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OBJECTIVE

- To work in a challenging position in a research and academic organization.

Work Experience

- **August 2024 to date: Associate Professor** (Chemical Toxicology) Department of Entomology, University of Agriculture Faisalabad, Pakistan, UAF Sub-Campus Burewala-Vehari, Punjab, Pakistan.
- **September 2015 to August 2024: Assistant Professor** (Pesticide Chemistry) Department of Entomology, University of Agriculture Faisalabad, Pakistan, UAF Sub-Campus Burewala-Vehari, Punjab, Pakistan.
- **June 2014 to September 2015: Assistant Professor** Department of Environmental Sciences, COMSATS Institute of Information Technology, Vehari.
- **January 2010 to March 2014: Guest Scientist** at Helmholtz Centre for Environmental Research Leipzig, Germany.

Education

- **Dr. rer. nat.** Chemistry (Pesticides), 2010-2014. Helmholtz Centre for Environmental Research Leipzig, Germany and Freiberg University of Mining and Technology, Germany.
- **M.Sc. (Hons.)** Agri. Entomology (Ecotoxicology), 2005-2007. University of Agriculture, Faisalabad-Pakistan
- **B.Sc. (Hons.)** Agriculture, 2001-2005. University of Agriculture, Faisalabad-Pakistan
- **F.Sc.** Pre-medical, 1999-2001. Govt. College of Science, Faisalabad-Pakistan

Area of Interest

- Development of bio-analytical techniques/tools for plants and insects on different instruments.
- Detection of plant chemicals for insect control.
- Risk Assessment: Environmental fate of agricultural chemicals (Pesticides) and health effects of chemicals.

Awards

- Merit Scholarship in B.Sc. (Hons.) and M.Sc. (Hons.)
- DAAD Ph.D Fellowship for Germany

Languages.

- English (Excellent)
- Urdu (Excellent)
- German (Good - A2)

Projects and Consultancies

1. “Carcinogenic potential of extensively used pesticide compounds of cotton grown district Vehari of Punjab, Pakistan” (**Amount 0.500 Mn PKR**).
2. “Impact and risks analysis of pesticide cocktails used in crops align with “Better Cotton” compliance requirements”. At Master Trainers training on 7th March 2023. (**Amount 0.175 Mn PKR**)
3. “Reduction in Highly Hazardous Pesticides Use in Cotton Crop” and “Enhancing Soil Health”(Amount 6.000 Mn PKR)
4. “Developing training material for the hazards of highly hazardous pesticides and capacity building of project staff on Integrated Pest Management (IPM) practices and alternate pest control methods.” (**Amount 2.300 Mn PKR**).
5. “Review and Developing training material for the hazards of highly hazardous pesticides, training Material on Cocktail, List of Product having phasing out Active Ingredient and capacity building of project staff on Integrated Pest Management (IPM) practices and alternate pest control methods,” (**Amount 0.300 Mn PKR**).
6. Developing training manual for farmers and field staff regarding improve soil health through implementing locally relevant practices, 4r soil management and alternate methods beyond synthetic fertilizer. (**Amount 1.400 Mn PKR**) (**As Supervisor**).
7. Capacity building of project staff on recording and reporting of effective ingridiant monitoring of pesticides data and alternative of phase out pesticides. (**Amount 1.000 Mn PKR**)

Publications

A. Journal Publications

- 1- Ahmed, S., Ashraf, M.R. and Hussain, M.A., 2008. Pathogenicity of a local strain of *Metarhizium anisopliae* against *Coptotermes heimi* (Was.)(Isoptera: Rhinotermitidae) in the laboratory. *Pakistan Entomology*, 30, No. 1, pp.43-50.
- 2- Ahmed, S., Ashraf, M.R., Hussain, M.A. and Riaz, M.A., 2008. Pathogenicity of isolates of *Metarhizium anisopliae* from Murree (Pakistan) against *Coptotermes heimi* (Wasmann)(Isoptera: Rhinotermitidae) in the laboratory. *Pakistan Entomologist*, 30, No. 2, pp.119-125.
- 3- Ahmed, S., Ashraf, M.R., Hussain, A. and Riaz, M.A., 2009. Pathogenicity of isolates of *Metarhizium anisopliae* from Gujranwala (Pakistan) against *Coptotermes heimi* (wasmann)(Isoptera: Rhinotermitidae). *International Journal of Agriculture and Biology*, 11, pp.707-711.
- 4- Shahid, N., Zia, Z., Shahid, M., Faiq Bakhat, H., Anwar, S., Mustafa Shah, G. and Rizwan Ashraf, M., 2015. Assessing Drinking Water Quality in Punjab, Pakistan. *Polish Journal of Environmental Studies*, 24(6).
- 5- Iqbal, H.H., Shahid, N., Qadir, A., Ahmad, S.R., Sarwar, S., Ashraf, M.R., Arshad, H.M. and Masood, N., 2017. Hydrological and Ichthyological Impact Assessment of Rasul Barrage, River Jhelum, Pakistan. *Polish Journal of Environmental Studies*, 26(1).
- 6- Zia, Z., Bakhat, H.F., Saqib, Z.A., Shah, G.M., Fahad, S., Ashraf, M.R., Hammad, H.M., Naseem, W. and Shahid, M., 2017. Effect of water management and silicon on

- germination, growth, phosphorus and arsenic uptake in rice. *Ecotoxicology and Environmental Safety*, 144, pp.11-18.
- 7- Bakhat, H.F., Bibi, N., Zia, Z., Abbas, S., Hammad, H.M., Fahad, S., Ashraf, M.R., Shah, G.M., Rabbani, F. and Saeed, S., 2018. Silicon mitigates biotic stresses in crop plants: A Review. *Crop Protection*, 104, pp.21-34.
 - 8- Khalid, S., Murtaza, B., Shaheen, I., Ahmad, I., Ullah, M.I., Abbas, T., Rehman, F., Ashraf, M.R., Khalid, S., Abbas, S. and Imran, M., 2018. Assessment and public perception of drinking water quality and safety in district Vehari, Punjab, Pakistan. *Journal of Cleaner Production*, 181, pp.224-234.
 - 9- Hammad, H.M., Zia, F., Bakhat, H.F., Fahad, S., Ashraf, M.R., Wilkerson, C.J., Shah, G.M., Nasim, W., Khosa, I. and Shahid, M., 2018. Uptake and toxicological effects of pharmaceutical active compounds on maize. *Agriculture, Ecosystems & Environment*, 258, pp.143-148.
 - 10- Ashraf, M.R., Hafeez, O.B.A., Masroor, A., Ahmad, S. and Zaib, I., 2018. Okra Seeds Priming with Two *Bacilli* spp. and TriHar-6 Isolates Enhanced the Physiological Attributes and Suppressed the *Fusarium oxysporum* f. sp. vasinfectum. *Annals of the Romanian Society for Cell Biology*, pp.34-49.
 - 11- Masroor, A., Ashraf, M.R., Javed, K., Ahmad, S. and Khan, S.Z., 2018. Comparative Study of Different Management Practices for Cotton Cultivars against Dusky Cotton Bug (*Oxycarenus* Spp.). *Annals of the Romanian Society for Cell Biology*, pp.23-33.
 - 12- Waqar, A., Shah, G.M., Bakhat, H.F., Shahid, M., Aslam, M., Ashraf, M.R., Hafeez, R., Murtaza, B. and Rashid, M.I., 2019. The earthworm species *Pheretima hawayana* influences organic wastes decomposition, nitrogen mineralization and maize N recovery. *European Journal of Soil Biology*, 90, pp.1-8.
 - 13- Perveen, S., Mushtaq, M.N., Yousaf, M., Waqas, M.R., Ashraf, M.R., Awan, M.I., Hashim, S. and Koodkaew, I., 2019. Potent phenolic allelochemicals from *Celosia argentea* var. *crinata* L. leaf extract based on bioactive fractions. *Allelopathy Journal*, 48(1), pp.27-34.
 - 14- Bakhat, H.F., Bibi, N., Fahad, S., Hammad, H.M., Abbas, S., Shah, G.M., Zakir, A., Murtaza, B. and Ashraf, M.R., 2020. Rice Husk Bio-Char Improves Brinjal Growth, Decreases Insect Infestation by Enhancing Silicon Uptake. *Silicon*, pp.1-10.
 - 15- Ashraf, M.R., Bakhat, H.F., Shah, G.M., Arshad, H.M., Mahmood, Q. and Shahid, N., 2020. Role of hydrophobicity in bio-accessibility of environmental pollutants among different organisms. *Polish Journal of Environmental Studies*, 29(5).
 - 16- Zafar, M.I., Nazli, A., Riaz, M.A. and Ashraf, M.R., 2020. TOXIC POTENTIAL OF *ALSTONIA SCHOLARIS* AND *SALVADORA OLEIODES* LEAVES EXTRACT AGAINST SUBTERRANEAN TERMITES, *MICROTERMES OBESI* (ISOPTERA: TERMITIDAE). *International Journal of Pharmacognosy Vol. 7, Issue 4*, 109-115.
 - 17- Yasin, O., Masroor, A., Mustafa, G., Ashraf, M.R., Ahmad, S. and Tahir, G.M., 2021. Evaluation/Screening of Tomato Germplasm to Find the Resistant Source against Early Blight Disease and Its Management. *Webology*, 18(5), pp.800-816.
 - 18- Hanif, A., Ashraf, M.R., Masroor, A., Iqbal Awan, G.M., Ahmad, S. and Zaman, S., 2022. Botanical description of six brassica species with relevance to their quantitative and morphological characteristics. *Journal of Xi'an Shiyou University, Natural Sciences Edition*, 65 (06), pp. 89-101. DOI 10.17605/OSF.IO/M8GVU.
 - 19- Masroor, Ashir and Din, Mairaj and Binyamin, Rana and Ashraf, Muhammad Rizwan and Ahmed, Nadeem and Iqbal, Rashid and Zeshan, Muhammad Ahmad and Abbas, Hafiz Tassawar and Ali, Iftikhar, Exploring the Potential of Exotic Rice Hybrids Against *Xanthomonas Oryzae* Pv. *Oryzae*, *Bipolaris Oryzae*, Grain Discoloration

- Diseases, and Yield Attributes Under Agro-Climatic Conditions Of Punjab, Pakistan (November 10, 2022). Available at SSRN: <https://ssrn.com/abstract=4273696> or <http://dx.doi.org/10.2139/ssrn.4273696>.
- 20- Nadeem, S.M., Hanif, A., Khan, M.Y., Waqas, M.R., Ahmad, Z., Ashraf, M.R. and Naveed, M., 2022. Elemental sulphur with sulphur oxidizing bacteria enhances phosphorus availability and improves growth and yield of wheat in calcareous soil. *Archives of Agronomy and Soil Science*, pp.1-9.
 - 21- Aslam, M., Sarwar, A., Khan, S.Z., Awan, M.I., Munir, M., Mushtaq, M.N., Ahmad, S., Hanif, A., Masroor, A. and Ashraf, M.R., 2023. The effectiveness of botanicals and fungus isolates from fish pound on the population reduction of *Bemisia tabaci*. *Journal of Survey in Fisheries Sciences*, 10(3S), pp.4996-5007.
 - 22- Ashraf, M. R., Khan, L. A., Ahmed, S., Iqbal, M. U., Nadeem, S. M., Mustafa, G., ... Ahmad, S. 2024. Validation of different control strategies (chemical and biological) for the reduction of whitefly for better cotton production. *European Chemical Bulletin*, 13(06), 238–245. <https://doi.org/10.53555/ecb.v13>

B. Book Chapter Published

1. Pesticides Pollution in Agricultural Soils of Pakistan. “Soil Science: Agriculture and Environmental Prospective” Springer International Publishing Switzerland 2016. ISBN 978-3-319-34449-2.
2. Transporters and Plant Osmotic Stress. "In Transporters and Plant Osmotic Stress, pp. 307-344. Academic Press, 2021.
3. Pathogenicity of local isolates of entomopathogenic fungi of Pakistan. LAMBERT Academic Publishing, Germany.
4. Insect Biodiversity Management, 2023, LAMBERT Academic Publishing, Germany.
5. Techniques for Biochemical Analysis (Laboratory Handbook), 2025, LAMBERT Academic Publishing, Germany.
6. Cotton Plant Protection Manual for Farmers (Urdu language) (1st Edition 2023, 2nd Edition 2025).
7. Farmer manual regarding improve soil health through implementing locally relevant practices, 4r soil management and alternate methods beyond synthetic fertilizer. (Urdu language) 1st Edition 2025.

C. Conference Abstracts Published

1. Carcinogenic Potential of Extensively Used Pesticide Compounds of Cotton Grown in District Vehari. (Entomological congress on “One Exclusive Day on Current Scenario and Management of Pink Bollworm” on December 16, 18, 2016, Organized by Pakistan Entomological Society, Department of Entomology, University of Agriculture, Faisalabad Pakistan).
2. Mass rearing of *Chrysoperla carnea* by using different filters material under laboratory conditions. (Entomological congress on “One Exclusive Day on Current Scenario and Management of Pink Bollworm” on December 16, 18, 2016, Organized by Pakistan Entomological Society, Department of Entomology, University of Agriculture, Faisalabad Pakistan).
3. Effect of organic manures on population of sucking insect pests of Brinjal (*Solanum melongena* L.) (1st International & 2nd National Conference “Challenges and Opportunities to Boost Agriculture in Changing Climate” March 26-28, 2018, Bahauddin Zakariya University, Multan, Pakistan, Layyah Campus).

4. Anti-microbial activity of indigenous medicinal plant species towards bacteria. International Horticulture Conference, on February 26-28, 2019, Department of Horticulture, Faculty of Agricultural Sciences and Technology, Bahauddin Zakariya University, Multan, Pakistan.
5. Rice husk bio-char improves brinjal growth and decrease sucking insect infestation. ESCON, 2019: International Conference on Environmental Toxicology and Health, Feb. 25-27, 2019. Department of Environmental Sciences, COMSATS University Islamabad, Vehari Campus, Pakistan.
6. Analysis and Re-design of Urban Municipal Solid Waste Management Operations in Pakistan: the Case of District Vehari. ESCON, 2019: International Conference on Environmental Toxicology and Health, Feb. 25-27, 2019. Department of Environmental Sciences, COMSATS University Islamabad, Vehari Campus, Pakistan.
7. Environmental risk analysis of pharmaceuticals abundantly used in Punjab, Pakistan. ESCON, 2019: International Conference on Environmental Toxicology and Health, Feb. 25-27, 2019. Department of Environmental Sciences, COMSATS University Islamabad, Vehari Campus, Pakistan.
8. Analysis and re-design of urban municipal solid waste management operations in district Vehari-Pakistan. ESCON, 2019: International Conference on Recent Trends in Environmental Sustainability, Feb. 21-23, 2022. Department of Environmental Sciences, COMSATS University Islamabad, Vehari Campus, Pakistan.

Conferences Attended

- Attended 12 international conferences
- Attended 30 National conferences