Asif Jamal (PhD)





CV .Page1

# Assistant Professor, Department of Microbiology, Quaid-i-Azam

# University, Islamabad, 45320, Pakistan.

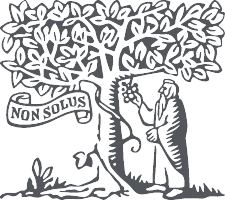


Phone; +92-302-4746105,+92-51-90643195,

@

Email: [asifjamal@qau.edu.pk](mailto:asifjamal@qau.edu.pk)

**Orcid ID** 0000-0001-5834-5210

****

**ORCID**

**Scopus ID**[5583109830](http://www.scopus.com/inward/authorDetails.url?authorID=55831098300&partnerID=MN8TOARS)0

Web: https://www.qau.edu.pk/profile.php?id=805013

With 14 years (**Post-PhD 7 years**) of teaching and research experience at University level, I have supervised **35** M.Phil, **1** PhD student and published **36** research articles (**28**-last five years) in reputed international journals (Total Impact Factor: **125.79**) , as well as, a book chapter. I have participated in a number of National and International conferences, seminars and training programs as invited speaker.

Currently, my group is working on various aspects of applied and environmental microbiology specifically bioprocesses design, biochar production and characterization, biodegradation of hydrocarbons and biocontrol of plant pathogens. In the year 2017, I have won two competitive grants from Higher Education Commission of Pakistan (11 million PKR). I have been associated with curriculum development/revision team for improving BS/MPhil/PhD courses at par with international standards. I have been assigned diverse management tasks both within and off-campus. These includes; member admission committees (MSc/MPhil/PhD), BS program coordinator, Member student advisory committee, senior resident warden for boy’s hostel; Member University sports committee, Deputy Director, Quality Enhancement Cell, In- charge, Quality Enhancement Cell of Affiliated colleges, Focal Person of Affiliated Colleges and M.Phil/PhD programs review committee.

## ACADEMICS

* PhD Chemistry/Biotechnology G.C University, Lahore,2014 (Thesis Title: Studies on Microbial and Plants Surfactants for their Use in Soil Remediation
* M.Phil Microbiology QAU, 2004 (Thesis Title: Isolation and Characterization of Crude Oil Degrading Bacteria)
* M.Sc Biology QAU, 2001(Thesis Title: Biodegradation of Phenolic Compounds by *P.putida*).

## PROFESSIONAL ACTIVITIES:

* **Assistant Professor,** Department of Microbiology, Quaid-i-Azam University, Islamabad-Pakistan. 2009- todate
* **Assistant Professor,** Institute of Molecular Biology and Biotechnology, The University of Lahore, Lahore, Pakistan.2007-2009
* **Research Assistant,** Department of Biology, Microbiology Research Lab, Quaid-i-Azam University, Islamabad, Pakistan.2001-2003.
* **Courses Taught:** Fermentation Technology, Advances in Microbiology, Fundamentals of Microbiology, Molecular Microbiology**,** Microbial Diversity, Microbial Physiology, Biosafety and Risk Management, Current Trends in Biotechnology, Cell Biology and Microbial Biotechnology.
* **Courses Developed:**

CV .Page2

1. Research Innovation and Entrepreneurship (M.Phil/PhD)
2. Molecular Microbiology (B.S, M.Sc)
3. Advances in Bacterial Physiology (M.Phil/PhD)

* **External Examiner:** University of the Punjab, Hazara university Manshera, International Islamic University, Arid agriculture University Rawalpindi, The University of Lahore, GC University Lahore.
* **Reviewer:** Higher Education Commission of Pakistan & Pakistan Science Foundation for the evaluation of competitive research grants
* **Reviewer:** Journal of Hazardous Materials**,** Soil and sediment contamination**,** Bioremediation Journal, Bioremediation & Biodegradation, Applied Biochemistry and Biotechnology, Bioengineering and Biotechnology, Environmental Technology. Brazilian J Microbiology, Tarkya J Natural Sciences, International Journal of leather science and engineering.
* **Member:** University Sports Committee, Member PhD Admission Committee, Member Board of Faculty of Biological Sciences, Quaid-i-Azam University (2017-19), Member Board of studies, Department of Microbiology.

## Senior Resident Warden Boys Hostels (2015-2018)

* **Deputy Director Quality Enhancement Cell, Quaid I Azam University (2019-todate)**
* **Incharge, Quality Enhancement Cell of Affiliated Collages (2020 todate)**
* **Focal Person, ICT Affiliated Colleges (2020- todate)**
* **BS Microbiology Program Coordinator (2020-to2021)**
* **Member: Self-assessment process, M.Phil/PhD review, accreditation and University ranking committee (2021-to date)**
* **Member Higher Education Commission committee for third party validation of Prime Minster Laptop Scheme (2021-todate)**

**Research Interest**

* + Bioremediation, Biodegradation and biosurfactants: Characterization of non-ribosomal and glycolipid biosurfactants, bioenergy
  + Soil and Agriculture Microbiology: Biological control of phytopathogens, Plant growth promotion and agriculture yield improvement using biochar and bio-fertilizers

## Research Infrastructure Established:

* Established Applied and Environmental Microbiology Research Group**(2017)**
* Established Applied and Environmental Microbiology Lab**(2017)**

## COMPETITIVE RESEARCH GRANTS:

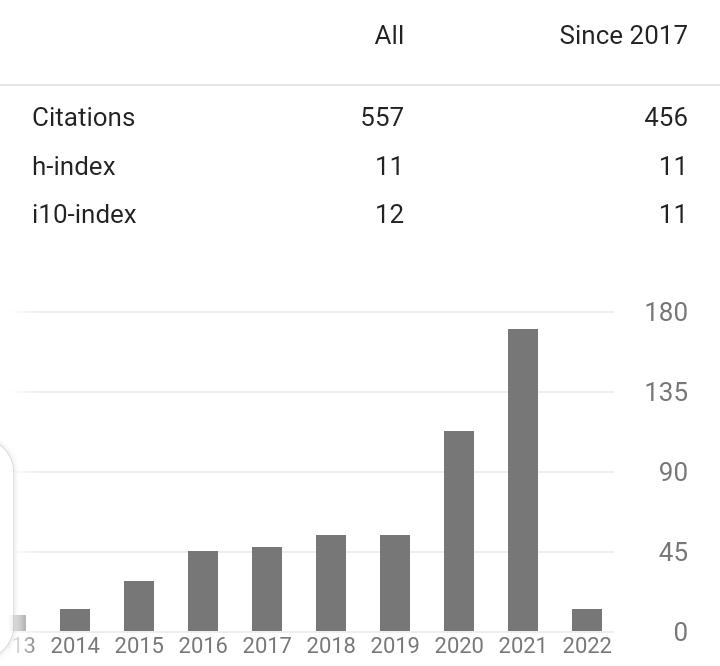
* **Principle Investigator;** Development of biological treatment system for pulp and paper industry waste water, Awarding Agency (Higher Education commission of Pakistan) 4.23 million PKR**(2017-2020).**
* **Co-Principle Investigator;** Production and Characterization of Biochar and its application for soil Bioremediation and as Bio-fertilizer. Awarding Agency (Higher Education commission of Pakistan) 7.0 million PKR**(2017-2020).**

## Research publications: 36

## Total Impact Factor: 125.79

## RESEARCH SUPERVISION

* M.Sc completed:9
* M.Phil Completed:35
* M.Phil Enrolled:4
* PhD thesis completed: 1 PhD Enrolled:5



**Citation indices(14-2022)**

**All Since 2017**

[Citations](http://scholar.google.com.pk/citations?user=nik9LYIAAAAJ&hl=en) 578 480

1. [index](http://scholar.google.com.pk/citations?user=nik9LYIAAAAJ&hl=en) 11 11

[i10-index](http://scholar.google.com.pk/citations?user=nik9LYIAAAAJ&hl=en) 13 12

https://scholar.google.com/citations?user=fE9UCgoAAAAJ&hl=en&oi=ao

CV .Page3

## Academic & Intellectual Contribution

**Book (Chapter)**

Recent Advances in Treatment Technologies for Antibiotics and Antimicrobial Resistance Genes: **A**ntibiotics and antimicrobial resistance; Occurrence and treatment technologies, ***Springer publishers***, (**2020),** 1st Edition.

## Research Papers

* 1. Farhana Bibi, **Asif Jamal,** Zaixing Huang, Muhammad Ishtiaq Ali **(2022)** Advancement of and role of abiotic stresses in microalagae biorefinary with a focus on lipid production, Fuel **(Accepted, Impact 6.60)**
  2. Qura tul Ain Rana, Muhammad Adil Nawa, Zeeshan sheikh, Saliha Perveen, **Asif Jamal,** Safia Ahmad, Rahul Gauttum, Sami ullah Khan, Malik Badshah **(2021)** Production of Bioethanol and Biogas from Spirodela polyrhiza in a Biorefinery Concept and Output Energy Analysis of the Process, Biomass Conversion and Biorefinery, doi.org/10.1007/s13399-021-02066-9 **(Impact factor 4.987)**
  3. Zaixing Huang, Muhammad Ishtiaq Ali, **Asif Jamal** **(2022),** A review on Biotransformation of coal to methane by enhancement of chemical pretreatment. Fuel, [Volume 308](https://www.sciencedirect.com/science/journal/00162361/308/supp/C), 121961. (**Impact factor 6.60)**
  4. Ramla Rehman, Naeem Ali, Malik Badshah, Muhammad Ishtiaq Ali, Zaixing Huang and **Asif Jamal**\***(2021)**. Crude oil biodegradation potential of biosurfactant producing *P. aeruginosa* and *Meyerozyma* spp. **Journal of Hazardous Materials,** [418](https://www.sciencedirect.com/science/journal/03043894/418/supp/C), 15, 126276 **(impact factor 10.55)**
  5. Farhana Hussain, **Asif Jamal**, Muhammad Ishtiaq Ali **(2021)** Deciphering role of technical bioprocess parameters for bioethanol production using microalgae, Suadi Journal of Biological Sciences, [28, 12](https://www.sciencedirect.com/science/journal/1319562X/28/12), 7595-7606 **(Impact Factor 4.21).**
  6. Latif Akanji, RamlaRehman, Onyemara, C. Ebel, R, **Asif Jamal** (**2021).** A novel technique for interface analysis: behavior of sophorolipids biosurfactant obtained from *Meyerozyma* spp. MF138126 during low-salinity heavy-crude experiments. **Fuel**, 287, 120697 **(Impact factor 6.60)**
  7. Zihao Chen, Xin-Ying Huang, Huan He, \*, Jie-Lin Tang, Xiu-Xiang Tao, Hua-Zhou Huang, Rizwan Haider, Muhammad Ishtiaq Ali, Asif Jamal and Zaixing Huang, (**2021)**, Bioleaching Coal Gangue with a Mixed Culture of *Acidithiobacillus Ferrooxidans* and *Acidithiobacillus Thiooxidans*. Minerals 2021, 11, 1043. (**Impact factor 2.6**)
  8. Noureen Fatima, Asif Jamal, Zaixing Huang, Rabia Liaquat, Rizwan  
     Haider, Dr Muhammad Ishtiaq **Ali (2021)** Extraction and Chemical Characterization of Humic Acid from Lignite and Bituminous Coal using Nitric acid as pretreatment. Sustainability Sustainability **2021**, 13(16), 8969 (**Impact factor 2.57**)
  9. AneelaYounas Malik, Muhammad Ishtiaq Ali, Asif Jamal, Uzma Farooq, NaziaKhatoon, William H. Orem, Elliott P. Barnhart, John R. San Filipo, Zaixing Huang **(2020).** Coal biomethanation potential of various ranks from Pakistan: A possible alternative energy source. **Journal of Cleaner Production**. 255:120177 **(Impact Factor 9.297)**
  10. BeenishSadaqat, NaziaKhatoon, AneelaYounas Malik, Asif Jamal, Uzma Farooq, Muhammad Ishtiaq Ali, Huan He, Fang-Jing, Liu, Hong guangGuo, Michael Urynowicz, Qiurong Wang, Zaixing Huang **(2020)** Enzymatic decolorization of melanin by lignin peroxidase from *Phanerochaetechrysosporium*. **Scientific Reports-Nature**. **10,**20240**(Factor 4.379)**
  11. Muhammad Adnan Sabara , Muhammad Ishtiaq Ali , NoureenFatimaa , AneelaYounas Malika , Asif Jamal , RabiaLiaquat , HuanHed , Fang-Jing Liud , HongguangGuoe , Michael Urynowiczf , Zaixing Huang **(2020)** Evaluation of humic acids produced from Pakistani subbituminous coal by chemical and fungal treatments, [**Fuel**,](https://www.sciencedirect.com/science/journal/00162361)[278,](https://www.sciencedirect.com/science/journal/00162361/278/supp/C) 118301 **(Impact factor 6.60)**
  12. Bushra Fatima, RabiaLiaqat, Asif Jamal & Muhammad Ishtiaq Ali **(2020)** Enhanced biogas production at mesophelic and thermophilic temperatures from a slaughterhouse waste with zeolite as absorbant, **International Journal of Environmental science and Technology (Impact factor 2.860)**
  13. Sadia Aziz, LaibaYaseen, 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 1.699)**
  14. Saeed Ullah Jan, Muhammad Adnan Sabar, Asif jamal, Huda Ahmed Alghamdi, İbrahim Ortaş, Mehmet Işik,VeysiAkşahin,BashirAhmadandMuhammadIshtiaqAli**(2020).**ImpactofZeaMaysLWasteDerived Biochar on Cadmium Immobilization and Wheat Plant Growth. Pakistan **Journal of Agricultural Sciences.** 57(4) **(Accepted Impact Factor 0.748)**

CV .Page4

* 1. Bushra Fatima, Asif Jamal, Muhammad Inshtiaq Ali **(2020)** Enhanced bioremediation of diesel rage hydrocarbons in soil using biochar made from organic waste. **Environmental monitoring and assessment (Accepted impact factor 2.513)**
  2. Jafir Hussain Shirazi, MuhamamdIshtiaq Ali, Asif Jamal, ZafeerSaqib, Abdul Rashid **(2020).** Effects of Seasonal Changes on the Patients flux to Basic Health Units in Pakistan. **Iranian Journal of Public Health(Accepted Impact Factor 1.429)**
  3. [Muhammad Ali Furqan,](http://www.pjoes.com/Author-Muhammad%20Ali-Furqan/98641)[Uzma Farooq,](http://www.pjoes.com/Author-Uzma-Farooq/9207)[RabiaLiaquat,](http://www.pjoes.com/Author-Rabia-Liaquat/29144)[Huda Ahmed Alghamdi,](http://www.pjoes.com/Author-Huda-Alghamdi/132072)[Bashir Ahmad,](http://www.pjoes.com/Author-Bashir-Ahmad/18728)[Zahid Qureshi,](http://www.pjoes.com/Author-Zahid-Qureshi/52046)[Asif Jamal,](http://www.pjoes.com/Author-Asif-Jamal/29145)[Isfahan Tauseef,](http://www.pjoes.com/Author-Isfahan-Tauseef/52045)[Syed Kashif Haleem,](http://www.pjoes.com/Author-Syed-Haleem/127625)[InayatUllah,](http://www.pjoes.com/Author-Inayat-Ullah/131667)[Muhammad Ishtiaq Ali](http://www.pjoes.com/Author-Muhammad-Ali/29143)**(2020).** Catalytic efficiency of *Acidithiobacillusferrooxidans*for bioleaching of Copper fromChalcocite Containing Sulfide Ore of RekoDiq Deposits of Balochistan, Pakistan. Pol. J. Environ. Stud. 2020;29(2):1593–1600**. (Impact factor 1.699)**
  4. [Muhammad Adnan SabaraMuhammadIshtiaq AliNoreen FatimaAneelaYounas MalikaAsifJamal, Muhammad Farman,Zaixing Huang,Michael Urynowicz](https://www.sciencedirect.com/science/article/pii/S0016236119306672?casa_token=P9wehu9HKPgAAAAA%3AmVkV3uQjAvlVxVP04ec968XZzdgmI3w3UChsJzdaqJmvbuIk9uI3U2Exq1itz4VoW_-yCLky&!)**(2019)** Degradation of low rank coal by Rhizopusoryzae isolated from a Pakistani coal mine and its enhanced releases of organic substances. [Fuel,](https://www.sciencedirect.com/science/journal/00162361)[253,](https://www.sciencedirect.com/science/journal/00162361/253/supp/C) Pages 257-265 **(Impact factor 6.60)**
  5. [Hassan Waseem](https://pubmed.ncbi.nlm.nih.gov/?term=Waseem%2BH&cauthor_id=31049196) , [Jafar Ali](https://pubmed.ncbi.nlm.nih.gov/?term=Ali%2BJ&cauthor_id=31049196) , [FizaSarwar](https://pubmed.ncbi.nlm.nih.gov/?term=Sarwar%2BF&cauthor_id=31049196), [Aroosa Khan](https://pubmed.ncbi.nlm.nih.gov/?term=Khan%2BA&cauthor_id=31049196) , [Hamza Saleem Ur Rehman](https://pubmed.ncbi.nlm.nih.gov/?term=Rehman%2BHSU&cauthor_id=31049196), [MishalChoudri](https://pubmed.ncbi.nlm.nih.gov/?term=Choudri%2BM&cauthor_id=31049196), [NoohArif](https://pubmed.ncbi.nlm.nih.gov/?term=Arif%2BN&cauthor_id=31049196), [Muhammad Subhan](https://pubmed.ncbi.nlm.nih.gov/?term=Subhan%2BM&cauthor_id=31049196), [AansaRukyaSaleem](https://pubmed.ncbi.nlm.nih.gov/?term=Saleem%2BAR&cauthor_id=31049196), [Asif Jamal](https://pubmed.ncbi.nlm.nih.gov/?term=Jamal%2BA&cauthor_id=31049196) , [Muhammad Ishtiaq Ali](https://pubmed.ncbi.nlm.nih.gov/?term=Ali%2BMI&cauthor_id=31049196)**(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 Resistant and infection Control. doi: 10.1186/s13756-019-0517-3 **(Impact factor 4.887)**
  6. [Hassan Waseem](https://pubmed.ncbi.nlm.nih.gov/?term=Waseem%2BH&cauthor_id=30609875) , [Sana Jameel](https://pubmed.ncbi.nlm.nih.gov/?term=Jameel%2BS&cauthor_id=30609875), [Jafar Ali](https://pubmed.ncbi.nlm.nih.gov/?term=Ali%2BJ&cauthor_id=30609875) , [Hamza Saleem Ur Rehman](https://pubmed.ncbi.nlm.nih.gov/?term=Saleem%2BUr%2BRehman%2BH&cauthor_id=30609875), [Isfahan Tauseef](https://pubmed.ncbi.nlm.nih.gov/?term=Tauseef%2BI&cauthor_id=30609875), [Uzma Farooq](https://pubmed.ncbi.nlm.nih.gov/?term=Farooq%2BU&cauthor_id=30609875) , [Asif Jamal](https://pubmed.ncbi.nlm.nih.gov/?term=Jamal%2BA&cauthor_id=30609875) , [Muhammad Ishtiaq Ali,](https://pubmed.ncbi.nlm.nih.gov/?term=Ali%2BMI&cauthor_id=30609875)**(2019).** Contributions and Challenges of High Throughput qPCR for Determining Antimicrobial Resistance in the Environment: A Critical Review. Molecules, 3;24(1):163. doi: 10.3390/molecules24010163.**(Impact Factor 4.411)**
  7. NaziaKhatoon, Asif Jamal & Muhammad Ishtiaq Ali **(2019).** Lignin peroxidase isoenzyme: A Novel approach to biodegrade the toxic synthetic polymer waste. Environmental Technology, 40:11, 1366- 1375, DOI: [10.1080/09593330.2017.1422550.](https://doi.org/10.1080/09593330.2017.1422550) **(Impact factor 3.247)**
  8. [Jafir Hussain Shirazi](https://pubmed.ncbi.nlm.nih.gov/?term=Shirazi%2BJH&cauthor_id=32024627), [Muhammad Ishtiaq Ali](https://pubmed.ncbi.nlm.nih.gov/?term=Ali%2BMI&cauthor_id=32024627) , [Zareen Akhtar](https://pubmed.ncbi.nlm.nih.gov/?term=Akhtar%2BZ&cauthor_id=32024627) , [Asif Jamal](https://pubmed.ncbi.nlm.nih.gov/?term=Jamal%2BA&cauthor_id=32024627) , [Abdul Rashid](https://pubmed.ncbi.nlm.nih.gov/?term=Rashid%2BA&cauthor_id=32024627) **(2019)**Pediatric oropharyngeal candidiasis: A comprehensive study on risk factors and most prevalent species of Candida. **Pak J Pharmaceutical Science**. 32(6): 2873-2878. **(Impact factor 0.684**)
  9. Hasan Waseem, 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 0.711)**
  10. RamlaRehman, Muhammad Ishtiaq Ali, Umar Masood Qureshi and **Asif Jamal**\*. **(2019)** Characterization of brownfield: Ex-Situ detection of hydrocarbon degrading and biosurfactants producing Microflora. Pak. J. Agri. Sci., Vol. 56(4), 953-961; 2019 **(Impact factor 0.748)**

CV .Page5

* 1. NaziaKhaton, Asif Jamal& Muhammad Ishtiaq Ali **(2018)** Polymeric pollutant biodegradation through microbial oxidoreductases: a better strategy to safe environment; International Journal of Biological Macromolecules DOI: 10.1016/j.ijbiomac-047. (**Impact Factor 6.953)**
  2. NaziaKhatoon, Najam I Sahar, Asif Jamal, Naeem Ali, UdonnaNdu, 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. DOI:10.1007/s13762-016-1182-1 **(Impact Factor 2.860)**
  3. RamlaRehman, Abdul Hameed, Fariha Hasan, **Asif Jamal**\*, **(2017).** Catalytic Role of Thermostable Metallo- Proteases from Bacillus subtilis KT004404 as Dehairing and Destaining Agent" Applied Biochemistry and Biotechnology (DOI: 10.1007/s12010-016- 2222-5) **(Impact factor 2.926)**
  4. AneelaYounisMalik ,Mmuhammad Ali, Asif Jamal, Muhammad Ishtiaq Ali **(2017)** Isolation and Characterization of Coal Solubilizing Aerobic Microorganisms from Salt Range Coal Mines Pakistan. Geomicrobiology Journal. DOI 10.1080/01490451.2016.1143538 (**Impact factor 2.308)**
  5. RabiaLiaquat, Asif Jamal, Muhammad Ishtiaq Ali (2017). Characterization of bacterial consortia from anaerobic digester treating organic waste for biogas production. Polish Journal of Environmental Sciences **(Impact factor 1.699)**
  6. **Asif Jamal**\*, Muhammad Zahid Qureshi, Raja Riziul Hasan, Naeem Ali, Muhammad Ishtiaq Ali (2016). Mathematical modeling of bioprocess variables for improved production of Rhamnolipid from P. aeruginosa strain JQ.Pakistan Journal of Agricultural Sciences. **(impact Factor 0.748)**
  7. **Asif Jamal\*,**Naeem Ali, Muhammad Ishtiaq Ali, Abdul Hameed, M.Z. Qureshi (2014) Enhanced Production of rhamnolipid by P. aeruginosa using Response Surface Methodology. Asian Journal of Chemistry; 26(4):1044-1048**(Impact factor 0.225)**
  8. RabiaLiaquat, Sidra Kaleem, AqeelaAzeem, Asif Jamal and Muhammad Ishtiaq Ali (2015). Production and characterization of α-amylase from indigenously isolated bacterial strains treating organic waste in anaerobic digester. Pakistan journal of agricultural sciences. 52(4). (**Impact factor 0.748)**
  9. HajraHanif, AwaisAnjum, 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. doi: 10.4269/ajtmh.15-0040 **(Impact factor 2.345)**
  10. NaziaKhatoon, IffatNaz, Naeem Ali, Asif Jamal, Safia Ahmed, Abdul Hameed and 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 2.281)**

CV .Page6

* 1. 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 6.40)**

* 1. Ghumro, P.B., Shafique, M., Ali, M.I., Javed, I., Ahmad, B., Jamal, A., Ali, N. and Hameed, A., **(2012).** Isolation and screening of protease producing thermophilic Bacillus strains from different soil types of Pakistan. African Journal of Microbiology Research. 6(8), pp.1663-1668 **(Impact factor 0.529).**

## Articles under review/submitted

1. Bioprocess optimization for lignin degradation using a novel *Dipodascus australiensis* strain M-2 **Current Microbiology Impact Factor 2.5** (Under Review,2022)
2. Current advances in the classification, production, properties and applications of microbial biosurfactants - a critical review, **Coordination Chemistry Reviews Impact Factor 23.35** (Under Review 2022)
3. Synthesis and Characterization of Titanium oxide Nanoparticles with  
   Novel Biogenic process for the Dental Application, **Nanomaterials, impact factor 5.04** (Under Review 2022)

## PhD Supervision

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Name** | **Thesis Title** | **Year** |
| 1 | Syeda Ramla rehman | Bioprocessing of biosurfactants from microbial sources and their  Applications | 2015-2019  **Completed** |
| 2 | Samia Sakindar | Production and characterization of biosurfactants and their role as  antimicrobial agents | 2017  In progress |
| 3 | SalihaPerveen | Role of Fungi and their Enzymes for the Treatment of Wastewater  from Pulp and Paper Industry | 2017  In progress |
| 4 | Faisal Jan | Developing biotechnological strategies for improving plant growth and  crop yield | 2019  In progress |
| 5 | TabassumRasool | Designing bioprocess for the treatment of pulp and paper industrial  Wastewater | 2020  In progress |

**M.Phil Thesis Supervision**

CV .Page7

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Name** | **Thesis Title** | **Year** |
| 1 | Fozia khan | Media optimization for the production of rhamnolipid from newly  isolated strains of *P.aeruginosa* | 2013-15 |
| 2 | Sobia Ali | Studies on newly synthesized nanoparticles for their antimicrobial  activity against selected pathogen. | 2013-15 |
| 3 | Syedafarishta | Prevalence and molecular characterization of carbapanemase producing  *P.aeruginosa*from clinical isolated in tertiary care hospitals. | 2013-15 |
| 4 | Hafsa Iqbal | Evaluation of antibiotic resistance pattern among oral bacteria and their  response towards different drugs with nanoparticles amalgams. | 2013-15 |
| 5 | Neak Muhammad | Studies on various virulence factors among *Enterococci spp*isolated  from tertiary care hospitals. | 2013-15 |
| 6 | Samiasikandar | Evaluation of physio-chemical and biological (antimicrobial properties)  ofrhamnolipid produced by *P.aeruginosa.* | 2014-16 |
| 7 | Humairayasmeen | Process optimization for remediation of hydrocarbon contaminated soil  using microbial surfactant. | 2014-16 |
| 8 | Fida Muhammad | Molecular identification of egg shell microflora of chukar partridges (AlectorisChukar) | 2014-16 |
| 9 | Saleehamunir | Comparative analysis of physiochemical properties and production of rhamnolipid from clinical and environmental strains of *P.aeruginosa*. | 2014-16 |
| 10 | Agha saddam Hussain | Studies on production and surface active properties of biosurfactant  produced by fungi isolated from soil. | 2014-16 |
| 11 | Zeesthanif | Application of statistical design to investigate optimum growth and  biosurfactant production from a newly isolated bacterial strain. | 2014-16 |
| 12 | Naheedgulfam | Antagonistic and comparative properties of soil borne *Bacillus*  *spp*NG16 against selected fungal phytopathogens. | 2015-17 |
| 13 | Abdul baser khan | Characterization of an efficient biosurfactant producing bacteria from  sugar industry waste and their possible biotechnological uses. | 2015-17 |
| 14 | Hira niaz | Antagonistic efficiency of Bacillus strain HN03 isolated from  agricultural soil and its role as biocontrol agent. | 2015-17 |
| 15 | Saira Iqbal | Characterization of microbial surfactant as antimicrobial agents. | 2015-17 |
| 16 | Momenairum | Evaluation of microbial properties of biosurfactants against some  important pathogens. | 2015-17 |
| 17 | Syed Muhammad Aamir | Study on optimum conditions for biodegradation of crude oil | 2015-17 |
| 18  CV .Page8 | BenishSadaqat | Bioremediation of Heavy metals with the application of Biosurfactants | 2016-2018 |
| 19 | Anber Khaliq | Molecular investigation of Non Ribosomal Peptide Synthetase system in a metal resistant Bacillus strain | 2016-2018 |
| 20 | EjazUlHaq | Biodegradation of lignin; isolation, molecular characterization and process optimization | 2017-19 |
| 21 | Maryam Aslam | Lignin degradation in pulp and paper industry waste by selected microorganisms | 2017-19 |
| 22 | Faisal Jan | Characterization of antifungal peptides from Bacillus strains | 2017-19 |
| 23 | Waqar Ali | Development of synthetic microbial communities for improving the yield of soybean | 2017-2019 |
| 24 | Sana Ullah | Evaluating the role of selected microbial communities for plan yield enhancement | 2017-2019 |
| 25 | Sundas Sana | Evaluation of Bacillus strain as Environmental Friendly Biocontrol Agent | 2016-2018 |
| 26 | Nadia Begum | Deciphering role of Indigenous Microorganisms in Controlling Agricultural Pathogens | 2016-2018 |
| 27 | Aliza Fatima | Cost effective Production of Biosurfactants and their Applications in Pharmaceutical Industry | 2016-2018 |
| 28 | Asad Ali | Potential of Bacillus ssp. Showing Antagonistic Activity against Some Bacterial and Fungal Pathogens | 2016-2018 |
| 29 | IffatQazi | Isolation and characterization of lignin degrading bacteria from pulp and paper wastewater | 2018-2020 |
| 30 | Mir Azmat Khan | Characterization of rhizosphere microorganisms as plant growth promoters | 2018-2020 |
| 31 | Mehar Un Nisa Rana | Assessment of lignin degradation by selected fungal strains | 2018-2020 |

**Conference/Workshops/Courses Attended:**

* International Virtual Master Trainers Workshop on Effective Online Teaching and Assessment Skills organized by Inter University Consortium for Promotion of Social Sciences Pakistan, 24th July to 28th August, 2020.
* 1st International Seminar on Times Higher Education University Rankings, 24thOctober, 2019, The University of Lahore.

CV .Page9

* 12th International microbiology conference, Society of microbiology, Abotabad University of Science and Technology, February2019
* 11th International Biennial Conference of Pakistan Society for Microbiology on Applied Microbial Genomics in Punlic Health, Food, Pharma and Agriculture, 18-20 December 2017, **Invited speaker**
* 1st International Conference on Microbiology, Pakistan Society for Microbiology-Abotabad University of Science and Technology, September2016
* Training workshop on Patent application filling and drafting, 19th February 2015, Office of research innovation and commercialization, Quaid-i-Azam University,Islamabad
* 7thInternational Conference on Revitalization of degraded areas (Poland) October 6-8, 2015 (HEC Travel Grant)
* 8thInternational Conference on Revitalization of degraded areas (Poland) October 6-8, 2014 (HEC Travel Grant)
* Intellectual Property Rights and Innovation Policy, 6-10 June, 2011, COMSTECH and HEC,Islamabad
* Academic research skills, American information and resource center U.S embassy, Islamabad, October 20, 2009
* International Productivity Congress, National Productivity organization, Ministry of Industries, Govt. of Pakistan 17-18 November,2011
* International Seminar on Wastewater Treatment and its Re-use, Quaid-i-Azam University, Islamabad, 17 May2012,
* Emerging superbugs-standardizing antimicrobial susceptibility testing, surveillance and lab biosafety hands on workshop, 25-27 February 2013, Agha Khan University,Karachi
* American Society for Microbiology-Karachi University National Microbiology Teachers Training Workshop, ASM-KU Bio resource center, Karachi, 27-30 September 2013
* Training Workshop on SPSS and EndNote, Office of Research Innovation and Commercialization, Quaid- i-Azam University, Islamabad, 7-8 November,2013
* Quality assurance in analytical chemistry; Department of chemistry, GC University, Lahore,2011.
* Seminar on Setting new standards 21st century, Higher education commission, Islamabad,2011
* Seminar on Trends in Process engineering and bioenergy, Quaid-i-azam University, Islamabad, 13th December,2011
* Master Classes Training, British council of Pakistan and Columbia University, 17 Jan,2012
* Regional Peace and Economics: Developing role of China and Pakistan, National University of Science and Technology, Islamabad, 16th January2012
* Knowledge exchange Master Classes, Entrepreneur University Leadership, HEC-British Council Islamabad, July2012
* Pak-US Science and Technology Symposium, National University of Science and Technology, Islamabad, 31-Jan-1st Feb 2013

CV .Page10

## Professional Memberships:

* American Society for Microbiology,USA
* European Federation of Biotechnology
* Pakistan Society of Microbiology
* Microbiology Society,Scotland

## References:

Professor Dr. M.Zahid Qureshi Department of Chemistry

GC University, Lahore

Email: [**qureshienv@yahoo.coom**](mailto:qureshienv@yahoo.coom)

Phone: 0092-3347599729

Dr. Muhammad Ishtiaq Ali

Director Academics & Professor

Department of Microbiology

Quaid-i-Azam University, Islamabad Email: [ishi\_ali@hotmail.com](mailto:ishi_ali@hotmail.com)

Phone: 0092-321-5295275

Dr. Naeem Ali Professor

Department of Microbiology

Quaid-i-Azam University, Islamabad [Naeemali95@gmail.com](mailto:Naeemali95@gmail.com)

Phone: 0334-5000174