shomaila Ashfaq, Saeed ur Rehman, **Muhammad Ishtiaq Ali**, Shazia Sultana, Shabnum Shaheen, Shafiq Ahmad (2018). Microscopic Investigations of some selected species of Papilionaceae through SEM and LM from Skardu valley, Northern Pakistan. *Microscopy Research and Technique*. 82(4) 452-458 (**Impact factor 2.89, Q1**)
68. Nazia Khatoon, Asif Jamal and **Muhammad Ishtiaq Ali** (2018). Lignin peroxidase isoenzyme: A Novel approach to biodegrade the toxic synthetic polymer waste. *Environmental Technology*. 40 (11)1366-1375 (**Impact Factor 3.47, Q3**)
69. Nazia Khatoon, Asif Jamal and **Muhammad Ishtiaq Ali** (2017). **Polymeric pollutant biodegradation through microbial oxidoreductase: A better strategy to safe environment**. *International Journal of Biological Macromolecules*. 105(1) 9-16 (**Impact Factor 8.03, Q1**) \*
70. Aneela Younis Malik , Muhammad Ali, Asif Jamal, **Muhammad Ishtiaq Ali** (2017) Isolation and Characterization of Coal Solubilizing Aerobic Microorganisms from Salt Range Coal Mines Pakistan. *Geomicrobiology Journal*. 34(2): 109-118 **Impact factor (2.41, Q3)**

71. Rabia Liaquat, Asif Jamal, Isfahan Tauseef, Zahid Qureshi, Uzma Farooq, Muhammad Imran, Muhammad Ishtiaq Ali (2017). Characterization of bacterial consortia from anaerobic digester treating organic waste for biogas production. Polish Journal of Environmental Studies. 26(2) 709-716 (**Impact factor 1.87, Q4**)
72. Anam Fatima, Muhammad Zafar, Mushtaq Ahmad, Shazia Sultana & **Muhammad Ishtiaq Ali** (2017). Parametric characterization and statistical optimization of Argemone ochroleuca (Mexican Poppy) methyl esters as a renewable source of energy. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects. 39(19) 1963-1969 **Impact factor 3.45, Q2**
73. Nazia Khatoon, Najam I Sahar, Asif Jamal, Naeem Ali, Udonna Ndu, Safia Ahmed, **Muhammad Ishtiaq Ali** (2017). High throughput production of peroxidase and its biodegradation potential toward polymeric material. International Journal of Environmental Science and Technology. 14 (4): 755-766. (**Impact Factor 3.52, Q2**)
74. Jafar Ali, Abdul Hameed, Safia Ahmed, **Muhammad Ishtiaq Ali** , Shama Zainab, Naeem Ali (2016). Role of catalytic protein and stabilizing agents in transformation of Ag ions to nanoparticles by Pseudomonas aeruginosa. IET Nanobiotechnology. 10(5): 295 - 300 (**Impact Factor 2.05, Q3**)
75. Asif Jamal, Muhammad Zahid Qureshi, Raja Rizi ul Hasan, Naeem Ali, **Muhammad Ishtiaq Ali** (2016). Mathematical modeling of bioprocess variables for improved production of Rhamnolipid from *Pseudomonas aeruginosa* strain JQ. Pakistan Journal of Agricultural Sciences 53(3), 551-556 ( **Impact Factor 1.054, Q3**)
76. Rabia Liaquat, Sidra Kaleem , Aqeela Azeem , Asif Jamal and **Muhammad Ishtiaq Ali** (2015). Production and characterization of  $\alpha$ -amylase from indigenously isolated bacterial strains treating organic waste in anaerobic digester. Pakistan Journal of Agricultural sciences. 52(4) 895-903 (**Impact factor 1.05, Q3**)
77. Hajra Hanif, Awais Anjum, Naeem Ali, Asif Jamal, Muhammad Imran, Bashir Ahmad and **Muhammad Ishtiaq Ali** (2015). Isolation and antibiogram of Clostridium tetani from clinically diagnosed Tetanus patients. American Journal of Tropical Medicine and Hygiene. 93(4): 752–756 (**Impact factor 3.707, Q2**)
78. Muhammad Pukhtoon Zada Khan, Mushtaq Ahmad, Muhammad Zafar, Shazia Sultana, **Muhammad Ishtiaq Ali** (2015). Ethnomedicinal Uses of Edible Wild Fruits (EWFs) in Swat Valley, Northern Pakistan. Journal of Ethnopharmacology. 173:191-203 (**Impact factor 5.19, Q1**)

79. Mobushir Riaz Khan, Haroon Ahmed, Rosario Panadero-Fontán, Ceferino López Sández, Muhammad Aamir Khan, Saira Asif, **Muhammad Ishiaq Ali**, Mazhar Qayyum (2015). Risk mapping of bovine hypodermosis using geographical information system (GIS) in cattle of subtropical region, Pakistan. *Journal of Infection in Developing Countries*. 29; 9(8):872-7 (**Impact factor 2.55, Q4**)
80. Irfan Mustafa, Haroon, Myda Abrar Lodhi, Abdul Rauf Siddiqi Sher Khan, Waseem Haider, Nazish Bostan, Saira Asif, Mobushir Riaz Khan, Mazhar Qayyum, Shahzad Ali, **Muhammad Ishtiaq Ali**, Muhammad Sohail Afzal (2015). Newcastle disease as an emerging disease in Peacock of Tharparkar region of Pakistan. *Journal of Infection in Developing Countries*. 9(8): 914-916 (**Impact factor 2.55, Q4**)
81. Jafir Hussain Shirazi, Muhammad Ishtiaq Ali, Abdur Rashid, Safia Ahmed and Ayesha Nayab (2015). Prevalence and risk factors assessment of *Candida albicans* in tertiary health care institutions of Pakistan. *International Journal Current Microbiology and Applied Sciences* (2015) 4(3): 1067-1072
82. Shumaila Ishfaq, Naeem Ali, Isfahan Tauseef, Muhammad Nasir Khan Khattak, Zabta Khan Shinwari, **Muhammad Ishtiaq Ali**. (2015) Analysis of paint degradation by fungal and bacterial species. *Pakistan Journal of Botany*. 47(2): 753-760 (**Impact factor 1.207, Q4**)
83. Nazia Khatoon, Iffat Naz, Naeem Ali, Asif Jamal, Safia Ahmed, Abdul Hameed, **Muhammad Ishtiaq Ali** (2014). Bacterial Succession and degradative changes by biofilm on plastic for wastewater treatment. *Journal of Basic Microbiology*. 54(7): 739-749 (**Impact factor 2.65, Q2**)
84. Iffat Naz, Nazia Khatoon, **Muhamamd Ishtiaq Ali**, Naeem Ali, Devendra P. Saroj, Syeda Ainal Batool, Safia Ahmed (2014). Appraisal of the tire derived rubber (TDR) medium for wastewater treatment under aerobic and anaerobic conditions. *Journal of Chemical Technology and Biotechnology*. **89 (4) : 587-596 (Impact factor 3.71, Q1)**
85. **Muhammad Ishtiaq Ali**, Safia Ahmed, Imran Javed, Naeem Ali, Naima Atiq, Abdul Hameed, Geoff Robson (2014). Biodegradation of Starch Blended Polyvinyl Chloride Film by *Phanerochaete chrysosporium* PV1. *International Journal of Environmental Science and Technology*. 11(2):339-348 (**Impact factor 3.51, Q2**)
86. Asif Jamal, Naeem Ali, **Muhammad Ishtiaq Ali**, Abdul Hameed, Muhammad Zahid Qureshi (2014). Enhanced Production of rhamnolipid by *P. aeruginosa* using Response Surface Methodology. *Asian Journal of Chemistry*. 26(4):1044-1048 (**Impact factor 0.355**)
87. **Muhammad Ishtiaq Ali**, Safia Ahmed, Geoff Robson, Imran Javed, Naeem Ali, Naima Atiq, Abdul Hameed, (2014) Isolation and molecular characterization of polyvinyl chloride (PVC)

- plastic degrading fungal isolates. *Journal of basic Microbiology*. 54(1):18-27 (**Impact factor 2.65, Q2**)
88. Syed Zeeshan Haider Naqvi, Urooj Kiran, **Muhammad Ishtiaq Ali**, Asif Jamal, Abdul Hameed, Safia Ahmed and Naeem Ali (2013). Combined efficacy of biologically synthesized silver nanoparticles and different antibiotics against multi-drug resistant bacteria. *International Journal of Nanomedicine*. 8 : 3187-3195 (**Impact factor 7.03**)
89. Lubna Tahir. **Muhammad Ishtiaq Ali**, Muhammad Zia, Naima Atiq, Fariha Hasan, Safia Ahmed (2013) Production and Characterization of Esterase in *Lentinus tigrinus* for Degradation of Polystyrene. *Polish Journal of Microbiology*. 62(1) 101–108 (**Impact factor 2.02, Q3**)
90. Muneer Ahmed Qazi , Mishal Subhan , Nighat Fatima, **Muhammad Ishtiaq Ali** , Safia Ahmed (2013). Role of Biosurfactant Produced By *Fusarium* sp. BS-8 in Enhanced Oil Recovery (EOR) Through Sand Pack Column. *International Journal of Bioscience, Biochemistry and Bioinformatics*. 11/2013; 3(6):598-604
91. Pir Bux Ghumro, Maryam Shafique, **Muhammad Ishtiaq Ali**, Imran Javed, Bashir Ahmad, Asif Jamal, Naeem Ali and Abdul Hameed (2012). Isolation and screening of protease producing thermophilic *Bacillus* strains from different soil types of Pakistan. *African Journal of Microbiology Research*. 5(31), 5534-5539 (**Impact factor 0.539**)
92. Imran Javed, **Muhammad Ishtiaq Ali** , Bashir Ahmed , Pir Bux Ghumro , Abdul Hameed, Safia Ahmed (2011). Optimization and partial purification of bacteriocins from *Enterococcus* spp. indigenous to Pakistan. *Food Biotechnology*. 25(2),130-139 (**Impact factor 2.297, Q3**)
93. Shama Sehar, Iffat Naz, **Muhammad Ishtiaq Ali** and Safia Ahmed (2011). Monitoring of Physico-Chemical and Microbiological Analysis of Under Ground Water Samples of District Kallar Syedan, Rawalpindi-Pakistan. *Research Journal of Chemical Sciences*. 1(8), 24-30
94. Naima Atiq, Safia Ahmed, **Muhammad Ishtiaq Ali**, Saadia Andleeb, Bashir Ahmed, Geoff Robson (2010). Isolation and identification of polystyrene biodegrading bacteria from soil. *African Journal of Microbiology Research*. 4(14) 1537-1541 (**Impact factor 0.539**)
95. Saadia Andleeb, **Muhammad Ishtiaq Ali**, Naima Atiq, Fazal ur Rehman, Geoff Robson, Abdul Hameed, Safia Ahmad (2010). Biodegradation of anthraquinone dye by *aspergillus niger* SA1 in self designed fluidized bed bioreactor. *Journal of Environmental Health Science and Engineering*. 7(5); 371-376 (**Impact factor 3.433, Q3**)
96. Imran Javed , Safia Ahmed , Srikanth Manam , Mariam Riaz , Bashir Ahmad, **Muhammad Ishtiaq Ali**, Abdul Hameed, Abdul Hameed , Ghulam Jilani Chaudry (2010).

Production, characterization, and antimicrobial activity of a **bacteriocin** from newly isolated *Enterococcus faecium* IJ-31. *Journal of Food Protection*. 73(1), 44-52 (**Impact factor 2.745, Q2**)

97. Imran Javed, **Muhammad Ishtiaq Ali**, Bashir Ahmad, Pir Bux Ghumro, Abdul Hameed, Ghulam Jilani Chaudry, Safia Ahmed (**2010**). Bacteriocinogenic potential of newly isolated strains of *Enterococcus faecium* and *Enterococcus faecalis* from dairy products of Pakistan. *Journal of Microbiology and Biotechnology*. 20(1),153-160 (**Impact factor 3.27, Q2**)
98. Saadia Andleeb, Naima Atiq, **Muhammad Ishtiaq Ali**, Raja Razi-UI-Hussnain, Maryam Shafique, Bashir Ahmad, Pir Bux Ghumro, Masroor Hussain, Abdul Hameed, Safia Ahmad (**2010**). Biological Treatment of Textile Effluent in Stirred Tank Bioreactor. *International Journal of Agriculture and Biology*. 12(2) 256-260 (**Impact factor 0.94, Q3**)
99. **Muhammad Ishtiaq Ali**, Qaisara Perveen, Bashir Ahmad, Imran Javed, Raja Razi-UI-Hussnain, Saadia Andleeb, Nazia Atique, Pir Bux Ghumro, Safia Ahmed, Abdul Hameed (**2009**). Studies on Biodegradation of Cellulose Blended Polyvinyl Chloride Films. *International Journal of Agriculture and Biology*. 11(5) 577–58 (**Impact factor 0.94, Q3**)

## **Book Chapters**

1. Asif Jamal Ahtisham bin Masood, **Muhammad Ishtiaq Ali**. Pollution mitigation utilizing biosurfactants, *Industrial Applications of Biosurfactants and Microorganisms: Green Technology Avenues From Lab to Commercialization*, **Elsevier Publications 2023 (In press)**
2. Asif Jamal, Irfan Ali, **Muhammad Ishtiaq Ali**, Ahtisham bin Masood, Introduction and classification of Biosurfactants, *Industrial Applications of Biosurfactants and Microorganisms: Green Technology Avenues from Lab to Commercialization*, **Elsevier Publications 2023 (In production process)**
3. Afsheen Mansoor, Asif Jamal, Aetsam Bin Masood, and **Muhammad Ishtiaq Ali (2023)**. Magnetic Surfactants: Introduction, Chemistry, and Properties. 0.1021/bk-2023-1447.ch001 ACS Symposium Series; American Chemical Society: Washington, DC. (**in production process**)
4. Asif Jamal, **Muhammad Ishtiaq Ali**, Ahitsham bin Masood. Role of biosurfactants in agriculture, *Advancements in biosurfactants research*, **Springer publishers, (2022)**, 1st Edition
5. Hassan Waseem Sana Jameel, Hamza Saleem, Jafar Ali, Muhammad Javed Iqbal and **Muhammad Ishtiaq Ali**. **Chapter 14**. Global trends in ARGs measured by HT-qPCR platforms. **2020**. *Antibiotics and Antimicrobial Resistance Genes in the*

Environment (Elsevier). ISBN: 9780128188835 Volume 1: 206-22, DOI: <https://doi.org/10.1016/B978-0-12-818882-8.00014-0>

6. Hassan Waseem, Jafar Ali, Asif Jamal and **Muhammad Ishtiaq Ali**. Chapter 21. Treatment Technologies. 2020. Antibiotics and Antimicrobial Resistance Genes: Environmental Occurrence and Treatment Technologies. (Springer) ISBN: ISBN 978-3-030-40421-5 Volume 1: 395-413, DOI [https://www.doi.org/10.1007/978-3-030-40422-2\\_18](https://www.doi.org/10.1007/978-3-030-40422-2_18)

### Conferences Organized and Participated

Conference Title	Organizer	Location	Date	Sponsoring Agency
6 <sup>th</sup> International Conference on Applied Zoology	Government college and university of Faisalabad	Faisalabad	18-19 Dec 2023	Keynote speaker
5 <sup>th</sup> International Conference on Applied Zoology	Khawaja fareed university Khawaja	Rahim yar khan		
Joint session of education	Abdul ali khan university	Mardan	12 Dec 2023	
Annual consortium of excellence program meeting	Comstech	Islamabad	6 Dec 2023	
Rector conference	Marriott hotel	Islamabad	1 Dec 2023	
Rector conference of vice chancellor 3 days promoting peace and tolerant university	MARRIOTT HOTEL	ISLAMABAD	21 JULY 2023	
UAE Microbiome conference 2023	Abu Dhabi national exhibition center	Abu Dhabi	22 Nov 2023	talk
IUCPSS inter-university consortium for the promotion of social sciences	Shah Abdul latif university	Khairpur	18 Nov 2023	
HEC team for GPR (Mphil and PhD program review	HEC	Islamabad	17 Nov 2023	
International young scholar YUEQI FORUM 2023	China UNIVERSITY OF MINING AND technology	CHINA COPHENG EN	26 OCT 2023	
Development of joint research program with ministry of higher education Afghanistan	HEC	Islamabad	20 Oct 2023	
Rector roundtable conference APSUP	QAU	ISLAMABAD	18 OCT 2023	

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN SCIENCE AND TECHNOLOGY	FATIMA JINNAH UNIVERSITY	RAWALPINDI	11 OCT 2023	
world pharmacy day	NATIONAL CENTER of bioinformatics	Qau islamabad	25 sept 2023	
5 <sup>th</sup> international conference on recent trend in bioinformatics and bio science ( ICETBB-2023)	HAZARA UNIVERSITY	HAZARA DIVISION	21 SEPT 2023	
ORIENTATION AND TRAINING PROGRAM AT NAHE HEC	HEC	ISLAMABAD	23 AUGUST	
ATTENDING WORKSHOP :transforming higher education jointly organized by HEC QAA and British council	HEC	Marriott islamabad	9 august 2023	
WORLD ENVIRONMENT DAY SOLUTION TO PLASTIC POLLUTION	QAU	ISLAMABAD	5 <sup>TH</sup> JUNE 2023	
Collaboration of azerbaijan university with qau in academic activities	Azerbaijan texniki university	BAKU Azerbaijan	3 may 2023	
Education expo PRESENTING QAU	EDX SRILANKA	COLOMBO SRILANKA	24 FEB 2023	
KASHMIR DAY ATTENTION SEMINAR	EARTH AUDITORIUM	QAU	5 <sup>TH</sup> FEB 2023	
Academic Research Skills	American Information Resource Center U.S. Embassy	Islamabad	20 October, 2009	U.S. Embassy, Islamabad
4 <sup>th</sup> International Conference on Biosciences(ICBS-2021)	Department of Plant sciences,QAU	Islamabad	15 June 2021	QAU
4 <sup>th</sup> International Conference on Applied Zoology	QAU	Islamabad	24-25 November 2021	QAU
Awareness on the psychological Consequences and mental health in pandemics, A case of	Department of Biotechnology QAU Islamabad	Islamabad	31December 2020	UNESCO



COVID-19 Infodemics				
First International Seminar on Times Higher Education	University of Lahore	Pakistan	24 October 2019	PHEC, OF C, ELSEV IER
Dengue Infection In Pakistan And Its controlling Strategies	Department of Animal sciences	Islamabad	17-18 December 2019	QAU
International Conference on energy production from agriculture biomass and domestic waste	PMAS-UAAR	Rawalpindi	15-17 April 2014	HEC
sss	Dept. Microbiology, Hazara University KPK Pakistan	Nathia Gali, Abbottabad	27-28 June, 2013	QAU
BIT's 6 <sup>th</sup> annual World congress of Industrial Biotechnology (Ibio-2013)	IBIO China	Nanjing, China	25-27 April, 2013	PSF
Current Approaches in Microbiology	Dep of Microbiology, hazara university, Manshera	Nathiagali, Abbottabad	27-28 June, 2013	Hazara University, Manshera, Pakistan
IMMUNOHEAMATOLOGY	Pakistan Institute of Medical Sciences, Islamabad	Islamabad	June 29, 2013	Pakistan society of Blood Transfusion
Country strategy for Blood Donation Screening of Transfusion Transmissible Infections	National workshop	Islamabad Pakistan	july 01, 2013	WHO&O FID
1st National Symposium on New Horizons of microbiology	Fedral Urdu Univrsity karachi	Karachi, Pakistan	7th & 8th November 2012	HEC
International workshop on Essential Need of Nano-Education in OIC Countries	COMSTECH-PRESTON Islamabad. Pakistan	Islamabad.	7-9 April, 2011	COMSTE CH
	University of Natural Resources and		September	

15 <sup>th</sup> International Symposium on Biodeterioration and Biodegradation (IBBS-15)	Life Sciences Vienna, Austria	Austria	19-24 <sup>th</sup> , 2011	HEC
3 <sup>rd</sup> IPO conference 26 <sup>th</sup> April 2011	IPO Pakistan	Islamabad	26 April 2011	IPO, Pakistan
Essential Need of Nano-Education in OIC Countries	COMSATTEC H & PINSAT,	Preston, Islamabad	7-9 April, 2011	
Incorporating Technology in Education	QAU, Islamabad	QAU, Islamabad	29 December 2011 to 13 Jan, 2012	
2 <sup>nd</sup> IPR Conference, by Intellectual Property Organization – Pakistan	IPO-P	Islamabad	May 3, 2010	
1 <sup>st</sup> National conference of Microbiology “New Horizons of Microbiology	Department of Microbiology, Shah Abdul Latif University, Khairpur Sindh, Pakistan	Department of Microbiology, Shah Abdul Latif University, Khairpur Sindh, Pakistan	21-22, 2009	HEC
First international conference on Advances in Waste Water Treatment and Reuse. , from	University of Tehran, College of Engineering, Tehran, IRAN	Tehran, IRAN	09-11 November, 2009	
1 <sup>st</sup> International conference on biotechnology,	King Saud University, Riyadh Saudi Arabia	Riyadh Saudi Arabia	16-18 Sep 2009	HEC

#### **MEMBERSHIP OF INTERNATIONAL SOCIETIES:**

1. American Society for Microbiology
2. British Mycological Society
2. International Biodeterioration & Biodegradation Society
3. European federation for Biotechnology
4. Pakistan Society for Microbiology
5. Pakistan Society for Biochemistry
6. Society of Anaerobic Microbiology