**CURRICULUM VITAE**

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Faculty of Biological Sciences,

Quaid-I-Azam University,

Islamabad.

***EDUCATIONAL QUALIFICATIONS***

M. Sc. 1991(Biochemistry/ Molecular Biology) Quaid-i-Azam University, Pakistan.

M. Phil.1994 (Microbiology) Quaid-i-Azam University, Pakistan.

Ph. D. 2004 (Microbiology/ Biotechnology) Quaid-i-Azam University, Pakistan

**WORK/RESEARCH EXPERIENCE**

\* Junior Research Assistant, Microbiology Laboratory, Department of Biological Sciences, Quaid-i-Azam University, Islamabad, Pakistan from January 1991 to December 1993.

\* Senior Research Assistant, Microbiology Research Laboratory, Department of Biological Sciences, Quaid-i-Azam University, Islamabad, Pakistan from September 1995 to March 2004.

\* Adjunct faculty, Department of Environmental Sciences, Fatima Jinnah Women University, Rawalpindi, Pakistan from January 2000 to January 2003.

\* Adjunct faculty, Department of Biochemistry, University of Arid Agriculture, Rawalpindi, Pakistan from October 2003 to July 2004.

\* Lecturer (Biosciences), COMSATS Institute of Information Technology, Johar Campus, H-8, Islamabad, Pakistan from October 2003 –June2004.

\* Assistant Professor (Biosciences), COMSATS Institute of Information Technology, ChakShahzad Campus, Islamabad, Pakistan from July2004- Jan 2005

\* Assistant Professor on Tenure track system (Biosciences), COMSATS Institute of Information Technology, Chak Shahzad Campus, Islamabad, Pakistan from Feb 2005- 04 Nov 2010.

\* Post Doctoral Fellow, Department of Laboratory Medicine, Karolinska Institutet, Huddinge, Sweden from February 2007- to September 2008.

\* Associate Professor on Tenure track system (Biosciences), COMSATS Institute of Information Technology, ChakShahzad Campus, Islamabad, Pakistan from 05 Nov 2010- 30thDecember, 2012

\* Charles Wallace Trust Visiting Fellowship, University of Oxford, Oxford, UK from July- September 2013

\* Associate Professor on Tenure track system (Microbiology), Quaid-i-Azam University, Islamabad, Pakistan from 31st Dec 2012-26th January, 2015

\* Tenured Associate Professor (Microbiology), Quaid-i-Azam University, Islamabad, Pakistan from 26th January, 2015-December 2018

\* Chairperson (Department of Microbiology), Quaid-i-Azam University, Islamabad, Pakistan from 24th March, 2017-22nd March 2020

\* Tenured Professor (Microbiology), Quaid-i-Azam University, Islamabad, Pakistan from 17th December 2018 to date

**List of Honors, Awards for Scholarship and Professional Activity**

* Gold Medalist BS (Microbiology)

## BS (Microbiology) Cultural Scholarship (Ministry of Education, Kuwait)

## MSc. (Biochemistry/Molecular Biology) Merit Scholarship Quaid-i-Azam University, (Pakistan)

## M. phil. (Microbiology) Merit Scholarship Quaid-i-Azam University (Pakistan)

## PhD (Microbiology)Merit Scholarship Quaid-i-Azam University (Pakistan)

* Post Doctorate Fellowship Higher Education Commission (Pakistan)
* Post Doctorate Fellowship Karolinska Institute (Sweden)
* Charles Wallace Fellowship (United Kingdom)
* Research Productivity Award (PCST), 2010
* Research Productivity Award (CIIT), 2011-13
* Best Poster Award 4th International Biennial Conference of Pakistan Microbiological Society

**LIST OF PUBLICATIONS (W category)**

1. **Faryal R**, Hameed A. Isolation and characterization of various fungal strains from textile effluent for their use in bioremediation. Pakistan J Bot. 2005;37(4):1003–8.

2. **Faryal R**, Lodhi A, Hameed A. Isolation, characterization and biosorption of zinc by indigenous fungal strains Aspergillus fumigatus RH05 and Aspergillus flavus RH07. Pakistan J Bot. 2006;38(3):817–32.

3. **Faryal R**, Ahmed S, Hameed A. Biodegradation of 4-aminobenzene sulphonic acid by a local textile mill Aspergillus niger isolate. Pakistan J Bot. 2006;38(4):1333–40.

4. **Faryal R**, Tahir F, Hameed A. Effect of wastewater irrigation on soil along with its micro and macro flora. Pakistan J Bot. 2007;39(1):193–204.

5. **Faryal R**, Sultan A, Tahir F, Ahmed S, Hameed A. Biosorption of lead by indigenous fungal strains. Pakistan J Bot. 2007;39(2):615–22.

6. **Faryal R**, Yusuf M, Munir K, Tahir F, Hameed A. Enhancement of Cr6+ removal by Aspergillus niger RH19 using a biofermenter. Pakistan J Bot. 2007;39(5):1873–81.

7. Mohamed AJ, Yu L, Bäckesjö CM, Vargas L, **Faryal R**, Aints A, et al. Bruton’s tyrosine kinase (Btk): Function, regulation, and transformation with special emphasis on the PH domain. Immunol Rev. 2009;228(1):58–73.

8. Hussain A, **Faryal R**, Nore BF, Mohamed AJ, Smith CIE. Phosphatidylinositol-3-kinase-dependent phosphorylation of SLP-76 by the lymphoma-associated ITK-SYK fusion-protein. Biochem Biophys Res Commun [Internet]. 2009;390(3):892–6. Available from: http://dx.doi.org/10.1016/j.bbrc.2009.10.070

9. Munir K, Yusuf M, Noreen Z, Hameed A, Hafeez FY, **Faryal R**. Isotherm studies for determination of removal capacity of bi-metal (Ni and Cr) ions by Aspergillus niger. Pakistan J Bot. 2010;42(1):593–604.

10. Noreen Z, Hameed A, **Faryal R**. Comparative analysis of biosorption potential for chromium removal by live and dead biomass of Aspergillus niger ZH2. Int J Chem React Eng. 2010;8(June).

11. Iqbal H, Mir A, **Faryal R**. Molecular modeling of mutant kinase domain of Btk, a Tec family member, for structure prediction. African J Biotechnol. 2011;10(17):3274–89.

12. Hussain A, Yu L, **Faryal R**, Mohammad DK, Mohamed AJ, Smith CIE. TEC family kinases in health and disease - Loss-of-function of BTK and ITK and the gain-of-function fusions ITK-SYK and BTK-SYK. FEBS J. 2011;278(12):2001–10.

13. Masood N, Kayani MA, Malik FA, Mahjabeen I, Baig RM, **Faryal R**. Genetic variations in carcinogen metabolizing genes associated with oral cancer in Pakistani population. Asian Pacific J Cancer Prev. 2011;12(2):491–5.

14. ur Rehman Kayani M, Kayani MA, Malik FA, **Faryal R**. Role of miRNAs in breast cancer. Asian Pacific J Cancer Prev. 2011;12(12):3175–80.

15. Kanwal S, Kayani MA, **Faryal R**. Identification of novel SNPs in SYK gene of breast cancer patients: Computational analysis of SNPs in the 5′UTR. Mol Biol Rep. 2012;39(8):8345–51.

16. Inayat U, Kayani MA, **Faryal R**. Sporadic mutations and expression analysis of spleen tyrosine kinase gene in breast cancer: A preliminary report. Polish J Pathol. 2012;63(2):106–11.

17. Shakeel S, Mahjabeen I, Kayani MA, **Faryal R**. Association of SYK genetic variations with breast cancer pathogenesis. Asian Pacific J Cancer Prev. 2013;14(5):3309–14.

18. Zeb M, Shah MKN, **Faryal R**. Development of putative molecular markers to trace durable rust resistance genes in wheat breeding stocks. Pakistan J Bot. 2013;45(SPL.ISS):359–66.

19. **Faryal R,** Noreen Z, Tahir F, Zahid-Ur-Rehman. Seroprevalence of Corynebacterium diphtheriae among vaccinated population of Rawalpindi/Islamabad, Pakistan. Pak J Pharm Sci. 2013;26(3):649–51.

20. Azam MT, Khan AS, Muzzafar D, **Faryal R**, Siddiqi SA, Ahmad R, et al. Structural, surface, in vitro bacterial adhesion and biofilm formation analysis of three dental restorative composites. Materials (Basel). 2015;8(6):3221–37.

21. Noreen Z, Abrar M, Siddiqui F, **Faryal R**, Hamid H, Bokhari H. Antibiotic Susceptibility and Molecular Characterization of Campylobacter jejuni Strain Isolated from a Guillain Barré Syndrome Child. Indian J Pediatr [Internet]. 2016;83(7):728. Available from: http://dx.doi.org/10.1007/s12098-015-1923-z

22. Suleman M, **Faryal R**, Aamir UB, Alam MM, Nisar N, Sharif S, et al. Dengue outbreak in Swat and Mansehra, Pakistan 2013: An epidemiological and diagnostic perspective. Asian Pac J Trop Med. 2016;9(4):380–4.

23. **Faryal R**, Ishfaq M, Hayat T, Mahjabeen I, Kayani MA. Novel SYK gene variations and changes in binding sites of miRs in breast cancer patients. Cancer Biomarkers. 2016;16(3):319–26.

24. Suleman M, **Faryal R**, Alam MM, Sharif S, Shaukat S, Aamir UB, et al. NS1 antigen: A new beam of light in the early diagnosis of dengue infection. Asian Pac J Trop Med. 2016;9(12):1212–4.

25. Province P, Suleman M, Phil M, **Faryal R**, Ph D, Alam MM, et al. Dengue Virus Serotypes Circulating in Khyber Pakhtunkhwa Province, Pakistan, 2013-2015. Gen Lab Med. 2017;37(November 2015):151–4.

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28. Suleman M, **Faryal R**, Alam MM, Zaidi SSZ. Demographic characteristics of dengue virus outbreaks in Khyber Pakhtunkhwa province, Pakistan during 2003–2015. J Formos Med Assoc [Internet]. 2017;116(9):727–9. Available from: http://dx.doi.org/10.1016/j.jfma.2017.02.004

29. Suleman M, Lee HW, Zaidi SSZ, Alam MM, Nisar N, Aamir UB, Sharif S, Shaukat S, Khurshid A, Angez M, Umair M, Mujtaba G, **Faryal, R**. “Preliminary Seroepidemiological survey of dengue infections in Pakistan, 2009-2014.” Infect Dis Poverty. 2017;6(1):1–7.

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31. Hamid S, Zainab S, **Faryal R**, Ali N. Deterrence in metabolic and biofilms forming activity of Candida species by mycogenic silver nanoparticles. J Appl Biomed [Internet]. 2017;15(4):249–55. Available from: http://dx.doi.org/10.1016/j.jab.2017.02.003

32. Mehmood F, Iqbal J, Jan T, Gul A, Mansoor Q, **Faryal R**. Structural, photoluminescence, electrical, anti cancer and visible light driven photocatalytic characteristics of Co doped WO3 nanoplates. Vib Spectrosc [Internet]. 2017;93:78–89. Available from: http://dx.doi.org/10.1016/j.vibspec.2017.09.005

33. Saeed A, Haider A, Zahid S, Khan SA, **Faryal R**, Kaleem M. In-vitro antifungal efficacy of tissue conditioner-chitosan composites as potential treatment therapy for denture stomatitis. Int J Biol Macromol. 2019;125:761–6.

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35. Arshad A, Iqbal J, Alam A, Khadija B, **Faryal R**. Synthesis, characterization, enhanced dielectric and antimicrobial properties of WxCu1−xO nanostructures. Ceram Int [Internet]. 2018;44(6):5894–900. Available from: https://doi.org/10.1016/j.ceramint.2017.12.101

36. Sahar N, Bibi S, Masood N, **Faryal R**. Status of serine tyrosine kinase at germline and expressional levels in asthma patients. Mol Biol Res Commun. 2019;8(2):69–77.

37. Sakandar HA, Kubow S, Azadi B, **Faryal R**, Ali B, Ghazanfar S, et al. Wheat fermentation with Enterococcus mundtii QAUSD01 and Wickerhamomyces anomalus QAUWA03 consortia induces concurrent gliadin and phytic acid degradation and inhibits gliadin toxicity in Caco-2 monolayers. Front Microbiol. 2019;10(FEB):1–12.

38. Noreen H, Iqbal J, Arshad A, **Faryal R**, Ata-ur-Rahman, Khattak R. Sunlight induced catalytic degradation of bromophenol blue and antibacterial performance of graphene nanoplatelets/polypyrrole nanocomposites. J Solid State Chem [Internet]. 2019;275(January):141–8. Available from: https://doi.org/10.1016/j.jssc.2019.03.045

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40. Shirazi JH, Ali MI, Alghamdi, HA, **Faryal, R**, Akhtar Z, Jamal A, Rashid A. Pediatric oropharyngeal candidiasis: A comprehensive study on risk factors and most prevalent species of Candida. Pak J Pharm Sci. 2019;32(6):2873–8.

41. Muhammad A, Bokhari SAI, Vernoux JP, Ali MI, **Faryal R**, Desmasures N, et al. Purification, characterization and thermodynamic assessment of an alkaline protease by Geotrichum candidum of dairy origin. Iran J Biotechnol. 2019;17(2):30–7.

42. Zafar S, Hanif S, Akhtar H, **Faryal R**. Emergence of hypervirulent K. pneumoniae causing complicated UTI in kidney stone patients. Microb Pathog [Internet]. 2019;135(February):103647. Available from: https://doi.org/10.1016/j.micpath.2019.103647

43. Anjum S, Ullah R, Rana MS, Khan HA, Memon FS, Ahmed Y, Jabeen S, **Faryal R**. COVID-19 Pandemic: A serious threat for public mental health globally. Psychiatr Danub. 2020;32(2):245–50.

44. Zafar S, Fatima K, **Faryal R**. Prevalence of virulent Candida spp. in complicated urinary tract infection of nephrolithiatic patients from surgical units of tertiary care hospitals Islamabad. J Mycol Med [Internet]. 2020;101024. Available from: https://doi.org/10.1016/j.mycmed.2020.101024

45. Saddique A, Rana MS, Alam, MM, Ikram A, Usman M, Salman M, Faryal R, Massab U, Bokhari H, Mian MS, Israr A, Safiullah. Emergence of co-infection of COVID-19 and dengue: A serious public health threat. J Infect J. 2020;(January).

46. Subhan M, **Faryal R**, Macreadie I. Utilization of an industry byproduct, corymbia maculata leaves, by aspergillus terreus to produce lovastatin. Bioengineering. 2020;7(3):1–10.

47. Rana DMS, Usman MM, Alam DMM, Khalid DA, Ikram DA, Salman DM, Zaidi SSZ, Faryal R, Qadir M, Umair M, Rooullah, Sufian MM. First trimester miscarriage in a pregnant woman infected with COVID-19 in Pakistan. J Infect [Internet]. 2020;(xxxx):9–10. Available from: http://www.ncbi.nlm.nih.gov/pubmed/32896525

48. Fatima R, Usman M, **Faryal R**. Association of TLR2 polymorphisms, Arg753Gln and Arg677Trp, with tuberculosis in Pakhtun population of Pakistan. Infect Genet Evol [Internet]. 2020;83(September 2019):104291. Available from: https://doi.org/10.1016/j.meegid.2020.104291

**LIST OF PUBLICATIONS (Journals without impact factor)**

1. **Faryal R**, Bari A, and Qazilbash A. A. A study on the incidence of *Listeria monocytogenes* in raw milk. Proc. Pak. Cong. Zool 1996; 16: 167-172.
2. Qazilbash A, **Faryal R**, Naqvi K. B, Ahmed, S. and Hameed, A. Efficacy of Indigenous Bacillus Species in the Removal of Chromium from Industrial Effluent. Biotechnology 2006; (5)**:**12-20.
3. Qazilbash A, **Faryal R**, Tabassum A, Lodhi A. B, Ahmed S. and Hameed A. Comparative Analysis of Oven-dried and Non-growing Strains of *Aspergillus niger* for the Removal of Lead under Laboratory Conditions. International Journal of Botany 2006; (2):137-145.
4. Amir S, Faryal R, Zaufishan B, and Kabir A. Relationship Of Symptoms With Demographic Features In Case Of Thyroid Disorders In Pakistani Population. Asian Journal of Biomedical and Pharmaceutical Sciences 2012; 2(12):  
     
     
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5. [purchase](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WBK-4XH0MKT-3&_user=10&_coverDate=10%2F20%2F2009&_rdoc=6&_fmt=full&_orig=browse&_srch=doc-info%28%23toc%236713%239999%23999999999%2399999%23FLA%23display%23Articles%29&_cdi=6713&_sort=d&_docanchor=&_ct=141&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=a66d7c73367c42699f317a70d0e5c29c) this article.
6. 37-40.
7. Suleman M, **Faryal R,** Alam M.M, Sharif, S, Shaukat S, Khurshid A, Angez M, Umairm M, and Zaidi S.S.Z. Identification of Concurrent Infection by Multiple Dengue Virus Serotypes during an Epidemic in 2011 in Pakistan. Journal of Microbiology & Experimentation 2016; 3(3):00088.
8. Suleman M, **Faryal R,** Sufian M. M, and Arshad Y. Epidemiological Profile and Laboratory Characteristics of Dengue Virus Infection during 2011 Outbreak in Rawalpindi, Islamabad. Journal of Human Virology &Retrovirology 2016; 3(4):00099.
9. Subhan M, **Faryal R,** and Ian Macreadie I. Exploitation of *Aspergillusterreus* for the production of natural statins. J. Fungi 2016; 2: doi:10.3390/.
10. Subhan M, Sabir S. B, Akhtar Y, Khan S, Macreadie I, and **Faryal R**. Isolation and characterization of lovastatin producing fungi; investigating the antimicrobial and extracellular enzymatic activities. Int. J. Biosci 2016;10(2),12-20. DOI: http://dx.doi.org/10.12692/ijb/10.2.12-20
11. Dar A, **Faryal R**, and Masood N. Possible Association of a Distinct Combined Glutathione S Transferase Members with Allergic Asthma Patients in Pakistan. Genes & Diseases 2017; 4(2):111-115.
12. Naveed Q, Faryal R. Risk factors and prevalence of coccidiosis in chicken in district Gujarat, Punjab, Pakistan. Int. J. Biosci 2019; 15(3): 66-79.
13. Naveed Q, Faryal R, Rani R. A, Ahmad F, and Hussain B. Prevalence of coccidiosis in poultry farms in District Chakwal Punjab Pakistan. Int. J. Biosci 2019; 15(5) : 425-442
14. Naveed Q, Faryal R, Rani N. A, Ahmad F, Hussain B, and Rashid, Q Incidence and prevalence of coccidiosis in different age group and contributory factor of coccidiosis in poultry farms of District Sahiwal, Punjab Pakistan. Int. J. Biosci 2019; 15(5): 462-478  
      
      
    References and further reading may be available for this article. To view references and further reading you must [purchase](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WBK-4XH0MKT-3&_user=10&_coverDate=10%2F20%2F2009&_rdoc=6&_fmt=full&_orig=browse&_srch=doc-info%28%23toc%236713%239999%23999999999%2399999%23FLA%23display%23Articles%29&_cdi=6713&_sort=d&_docanchor=&_ct=141&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=a66d7c73367c42699f317a70d0e5c29c) this article.

**LIST OF PRESENTATION IN CONFERENCES**

1. **Faryal, R.**, Bari, A. and Qazilbash, A. A. 1996. Development of cell mediated prophylactic against listeriosis. 3rd Annual National Symposium, Aga KhanUniversity, Karachi, Pakistan.
2. Tahir, F., Subhan, F., **Faryal, R.**, Asif, M., Bari, A. and Qazilbash, A. A. 1996. Blood chemistry profiles of FSH related male infertility cases. 3rd Annual National Symposium, Aga KhanUniversity, Karachi, Pakistan.
3. **Faryal, R.**, Bari, A. and Qazilbash, A. A. 1997. Listeriosis: A foodborne threat to maternal and neonatal health. 1997. Ist National Symposium on Current Trends in Development and Reproductive Biology, Pakistan Academy of Sciences, Islamabad, Pakistan.
4. Qazilbash, A. A., Khan, J., Tahir, F., **Faryal, R.** and Bari, A. 1997. Mycoplasmal infection among infertile women. Ist National Symposium on Current Trends in Development and Reproductive Biology, Pakistan Academy of Sciences, Islamabad, Pakistan.
5. Qazilbash, A. A., Tahir, F., **Faryal, R.** and Bari, A. 1997. Human Brucellosis. A potential reproductive health hazard. Ist National Symposium on Current Trends in Development and Reproductive Biology, Pakistan Academy of Sciences, Islamabad, Pakistan.
6. Ali, N., **Faryal, R.** and Hameed, A. 2000. Biological characterization of textile industry effluent. 3rd International Biennial Conference of Pakistan Microbiological Society, Lahore, Pakistan.
7. **Faryal, R.** and Hameed, A. 2000. Isolation and characterization of various fungal strains from textile industry effluent. 20thPakistan Congress of Zoology, University of Sind, Jamshoro, Pakistan.
8. **Faryal, R.** and Hameed, A. 2001. Chromium tolerant bacterial strains and their use in industrial bioremediation. 21stPakistan Congress of Zoology, University of Agriculture, Faisalabad, Pakistan.
9. **Faryal, R.** and Hameed, A. 2002. Effect of wastewater irrigation on microbial community and its soil environment. 4th International Biennial Conference of Pakistan Microbiological Society, Peshawar and MalamJabba, Pakistan.
10. Batool, S.K., **Faryal, R.**, Ahmed, S. and Hameed, A. 2002. Bioremediation of chromium by using *Bacillus* sp. 3rd International Science Conference, University of Arid Agriculture, Rawalpindi, Pakistan.
11. Lodhi, A., **Faryal, R.**, Ahmed, S. and Hameed, A. 2002. Isolation, characterization and biosorption of heavy metals by indigenous fungal strains. 3rd International Science Conference, University of Arid Agriculture, Rawalpindi, Pakistan.
12. Zahoor, L., **Faryal, R.** and Awan, Z.I. 2003. Analysis of drinking water quality in Islamabad and its suburbs. 7th International Conference of the Pakistan Society for Biochemistry and Molecular Biology. Trends in Biochemistry and Molecular Biology. Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore, Pakistan.
13. Sarwar, S. **Faryal, R.** and Awan, Z.I. 2003. Physico-chemical analysis of soil and industrial effluents in the industrial area of Islamabad, Pakistan. 7th International Conference of the Pakistan Society for Biochemistry and Molecular Biology. Trends in Biochemistry and Molecular Biology. Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore, Pakistan.
14. Chaudhry, M. I., **Faryal, R.**, Saba, N.U. and Nasir, J. A. 2003. Analysis of faecal contamination in drinking water. 7th International Conference of the Pakistan Society for Biochemistry and Molecular Biology. Trends in Biochemistry and Molecular Biology. Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore, Pakistan.
15. Tabassum, A., **Faryal, R.** and Hameed, A. 2003. Studies on the role of microbes in bioremediation of metals. 7th International Conference of the Pakistan Society for Biochemistry and Molecular Biology. Trends in Biochemistry and Molecular Biology. Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore, Pakistan.
16. Sultan, A., **Faryal, R.**, Ahmed, S. and Hameed, A. 2003. Bioaccumulation and biosorption of lead by newly isolated fungal strains. 7th International Conference of the Pakistan Society for Biochemistry and Molecular Biology. Trends in Biochemistry and Molecular Biology. Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore, Pakistan.
17. Batool, A., Hasan, S., **Faryal, R.** and Ahmed, S. 2003. Optimization of some nutritional and physiological parameters for lysine production by *Corynebacteriumglutamicum*strain AHS-3. 7th International Conference of the Pakistan Society for Biochemistry and Molecular Biology. Trends in Biochemistry and Molecular Biology. Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore, Pakistan.
18. **Faryal, R.**, Ahmed, S. and Hameed, A. 2005. Biodegradation of 4-Aminobenzene sulphonic acid by Aspergillus species RH19.5th International Biennial Conference of Pakistan Microbiological Society, Karachi, Pakistan.
19. Munir, K**.**, **Faryal, R.** and Hameed, A. 2005. Factors effecting Nickel and Chromium removal from aqueous solution using oven dried biomass of A*spergillus niger* strain RH 19. 21st Annual Conference of Bangladesh Society of Microbiologist, BINA, Mymensingh,Bangladesh.
20. **Faryal, R.** Munir, K**.**, Ahmed, S. and Hameed, A. 2005.Studies on development of fungal biosorbet for removal of organic and metal pollutants. “Genomics, Bioinformatics, Biotechnology and Economic Development”, Karachi, Pakistan
21. **Faryal, R.** and Hameed, A. 2006. Removal of metal ions using non-growing biomass of *Aspergillus niger* RH19. 1st International Conference on Biotechnology and Informatics. Balochistan University of Information Technology and Management Sciences, Quetta, Pakistan.
22. Qazilbash, A.A., **Faryal, R.,**Tabasum, A., Lodhi, A., Ahmad, S. and Hameed, A.2008.Bioremediation Efficacy of Indigenous Strains of *Bacillus* Species in the Removal of Chromium VI from Industrially Polluted Soils.9th Biennial Conference Advances in Biochemistry and Molecular Biology, PMAS-Arid Agriculture University Rawalpindi, Pakistan (December, 17-20, 2008).
23. Qazilbash, A.A., **Faryal, R.,** Tabasum, A., Lodhi, A., Ahmad, S. and Hameed, A.2008. Removal of Lead (Pb) from SDB Media Using Oven-dried and Non-growing Strains of *Aspergillusniger* Under laboratory Conditions. 9th Biennial Conference Advances in Biochemistry and Molecular Biology, PMAS-Arid Agriculture University Rawalpindi, Pakistan (December, 17-20, 2008).
24. Badshah, I., Mehboob, M. and **Faryal, R.**2009.Antibiotic resistance pattern and integrons in clinical isolates of E. coli from Rawalpindi/Islamabad. 5thInternational Symposium on Biotechnology (ISB09). University of Sindh, Pakistan October 4 –7,2009
25. Parveen, A., Ahmed, A., Ahmad, F. and **Faryal, R.** 2014.Association of GSTM and GSTT polymorphism to allergic rhinitis among resident of Rawalpindi/Islamabad.12th International Congress of Immunology and Allergy of Iran. Mahmoudabad, Mazandaran, Iran (29th April to 2nd May 2014)
26. Ismail, T. and **Faryal, R.** 2014.Spleen tyrosine kinase’s genetic polymorphism among allergic asthma patients in Pakistani population.12th International Congress of Immunology and Allergy of Iran. Mahmoudabad, Mazandaran, Iran (29th April to 2nd May 2014)
27. Subhan, M., Ahmed, S. and **Faryal, R.** 2015. Screening of Lovastatin Production by Indigenous Filamentous Fungi.10th Biennial International Conference of Pakistan Society of Microbiology. University of Punjab, Lahore, Pakistan (25th to 28thMarch, 2015)
28. Subhan, M., **Faryal, R.,** and Ian Macreadie.2016. Exploitation of *Aspergillusterreus* for production of lovastatin Bioprocessing Networks annual conference (BPN 2016).Melbourne, Victoria, Australia (11-13 October, 2016)

1. Subhan, M., **Faryal, R.,** and Ian Macreadie. 2016. Production of lovastatin in statin resistant strains of *Aspergillus terreus*, International Biotechnology Symposium 2016 and Aus-Biotech., Melbourne, Victoria, Australia (24 - 27 October 2016)
2. Subhan, M., **Faryal, R.,** and Ian Macreadie.2016. Lovastatin production by *Aspergillus terreus* using a novel substrate (*Corymbia Maculata*) as a carbon source in solid state fermentation, International conference on “New frontiers of Microbiology”. Australian society of Microbiology, Perth, Western Australia, Australia (July 03-06, 2016)
3. Subhan, M., **Faryal, R.,** and Ian Macreadie.2016.Yeast assays for discovery of novel chemotherapeutics compounds, International conference on metabolomics “Australia and New Zealand metabolomics conference 2016(ANZMET 2016)”, Melbourne , Australia (March 30-1st April 2016)

**Book/Chapter Published**

1. Title “Bioremediation of Heavy metal ions and Organic Pollutants by Microbes”. Lambert Academic Publishing, GmbH& Co.KG, Germany
2. **Faryal, R.** ,Tabassum, A., Hameed, A. and Ahmed, S. 2004. Adsorption of lead by A*spergillus niger* strain RH 17. Proceeding of Fourth International Conference on Remediation of chlorinated and recalcitrant compounds, Columbus, Ohio, U.S.A.
3. Munir, K., Hameed, A., **Faryal, R**., Mubeen, F., Hassan, Z. and Hafeez, F.Y. 2009.“ Molecular Identification of a Novel Aspergillus strain capable of degrading nickel and chromium” in: Microbial Technologies for Sustainable Agriculture. Crystal Publisher, Pakistan
4. Parkash, O., Kumari, P., Deva, V., Lal, S., Ujjan, J. A., Qadir, S. M., ...&Kanhar, N. A. (2019). New Tools for Dengue Diagnostics. Dengue Fever: a Resilient Threat in the Face of Innovation, 131.

**ADDITIONAL COURSES/TRAININGS**

\* Workshop on Preservation, Identification and activity check of microbial cultures (University of Karachi/ UNESCO, Nov. 17-25th, 1991).

\* Training Course on Antimicrobial Susceptibility Testing, Islamabad, Pakistan (National Institute of Health/ WHO Oct. 28-30th, 1999).

\* Training Workshop on Quality Assurance (Lab diagnosis) in Clinical Microbiology, Islamabad, Pakistan (National Institute of Health/WHO, June 28-30th, 2000).

\* Training course on Role of Women in Population, Islamabad, Pakistan (Sustainable Development Policy Institute, Feb. 25-27th, 2003).

\* Training course on Designing Learning Experiences, Islamabad, Pakistan (Higher Education Commission,8-10th April,2004)

\* Training course on Identification, Maintenance and Preservation of microorganisms, Islamabad, Pakistan (Quaid-i-Azam University10-12th May,2004)

\* Inter Regional Workshop on Environmental Health Impacts from Exposure to Metals, Shimla, India(US Department of Health and Human Services/WHO/ICMR1-3rd June 2005).

\* HEC workshop/PARC symposia on Bacteriocin, Karachi, Pakistan (Microbiology Department, University of Karachi,6-10th Dec.2005)

\* HEC workshop/PARC symposia on Bacteriocin, Karachi, Pakistan (Microbiology Department, University of Karachi, 6-10thDec. 2005)

\* Workshop on Microflora, Karolinska Institute, Solna, Sweden (27th August, 2008)

\* Workshop on ”Curriculum Development and Associated Requirements for Biomedical Engineering” Pakistan Engineering Council, Islamabad, Pakistan, (5 -6thJan.2009)

\* Workshop on “Introduction to STAT”, Health Services Academy, Islamabad, Pakistan(27 -29th Sept.,2010 )

\* WHO Consultative meeting on Developing Biosafety and Biosecurity Policy Document, Pakistan (7-9th Sept.,2015)

\* WHO Consultative meeting on Developing Biosafety and Biosecurity Policy Document and Strategic Plan, Pakistan (21-22ndSept., 2015)

\* WHOSecond Workshop on National Laboratory Policy, Pakistan (6-8th Oct., 2015)

\* WHOThird Workshop on National Laboratory Policy, Pakistan (11 -13th Nov., 2015)

\* 1st National Policy forAntimicrobialResistanceContainment,Pakistan (2-3rd Feb., 2016)

\* 2nd Workshop onDevelopment of NationalPolicy for ContainmentAntimicrobial Resistance(AMR) in Pakistan, Pakistan (28 -29thApril, 2016)

\* Indo-U.S. workshop titled IndoU.S. Workshop on BuildingRegional Capacity to TackleChallenges of EmergingInfections and Global HealthSafety, Seychelles(9-11thMay, 2016)

\* National Laboratory working Group Workshopto finalize National Policyand Strategic plan for Biosafety/Bio-security, Pakistan (2-3rd June, 2016)

\* NIH-WHO meeting of National Laboratory Working Group (NLWG) for endorsement of National Laboratory Strategic Framework & to finalize operational plan for Laboratory Bio safety &Biosecurity,Pakistan (19 -23rdOct., 2016)

\* Preparing Biological Laboratories for Certification in BioriskManagement,Pakistan (10 -13thDec., 2016)

\* 15thMeeting of the Avian Immunology Research Group (AIRG), St. Catherine’s College at University of Oxford, UK (5-7th September, 2018)

\* Responsible Conduct in the Life Sciences Workshop PBSA at Islamabad (Dec. 6th-10th 2018).

## \* Containment Certification Schemeto support the WHO Global Action Plan for Poliovirus Containment Training for Auditors, Copenhagen, Denmark (6th-10th May, 2019)

**\*** Sample Processing using Flexible film Isolator (FFI) and FFI maintenance, NADP Training Laboratory, Public Health Enngland, Porton Down, UK(15-17th May, 2019)

**ACTED AS RESOURCE PERSONS**

* International Thematic Workshop on “Advances in Bioinoculant/Biopesticides Production, Formulation and Application”, COMSTECH Secretariat, Islamabad, Held on 20 -22nd Oct., 2009.
* DAAD International Summer School on “Recent Advances in Plant Biotechnology for Sustainable Development (Exploring the hidden potential of microorganisms)”, Quaid-I-Azam University, Islamabad, Held on 26 -30th March, 2012.
* CIIT Workshop on “Capacity Building of Teacher from Baluchistan”, COMSATS Institute of Information Technology, Abbottabad, Held on 26 -30th Aug., 2012
* NIH/WHO Workshop on “Data Dissemination for Water Quality Parameters”, National Institute of Health, Islamabad, Held on 29 -30th April, 2013
* Seminar on “Development of Vaccine: Current Status and Future” ,Government College University, Faisalabad, Held on 22nd April,2014
* Workshop in “1st National Policy for Antimicrobial Resistance Containment, Pakistan (2nd -3rd Feburary, 2016)
* Symposium on “Frontiers in Biology; From Discovery to Applications”, Allama Iqbal Open University, Islamabad, Held on 19th Jan., 2017

**Research projects**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Project Title | Principal / Co-Principal Investigator | Sponsoring Agency | Duration | Completed/In Progress |
| Studies on transmission mechanism of antibiotic resistance from poultry to human population | PI | HEC | Three years | Completed |
| Molecular characterization of *Corynebacterium diphtheria* strains prevalent in Pakistan. | PI | CIIT | One year | Completed |
| To assess the role of spleen tyrosine kinase in paper mulberry allergy" | PI | CIIT | One year | Completed |
| Candidate gene approach for studying association of SYK polymorphism with pollen allergy | PI | URF | One year | Completed |
| GSTT1 and GSTM1 genes polymorphism in Lymphoma patients | PI | URF | One year | Completed |
| Development of Containment facility for preservation of indigenous microbial strains at Department of Microbiology, Quaid-i-Azam University | PI | CRDFGLOBAL, USA | One year | Completed |
| Strengthening Medical Microbiology for teaching at Department of Microbiology | PI | HEC | One years | Completed |
| Development of Diagnostic Biomarker for Circulating Varicella Strains In Pakistan | PI | HEC | Three years | In progress |

## Administrative Duties

Member Board of studies (Department of Biosciences, CIIT) 2005-2012

Member Proctor Board (CIIT, Islamabad) 2004-2006

Member Proctor Board (CIIT, Islamabad) 2009-2010

Team Member, QEC cell (CIIT, Islamabad) 2009-2012

Member Board of studies (Department of Microbiology, QAU) 2013to date

Member Board of Faculty (Faculty of Biological Sciences, QAU) 2013to date

Member Admission Committee MPhil and PhD (Department of Microbiology, QAU)2013 to date

Member Faculty of Medical Sciences, Quaid-i-Azam University 2017 to 2020

Member Academic council, Quaid-i-Azam University 2017 to date

Member Faculty of Natural Sciences, Quaid-i-Azam University 2020 to date

Member Equivalence Committee, Quaid-i-Azam University 2019 to date

Chairperson Girls Hostel Disciplanary Committee, Quaid-i-Azam University 2017 to date

Chairperson Admission Committee, Quaid-i-Azam University 2020 to date

## List of University and public service activities

* Member National Laboratory Working Group, Pakistan
* Member drafting committee for: National Laboratory Strategic Framework Pakistan
* Member drafting committee for: Operational plan for Laboratory Bio-safety & Bio-security, Pakistan
* Member drafting committee for: National Policy for Antimicrobial Resistance Containment, Pakistan
* Member drafting committee for: National Laboratory Quality Standard of the Islamic Republic of Pakistan
* Member Ethical Committee, National Institute of Health. Pakistan
* Member National Authority on Containment, Ministry of National Health Services Regulations and Coordination, Pakistan
* Member *iTech*, WHO for NAC Pakistan
* Member Higher Education Commission(Pakistan) curriculum Revision Committee (Bioinformatics)
* Member Higher Education Commission(Pakistan)curriculum Committee (Microbiology)
* Member of Board of Studies of Department of Biosciences-University of Wah
* Member of Selection Board, Department of Biosciences-University of Wah
* Member of Board of Studies, Department of Biotechnology and Bioinformatics, International Islamic University, Islamabad
* Member Departmental Tenure Review Committee, Kohat University of Science and Technology
* Member Departmental Tenure Review Committee, Bahauddin Zakariya University, Multan
* Member Selection Board-Shaheed Benazir Bhutto Women University
* Editorial board member “University of Wah Journal of Science and Technology (UWJST)”
* Reviewer of International and national journals
* Member Board of Faculty of Science and Technology, Fatima Jinnah Women University, Rawalpindi
* External Examiner
* Universiti Brunei Darussalam
* Gomal University
* PMAS Arid Agriculture University
* Fatima Jinnah Women University
* Government College University
* Bahauudin Zakariya University
* Wah University
* International Islamic University Islamabad
* COMSATS Institute of Information Technology
* University of Health Sciences

**Number of Student Supervised:**

|  |  |  |
| --- | --- | --- |
| No of graduate students | In progress | Completed |
| PhD (Supervisor) | 04 | 04 |
| PhD (Co-Supervisor) | 02 | - |
| MPhil/ MS | 07 | 62 |