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Tenured Associate Professor

Department of Meteorology

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Work & Research Experience:

8/2025 –

PIFI Visiting Associate Professor

Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou China

5/2023 –

Associate Professor (Tenured)

Department of Meteorology, COMSATS University Islamabad, Pakistan

7/2024 – 12/2024

International Visiting Scholar

Department of Environmental Toxicology and Air Quality Research Center at University of California, Davis USA

9/2017 – 3/2018

Visiting Research Fellow

Department of Environmental & Civil Engineering, Hongkong Polytechnic University, Hongkong

5/2017 – 4/2023

Assistant Professor (Tenure Track)

Department of Meteorology, COMSATS University Islamabad, Pakistan

5/2015 – 4/2017

PIFI Post-Doctoral Researcher

Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou China

5/2014 – 4/2015

Guangdong Post-Doctoral Researcher

Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou China

Academic Profile:

1/2014

Quaid-I-Azam University Islamabad Pakistan/Chinese Academy of Sciences, China

PhD – Environmental Biology

Thesis Title: Residual Status and Air-Soil Exchange Fluxes of Persistent Organic Pollutants (POPs) in the Environment of Punjab Province, Pakistan
Advisor: Prof. Riffat N. Malik, Co-Advisor: Prof. Gan Zhang

7/2009	Quaid-I-Azam University Islamabad Pakistan MS – Environmental Biology Thesis Title: Organochlorine pesticides (OCPs) residues in the surrounding surface soils of Ittehad Chemical Industries, Kala Shah Kaku, Lahore Pakistan
7/2007	Pir Mehr Ali Shah University of Arid Agriculture (PMAS) Rawalpindi, Pakistan BSc (Hons) – Soil Sciences (Agriculture) Project report with Ministry of Climate & Environmental Coordination, Islamabad Pakistan

Research Grants (PI/Co-PI/Collaborator):

Principal Investigator (PI):

- Investigation of selected Persistent Organic Pollutants (POPs) and heavy metals pollution from E-waste processing facilities" (2019-2022: Pakistan Science Foundation; PKR 8.1 million).
- Value Chain Mapping and Capacity Building of Pakistani Government Stakeholders to Implement Basel Convention's Amendments to Enhance Control of the Transboundary Movements of Plastic Waste (CBA2020-FP04-SYED) (2022-2024: Asian Pacific Network for Global Change Research (APN); US\$ 57,000).
- Role of carbonaceous aerosols in the formation of South Asian brown clouds from Pakistan: Characterization and source apportionment using radiocarbon and organic tracers (2016-2017: Natural National Science Foundation, China; RMB 200,000).

Co-Principal Investigator (Co-PI)/Collaborator:

- Molecular Epidemiology and Prevalence of Antibiotic Resistance Genes in Smog Particulate Matter: Implication for Human Exposure in Pakistan" (2020-2022: Higher Education Commission of Pakistan; PKR 6.5 million).

Collaborative Research Projects:

- Evidence-based Assessments to Guide Perceptions, Governance, and Ethical Frameworks for South Asia: Comparing Marine Cloud Brightening (MCB) Deployment Strategies vis-à-vis Carbon Dioxide Removal and Mitigation Efforts (Funded by ARIA, UK; € 574,000; 2025 – 2028)
- Pakistan-Indiana Environmental and Climate Resilience University Partnership (PIECRUP) (Funded by US Embassy in Pakistan: 2024-2026).
- Country Coordinator for the research project "Monitoring and Risk Assessment of Toxic Chemicals in the Air, MORATOXA" (The Alliance of International Science Organizations (ANSO): 2021- 2025).
- Country Coordinator of Southern Contaminant Program a CAS research program, the "Southern Contaminants Program (SCP)", on Environmental Contaminants along the 21st Century Maritime Silk Road (Chinese Academy of Sciences, China: 2017-2019).
- Work as collaborator from Pakistan for the project "Monitoring of air quality data by using active air sampling technique from major cosmopolitan cities of Pakistan (Hong Kong Polytechnic University, Hong Kong: 2017).

- Investigation of organic and pharmaceuticals pollutants through passive water samplers in the five major rivers from Pakistan (Lancaster University, UK: 2016-2017).
- Evaluation of POPs contamination in different environmental compartments from the Indus delta system of Pakistan (Quaid-I-Azam University, Pakistan: 2012-2014).
- Monitoring of sediment and water quality of riverine ecosystem of Pakistan (Wetlands Program, WWF-Pakistan): 2008-2010).

Consulting Projects:

- Ecological Assessment of Significant Peatlands in KPK to develop Management Plan and Ramsar Information Sheet (RIS) of the selected Peatlands (**2025: WWF-Pakistan**).
- TA-10243 REG: Enhancing Environmental Sustainability through Inclusive, Integrated Solutions (formerly Mainstreaming Circular Economy Approaches for Sustainable Development) “National Environmental and Air Quality Research Expert” (**2025: Asian Development Bank (ADB)**).
- Individual Consultant for the project entitled Ecological Assessment of Significant Wetlands in Gilgit-Baltistan to Develop Ramsar Information Sheets (**2023: WWF-Pakistan**).
- Individual Consultant for Technical Analysis of Climate Change Impact on Urban Areas of Multan City with Special Focus on Heatwave (**2023: Help Foundation & START Network**).
- National Capacity Need Assessment Consultant for the project Climate Adaptation and Resilience (CARE) for South Asia (**2021-2022: Project Implemented by Asian Disaster Prepared Center (ADPC) & Funded by World Bank**).
- Resource Person & Lead Consultant of Project “Mapping Agro-Biodiversity in Cotton Landscape” (**2021; WWF-Pakistan & SEM Pvt Ltd**).
- Lead Consultant for the Consulting Project “Development of National Chemical Policy for Pakistan in Coordination with Ministry of Climate Change” (**2020: UNDP, MASRO Pakistan & SEM Pvt. Ltd**).
- Partner-Country Resource Person for the project “Plastic Waste Management and flow research of selected Asia and Pacific countries towards its environmentally sound management” (**2019-2020; funded by Basel Convention Regional Center, China**).
- Team Expert of “Development of National Chemical Policy of Pakistan” (**2020; Funded by UNDP Pakistan**).
- National Consultant of “Formulation of Pilot Inventory of PCBs at National Level and Work on PCBs Database” (**2019; UNDP Pakistan**).
- National Inventory Facilitator of new & emerging persistent organic pollutants (POPs) in Pakistan (**2017/2018; UNDP, GEF, Ministry of Climate Change Pakistan**).

International Research Publications (*Corresponding/Thesis Supervision/First Author):

1. Xiao, Y., Zhao, S., Wang, W., Asante, K.A., Habib, A., Bong, C.W., **Syed, J.H.**, Bartolol, S., Weber, R., Jones, K.C. and Li, J., (**2026**). Highly Volatile POPs in Urban Air across Asia and Africa: Dominance of Volatile Methyl siloxanes. *Environmental Science & Technology*, 60, 2063–2075.

2. Khalid, M., **Syed, J.H.***, et al. (2025). Debris Flow Susceptibility and Propagation Modeling: A Deep Learning and Flow-R Framework. *Bulletin of Engineering Geology and the Environment*, 84, 45.
3. Khalid, A., Abbasi, N. A., Jamil, N., **Syed, J. H.**, Qadir, A., & Ahmad, S. R. (2025). Assessment of organochlorine pesticides in blood and tumor of breast cancer patients and control subjects from Punjab, Pakistan. *Environmental Geochemistry and Health*, 47(9), 1-15.
4. Kurt-Karakus, P.B., Akcetin, M.O., Birgul, A., Kara, M., Dumanoglu, Y., Yaman, B., Celik, S., Wania, F., **Syed, J.H.** and Odabasi, M. (2025). Formal E-waste facilities as a source of mercury to air and soil in Türkiye. *Waste Management*, 204, 114940.
5. Akram, S., Khan, S. A., Gul, H. K., **Syed, J. H.***, Kazim, M., Rehman, S. A. U., ... & Kurt-Karakus, P. (2025). Using hair as a non-invasive matrix to assess the exposure of e-waste workers to selected heavy metals in Pakistan. *Environmental Geochemistry and Health*, 47(6), 1-12.
6. Kamal, S., Wang, X., Liu, M., Shakoor, A., Li, M., Ali, J., ... & **Syed, J. H.*** (2025). Characteristics, seasonal variations and major sources of underivatized free amino acids in PM_{2.5} at a rural coastal site in Qingdao, China. *Environmental Pollution*, 126517.
7. Chakraborty, P., **Syed, J. H.**, Chandra, S., Hande, S., Pokhrel, B., Islam, E., & Miah, M. A. H. (2025). Electronic Waste Recycling in South Asia: Overview of Associated Risks from a Cocktail of Micro-Pollutants and Recommendations for Sustainable E-Waste Management. *Journal of Hazardous Materials Advances*, 100715.
8. Kazim, M., Saqib, Z., **Syed, J.H.***, Odabasi, M., & Kurt-Karakus, P. B. (2025). Characterization and distribution of brominated flame retardants in soils from informal E-waste recycling facilities: insights from Pakistan. *Environmental Monitoring and Assessment*, 197, 1-17.
9. Kazim, M., **Syed, J.H.***, Saqib, Z., Kurt-Karakus, P.B., Iqbal M.....& Odabasi, M. (2024). Informal E -waste recycling in nine cities of Pakistan reveals significant impacts on local air and soil quality and associated health risks. *Environmental Pollution*, 124259.
10. Khalid, A., Abbasi, N. A., Jamil, N., **Syed, J.H.***, Ahmad, S. R., & Qadir, A. (2024). Level of polychlorinated biphenyls in tumor and blood serum of breast cancer patients and control subjects from Punjab, Pakistan. *Science of The Total Environment*, 171908.
11. Tang, J., Li, J., Zhao, S., Zhong, G., Mo, Y., Jiang, H., Jiang, B., Chen, Y., Tang, J., Tian, C. and Zong, Z. **Syed, J.H.**, Song, J., Zhang, G. (2024). Molecular signatures and formation mechanisms of water-soluble chromophores in particulate matter from Karachi in Pakistan. *Science of the Total Environment*, 914, 169890.
12. Shakoor, A., Wang, X., Chen, J., Liang, Y., Kamal, S., Ali, J., **Syed, J.H.**, Xue, L. and Wang, W. (2023). Size Distribution and Secondary Formation of Particulate Organic Nitrates in Winter in a Coastal Area. *Sustainability*, 15(24), 16776 – 16789.
13. Hussain, N., Ahmad, M., Sipra, H., Ali, S., **Syed, J.H.***, Hussain, K., Hussain, S.W. (2023). First insight into seasonal variability of urban air quality of Northern Pakistan: An emerging issue associated with health risks in Karakoram-Hindukush-Himalaya Region. *Chemosphere*, 316, 137878.
14. Kazim, M., **Syed, J.H.***, Kurt-Karakus, P. B., Akcetin, M. O., Akram, S., Birgul, A., ... & Wania, F. (2023). Gaseous elemental mercury emissions from informal E-Waste recycling facilities in Pakistan. *Waste Management*, 170, 261-269.

15. Yadav, I. C., Devi, N. L., & **Syed, J.H. (2023)**. Legacy and emerging flame retardants as environmental pollutants: occurrence, toxicity mechanisms, and control. *Frontiers in Environmental Science*, 11, 1257582.
16. Iqbal, S.W., Latif, M., Ahmed, R., Adnan, S., Umar M., Ahmad, B., Azam, M., **Syed J.H.* (2022)**. Performance evaluation and comparison of observed and reanalysis gridded precipitation datasets over Pakistan. *Theoretical and Applied Climatology* 149, 1093–1116.
17. Paromita, C., Vinod, G., **Syed, J.H.**, Pokhrel, B., Bharat, G., Basu, A. R., Fouzder, T., Pasupuleti, M., Urbaniak, M., Beskoki, V.P. **(2021)**. Water-sanitation-health nexus in the Indus-Ganga-Brahmaputra River Basin: need for wastewater surveillance of SARS-CoV-2 for preparedness during the future waves of pandemic. *Ecohydrology and Hydrobiology*, <http://dx.doi.org/10.1016/j.ecohyd.2021.11.001>.
18. Amin, M., Gurmani, A.R., Rafique, M., Khan, S. U., Mehmood, A., Mohammad, D., & **Syed, J.H. (2021)**. Investigating the Degradation Behavior of Cypermethrin (CYP) and Chlorpyrifos (CPP) in Peach Orchard Soils Using Organic/Inorganic Amendments. *Saudi Journal of Biological Sciences*, <https://doi.org/10.1016/j.sjbs.2021.06.035>
19. Ishtiaq, J., **Syed, J.H.***, Jadoon, W.A., Hamid, N., Chaudhry, M.J.I., Shahnawaz, M., Nasir, J., Rizvi, S.H.H., Chakraborty, P., Li, J., Zhang G. **(2021)**. Atmospheric polycyclic aromatic hydrocarbons (PAHs) at Urban Settings in Pakistan: Spatial Variations, Sources and Health Risks. *Chemosphere*, <https://doi.org/10.1016/j.chemosphere.2021.129811>
20. Jadoon, W.A., Abdel-Dayem, S.M.M.A., Saqib, Z., Takeda, K., Sakugawa, H., Hussain, M., Shah, G.M., Rehman, W., **Syed, J.H.* (2021)**. Heavy metals in urban dusts from Alexandria and Kafir El-Sheikh, Egypt: implications for human health. *Environmental Science & Pollution Research* <https://doi.org/10.1007/s11356-020-08786>
21. Mahmood, A., **Syed, J.H.**, Raza, W., Tabinda, A. B., Mahmood, A., Li, J., Zhang, G., Azam, M. **(2020)**. Human Health Risk Assessment by Dietary Intake and Spatial Distribution Pattern of Polybrominated Diphenyl Ethers and Dechloran Plus from Selected Cities of Pakistan. *International Journal of Environmental Research and Public Health* 17249543.
22. Sipra, H., Aslam F., **Syed, J.H.***, Awan, T.M. **(2020)**. Investigating the Implications of COVID-19 on PM2.5 in Pakistan. *Aerosol & Air Quality Research*, <https://aaqr.org/articles/aaqr-20-07-covid-0459>.
23. Aslam, F., Awan, T.M., **Syed, J.H..... (2020)**. Sentiments and emotions evoked by news headlines of coronavirus disease (COVID-19) outbreak. *Humanities and Social Sciences Communications* 7, 23.
24. **Syed, J.H.***, Iqbal, M., Breivik, K., Chaudhry, M.J.I., Shahnawaz, M., Abbas, Z., Nasir, J., Rizvi, S.H.R., Taqi, M.M., Li, J., Zhang, G. **(2020)**. Legacy and Emerging Flame Retardants (FRs) in the Urban Atmosphere of Pakistan: Diurnal Variations, Gas-Particle Partitioning and Human Health Exposure. *Science of The Total Environment*, 140874.
25. Zong, Z., Tian, C., Li, J., **Syed, J.H.**, Zhang, W., Fang, Y., Jiang, Y., Nasir, J., Mansha, M., Rizvi, S.H.H., Farhan, S-B., Zhang, G. **(2020)**. Isotopic Interpretation of Particulate Nitrate in the Metropolitan City of Karachi, Pakistan: Insight into the Oceanic Contribution to NOx. *Environmental Science & Technology*, 54, 13, 7787–7797.
26. Taqui, M., **Syed, J.H.***, Askari, H. **(2020)**. Routine, Extreme and Engineering Meteorology Analysis for Karachi Coastal Area. *Earth Sciences Malaysia (ESMY)* 4(1) (2020) 15-22.

27. Waseem, H., Ali, J., **Syed, J.H.***, Jones, K.C. (2020). Establishing the relationship between molecular biomarkers and biotransformation rates: extension of knowledge for dechlorination of polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/Fs). *Environmental Pollution*, 263, 114676.
28. Rehman, M.Y.A., Taqi, M.M., Hussain, I., Nasir, J., Rizvi, S.H.H., **Syed, J.H.* (2020)**. Elevated Exposure to Polycyclic Aromatic Hydrocarbons (PAHs) May Trigger Cancers in Pakistan: An Environmental, Occupational and Genetic perspective. *Environmental Science & Pollution Research* (Accepted).
29. Hayat, A., Hussain, I., Soja, G., Iqbal, M., Shahid, N., **Syed, J.H.**, Yousuf, S. (2019). Organic and chemical amendments positively modulate the bacterial proliferation for effective rhizoremediation of PCBs- contaminated soil. *Ecological Engineering*, 138: 412-419.
30. Sajid, M., **Syed, J.H.***, Iqbal, M., Abbas, Z., Hussain, I., Baig, M.A. (2019). Assessing the generation, recycling, and disposal practices of electronic/electrical waste (E-Waste) from major cities in Pakistan. *Waste Management*, DOI: 10.1016/j.wasman.2018.11.026.
31. Iqbal, M., Breivik, K., **Syed, J.H.***,Malik, R.N. (2017). E-waste driven pollution in Pakistan: The first evidence of environmental and human exposure to flame retardants (FRs) in Karachi City. *Environmental Science & Technology*, DOI: 10.1021/acs.est.7b03159.
32. Hussain, I., Aleti G., Naidu R., Puschenreiter M., Mahmood, Q., Rahman, M., Wang, F., Shaheen, S., **Syed, J.H.***, Reichenauer, T. G. (2018). Microbe and plant assisted remediation of organic xenobiotics and its enhancement by genetically modified organisms and recombinant technology: A review. *Science of the Total Environment* (Accepted).
33. Hussain, I., Puschenreiter, M., Gerhard, S., Schöftner, P., Yousuf, S., Wang, A., **Syed, J.H.***, Reichenauer, T.G. (2018). Rhizoremediation of petroleum hydrocarbon-contaminated soils: Improvement opportunities and field applications. *Experimental and Environmental Botany*, 147: 202-219.
34. Hamid, N., **Syed, J.H.***, Junaid, M., and Malik, R.N., (2017). Elucidating the urban levels, sources and health risks of polycyclic aromatic hydrocarbons (PAHs) in Pakistan: Implications for changing energy demand. *Science of the Total Environment*, 619-620: 165-175.
35. Junaid, M., **Syed, J.H.**, Abbasi, N.A., Hashmi, M.Z., Malik, R.N., Pei, D. (2017). Status of indoor air pollution (IAP) through particulate matter 6 (PM) emissions and associated health concerns in South Asia. *Chemosphere*, 191: 651-663.
36. Xie, S., Junaid, M., Bian, W., Luo, J., **Syed, J.H.**, Pei, D. (2017). Generation and application of a novel transgenic zebrafish line Tg (cyp1a: mCherry) as an in vivo assay to sensitively monitor PAHs and TCDD in the environment. *Journal of Hazardous Material*, 344: 723-732.
37. **Syed, J.H.***, Iqbal, M., Zhong, G., et al. (2017). Polycyclic aromatic hydrocarbons (PAHs) in Chinese forest soils: profile composition, spatial variations and source apportionment. *Scientific Reports*, 7: 2692.
38. Hashmi, M. Z., Hasnain, A., **Syed, J.H.**, Tariq, M., Su, X., Mubarak, H., Nasim, W., Shen, C. (2017). PCB118- induced cell-proliferation mediated by oxidative stress and MAPK signalling pathway in HELF cells. *Dose Response*.
39. Di, L., Tian, L., **Syed, J.H.**, et al., (2017). Concentration, source identification, and exposure risk assessment of PM2.5-bound parent PAHs and nitro-PAHs in atmosphere from typical Chinese cities. *Scientific Reports*, 7 (1). DOI 10.1038/s41598-017-10623-4.

40. Iqbal, M., **Syed, J.H.***, A Katsogiannis, RN Malik, A Farooqi, A Butt, Jun Li, Gan Zhang, A. Cincenelli, KC Jones (2016). Legacy and emerging flame retardants (FRs) in the freshwater ecosystem: A Review. *Environmental Research*, 152: 26-42.
41. H Yasmeen, A Qadir, M Mumtaz, SAMAS Eqani, **Syed J.H.**, A Mahmood, N Jamil, F Nazar, H Ali, MS Ahmad, ZI Tanveer, G Zhang (2016). Risk Profile and Health Vulnerability of Cotton Picker's Women by Organochlorine Pesticides (OCPs) from Southern Punjab, Pakistan. *Environmental Chemistry & Toxicology*, 9999, 1-9.
42. Hussain, I., **Syed, J.H.***, A Kamal, M Iqbal, S-A-M-A-S Eqani, CW Bong, MM Taqi, TG Reichenauer, G Zhang, RN Malik (2016). The relative abundance and seasonal distribution correspond with the sources of Polycyclic 1 Aromatic Hydrocarbons (PAHs) in the surface sediments of Chenab River, Pakistan. *Environmental Monitoring and Assessment*, 188:378.
43. S Hafeez, A. Mahmood, **Syed, J.H.***, J Li, U Ali, RN Malik, G Zhang (2016). Waste dumping sites as a potential source of POPs and associated health risks in perspective of current waste management practices in Lahore city, Pakistan. *Science of the Total Environment*, 562, 953-961.
44. A Bajwa, U Ali, MJI Chaudhry, A Mahmood, **Syed, J.H.**, J Li, G Zhang, KC Jones, RN Malik (2016). Organochlorine pesticides (OCPs) in the Indus River catchment area, Pakistan: Status, soil-air exchange and black carbon mediated distribution. *Chemosphere*, 152:292-300.
45. U Ali, A Bajwa · MJI Chaudhry, A Mahmood, **Syed, J.H.**, J Li, G Zhang, KC Jones, RN Malik (2016). Significance of black carbon in the sediment-water partitioning of organochlorine pesticides (OCPs) in the Indus River, Pakistan. *Ecotoxicology & Environmental Safety*, 126:177-185.
46. N Hamid, **Syed, J.H.***, A Kamal, F Aziz, S Tanveer, U Ali, A Cincenelli, A Katsoyiannis, IC Yadav, J Li, RN Malik, Gan Zhang (2016). A review on the abundance, distribution and eco-biological risks of PAHs in the key environmental matrices of South Asia. *Reviews of Environmental Contamination & Toxicology*, DOI 10.1007/398_2015_5007.
47. U Ali, L Sánchez-García, MYA Rehman, **Syed, J.H.**, A Mahmood, J Li, G Zhang, KC Jones, RN Malik (2015). Tracking the fingerprints and combined TOC–black carbon mediated soil–air partitioning of polychlorinated naphthalenes (PCNs) in the Indus River Basin of Pakistan. *Environmental Pollution*, Article in Press xxx-1-9.
48. A Kamal, **Syed, J.H.**, A Mahmood, J Li, G Zhang, RN Malik (2015). Profile and excessive lifetime carcinogenic risk associated with atmospheric PAHs in Rawalpindi, Lahore and Gujranwala districts of Punjab province (Pakistan). *Aerosol and Air Quality Research*, x: 1–12, xxxx
49. M Iqbal, K Breivik, **Syed, J.H.***, RN Malik, J Li, G Zhang, KC Jones (2015). Emerging issue of e-waste in Pakistan: A review of status, research needs and data gaps. *Environmental Pollution*, 207: 308-318.
50. IC Yadav, NL Devi, **Syed, J.H.***, Z Cheng, J Li, G Zhang, KC Jones (2015). Current status of persistent organic pesticides residues in air, water, and soil, and their possible effect on neighboring countries: A comprehensive review of India. *Science of the Total Environment*, 511: 123-137.
51. U Ali, **Syed, J.H.***, A Mehmood, J Li, G Zhang, RN Malik, Kevin C Jones (2015). Influential role of black carbon in the soil–air partitioning of polychlorinated biphenyls (PCBs) in the Indus River Basin, Pakistan. *Chemosphere*, 134: 172-180.

52. U Ali, A Mahmood, **Syed, J.H.**, J Li, G Zhang, A Katsoyiannis, KC Jones, RN Malik (2015). Assessing the combined influence of TOC and black carbon in soil-air partitioning of PBDEs and DPs from the Indus River Basin, Pakistan. *Environmental Pollution*, 201: 131-140.
53. Amna, S Masood, **Syed, J.H.**, MFH Munis, HJ Chaudhary (2015). Phyto-Extraction of Nickel by *Linum usitatissimum* in Association with *Glomus intraradices*. *International journal of phytoremediation*, 17(10), 981-987.
54. A Mahmood, RN Malik, **Syed, J.H.**, Jun Li, G Zhang (2015) Dietary exposure and screening-level risk assessment of polybrominated diphenyl ethers (PBDEs) and dechlorane plus (DP) in wheat, rice, soil and air along two tributaries of the River Chenab, Pakistan. *Chemosphere*, 118: 57-64.
55. U Ali, N Sajid, A Khalid, L Riaz, MM Rabbani, **Syed, J.H.**, RN Malik (2015). A review on vermicomposting of organic wastes. *Environmental Progress & Sustainable Energy*, 34(4), 1050-1062.
56. MA Kamran, **Syed, J.H.***, S-A-M-A-S Eqani, MFH Munis, HJ Chaudhary (2015). Effect of plant growth- promoting rhizobacteria inoculation on cadmium (Cd) uptake by *Eruca sativa*. *Environmental Science and Pollution Research*, 22(12), 9275-9283.
57. U Ali, RN Malik, **Syed, J.H.**, CT Mehmood, L Sanchez-Garcia, A Khalid, MJI Choudhry (2014). Mass burden and estimated flux of heavy metals in Pakistan coast: sedimentary pollution and eco-toxicological concerns. *Environmental Sciences and Pollution Research*, DOI 10.1007/s11356-014-3612-2.
58. J Sultana, **Syed, J.H.***, A Mahmood, RN Malik, J Li, Gan Zhang (2014). Investigation of organochlorine pesticides from Indus Basin, Pakistan: Sources, air-soil exchange fluxes and risk assessment. *Science of the Total Environment*, 497-498; 113-122.
59. F Aziz, **Syed, J.H.***, RN Malik, A Katsoyiannis, J Li, G Zhang, KC Jones (2014). Occurrence of Polycyclic Aromatic Hydrocarbons in the Soan River, Pakistan: Insights into distribution, composition, sources and ecological risk assessment. *Ecotoxicology and Environmental Safety*, 109: 77-84.
60. **Syed, J.H.***, A Alamdar, A Mohammad, K Ahad, Z Shabir, H Ahmed, Maria Ali, SGAS Sani, H Bokhari, KD Gallagher, I Ahmad, SAMAS Eqani (2014) Pesticide residues in fruits and vegetables from Pakistan: A review of the occurrence and associated human health risks. *Environmental Science and Pollution Research*, 21: 13367-13393.
61. C Chakra, X Yue, L Jun, C Paromita, **Syed, J.H.**, RN Malik, Y Wang, J Lie, G Zhang, KC Jones (2014) Screening of Atmospheric Short- and Medium-Chain Chlorinated Paraffins in India and Pakistan using Polyurethane Foam Based Passive Air Samplers. *Environmental Science & Technology* (DOI: 10.1021/es405186m)
62. U Ali, **Syed, J.H.***, L Junwen, L Sánchez-García, RN Malik, MJI Chaudhry, M Arshad, J Li, G Zhang, KC Jones (2014). Assessing the relationship and influence of black carbon on distribution status of organochlorines in the coastal sediments from Pakistan. *Environmental Pollution*, 190, 82-90.
63. A Mahmood, **Syed, J.H.**, RN Malik, Z Qian, Z Cheng, J Li, G Zhang (2014) Polychlorinated biphenyls (PCBs) in air, soil, and cereal crops along the two tributaries of River Chenab, Pakistan: Concentrations, distribution, and screening level risk assessment. *Science of The Total Environment* (<http://dx.doi.org/10.1016/j.scitotenv.2014.02.074>).
64. A Usman, **Syed, J.H.***, RN Malik, A Katsoyiannis, J Li, G Zhang and KC Jones (2014). Organochlorine pesticides (OCPs) in South Asian region: A review. *Science of the Total Environment* 476:705-717.

65. Y Xu, J Li, P Chakraborty, **Syed, J.H.**, RN Malik, Y Wang, C Tian, G Zhang, and KC Jones (2014). Atmospheric polychlorinated naphthalenes (PCNs) in India and Pakistan. *Science of the Total Environment*, 466–467: 1030–1036.
66. **Syed, J.H.***, RN Malik, A Muhammad (2014) Organochlorine pesticides in surface soils and sediments from obsolete pesticides dumping site near Lahore city, Pakistan: contamination status and their distribution. *Chemistry & Ecology*, 30 (1) 87–96.
67. A Alamdar, **Syed, J.H.**, RN Malik, A Katsoyiannis, J Liu, J Li, G Zhang and KC Jones (2014). Organochlorine pesticides in surface soils from obsolete pesticide dumping ground in Hyderabad city, Pakistan: Contamination levels and their potential for air-soil exchange. *Science of the Total Environment*, 470- 471:737-741.
68. S Zafeer, A Mahmood, RN Malik, A Mahmood, **Syed, J.H.**, and T Ahmad (2014). Indigenous knowledge of medicinal plants in Kotli Sattian, Rawalpindi district, Pakistan. *Journal of ethno pharmacology* 151:820- 828.
69. MA Kamran, Amna, R Mufti, N Mubariz, **Syed, J.H.**, A Bano, MT Javed, MFH Munis, Z Tan and H Javed (2014). The potential of the flora from different regions of Pakistan in phytoremediation: a review. *Environmental Science and Pollution Research* 21(2), 801-812.
70. **Syed, J.H.***, RN Malik, J Li, C Chaemfa, G Zhang and KC Jones (2014). Status, Distribution and Ecological Risk of Persistent Organochlorines (OCs) in the Surface Sediments from the Ravi River, Pakistan. *Science of the Total Environment*, 472:204-214.
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Presentations:

- **Nov 29, 2025:** International training program on Monitoring and Assessment of Persistent Toxic Substances (PTS) along the 21st Century Maritime Silk Road at State Key Laboratory of Advanced Environmental Technology (SKLAET), Guangzhou Institute of Geochemistry (GIG), supported by the Chinese Academy of Sciences (CAS)
- **Nov 1 – 6, 2025:** 45th International Symposium on Halogenated Persistent Organic Pollutants (DIOXIN, 2025), Antalya, Turkey. One Session Chair & Two Presentations,
- **June 24-25, 2025:** Project Presentation during “Exploring Climate Cooling Workshop, UK

- **July 17, 2024:** Smog & Air Quality Challenges in Pakistan at DePaul University, Chicago USA
- **April 14-26, 2024:** Training workshop entitled “Senior Talents Training for Pakistani Faculty and Staff in China” (Nanchang, Beijing & Shanghai).
- **March 7, 2024:** **Panel** Discussion on “Strengthening Climate Policy & Governance: Lessons from CoP-28 and the path to CoP-29” at COMSATS University Islamabad.
- **December 26-27, 2023:** “Green Urban Development School (GUDS)” at COMSATS University Islamabad in collaboration with School of Leadership Foundation (SoLF) and Institute of Urbanism (IoU) funded by U.S Embassy, Islamabad Pakistan.
- **December 5, 2023:** Panel Discussion on “Elevating & Catalyzing Climate Action in Pakistan” organized by Beyond Carbon in collaboration with Rawalpindi Chamber of Commerce at RCCI Complex, Rawalpindi Pakistan.
- **November 16-17, 2023:** Advance Tools and Approaches for Air Quality Data Analytics and Pollution Assessment organized by the Department of Environmental Sciences, Kohat University of Science & Technology (KUST)
- **October 26, 2023:** Organized a capacity building training entitled “One-Day National Workshop of Governmental Stakeholders to Address Hazardous Transboundary Plastic Waste Import Issue” at Ramada Hotel, Islamabad
- **October 20, 2023:** Training workshop on “Applications of RS/GIS in Environmental Pollution Studies” as a resource person at Rawalpindi Women University, Rawalpindi
- **September 13, 2023:** Panel discussion as an Expert Panelist entitled “National Youth Policy Dialogue on Climate Change” at Marriot Hotel Islamabad
- **August 2, 2023:** Training workshop entitled “Implementing Basel Conventions on Amendments for Enhanced Control of Plastic Waste Movements in Pakistan” at Karachi School of Business and Leadership (KSBL), Karachi – Pakistan
- **June 14, 2023:** Delivered talk as a Keynote Speaker entitled “Environmental Pollution & Biodiversity Loss” at Capital University of Science & Technology (CUST), Islamabad – Pakistan
- **June 05, 2023:** Delivered a Keynote talk on Plastic Pollution on Environment Day Celebration at Fatima Jinnah Women University (FJWU), Rawalpindi – Pakistan
- **May 8-10, 2023:** Participated as a guest speaker in South Asian Telecommunication Regulators’ Council (SATRC) Workshop on Policy, Regulation and Services organized by Pakistan Telecommunication Authority at Islamabad – Pakistan
- **April 24, 2023:** Delivered a talk on “Emerging Issue of E-waste in Pakistan: Recent Updates & Challenges” in a seminar organized by Department of Physics at Air University Islamabad – Pakistan
- **Nov 26 – Dec 02, 2022:** Presentation at Bursa Technical University and Project Meeting at Bursa Technical University (BTU) and Dokuz Eylul University, Izmir (DEÜ), Turkey to discuss project updates under PSF & TUBITEK funded projects

- **November 5 – 12, 2021:** Visit to Bursa Technical University and Project Meeting at Bursa Technical University (BTU) and Dokuz Eylul University, İzmir (DEÜ), Turkey to discuss project updates under PSF & TUBITEK funded projects
- **Oct 25 – 01, Nov 2019:** International Academics Exchange visit to Chongqing Institute of Green & Intelligent Technology, Chinese Academy of Sciences, Chongqing China
- **May 25 – 27, 2019:** Southern Contamination Programme (SCP) Workshop at Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou China
- **April 23 -26, 2019:** SETAC A/P: Focus Meeting on Environment Pollution and Health in Coastal Zones along the 21st Century Maritime Silk Road, Guangzhou China
- **July 15-17, 2019:** 18th International Symposium on Aerosol & Climate Change: Observations, Modeling & Interaction. Institute of Atmospheric Physics, Chinese Academy of Sciences Beijing China
- **July 18-20, 2019:** International Training Workshop on Atmospheric Aerosol: Observation, Modelling, and Impact. Institute of Atmospheric Physics, Chinese Academy of Sciences Beijing China
- **August 25-30, 2019:** Dioxin 2019- Kyoto, Japan
- **March 25-31, 2018:** Capacity Strengthen for Young Scientists Study Visit to Scotland UK
- **March 27, 2018:** Seminar and Workshop for PhD Study in University of Dundee, Scotland UK
- **October 04, 2017:** Particulate Matter (PM) Pollution and its Control Technologies in Subway. Hong Kong Polytechnic University Hong Kong
- **November 2-5, 2015:** The 1st International Conference on Environment, Livelihood and Services (ICELS, 2015). Bangkok Thailand
- **December 14-20, 2014:** Research Collaboration Visit & presented group work at University of Malaya, Kula Lumpur Malaysia
- **February 12-14, 2019:** Final Workshop for Validation of Persistent Organic Pollutants (POPs) Inventories and Development of Action Plans for POPs Management in Pakistan, Margalla Hotel Islamabad
- **July 18-31, 2017:** Training Course on "Remote Sensing and GIS Applications in Flood Management. National University of Science & Technology (NUST) Islamabad
- **July 2-4, 2018:** Workshop on Geospatial Tools for Multidisciplinary Applications. Comsats University Islamabad
- **November 5-7, 2018:** International Workshop on Mesoscale Modeling Using Weather Research and Forecasting (WRF) Model. Comsats University Islamabad
- **August 31, 2018:** National Workshop on Inventory of Initial and New Persistent Organic Pollutants (POPs) in Pakistan
- **December 26, 2018:** Provincial Coordination Meeting on Inventory of Initial and New Persistent Organic Pollutants (POPs) in Pakistan

Awards/Fellowships:

- Best Research Paper Award 2017 by Higher Education Commission Pakistan for the Paper " E- waste Driven Pollution in Pakistan: The First Evidence of Environmental and Human Exposure to Flame Retardants (FRs) in Karachi City".
- Research Productivity Award, 2015 by Pakistan Council for Science & Technology, Ministry of Science & Technology Pakistan
- Presidential Postdoctoral Fellowship (PIFI), 2015 by Chinese Academy of Sciences, China
- IRSIP Fellowship for PhD Research by HEC, Pakistan (2011).
- Indigenous Scholarship for PhD Study 2009-2014 by Higher Education Commission (HEC) of Pakistan

Teaching (Key Courses):

- Basics of Environmental Monitoring (Undergrad)
- RS & GIS in Environmental Management (Graduate)
- Environmental Analysis (Graduate)
- Air Pollution Meteorology (Graduate)

Research Supervision:

PhD:

Mureed Kazim (International Islamic University Islamabad)

Thesis Title: Assessing the Spatio-Temporal Trends of Selected Toxic Substances from E-waste Recycling Facilities in Pakistan

Sumaira Mudassir (Bahria University Islamabad)

Thesis Title: Biomonitoring of Hazardous Substances in Workers Associated with Electronic Waste Processing Facilities in Pakistan

Abdul Shakoor (Bahria University Islamabad)

Thesis Title: Estimation and Analysis of Atmospheric Emissions from Ship Breaking Industry in Gadani Balochistan, Pakistan

Sajid Kamal (Shandong University, Qingdao Campus, China)

Thesis Title: Characteristics, seasonal variations and major sources of underivatized free amino acids in PM_{2.5} in Qingdao, China

Master:

Syed Waseem Iqbal: MS Meteorology 2017-2019 (COMSATS University Islamabad)

Thesis Title: Performance Evaluation of Observed and Reanalysis Gridded Precipitation Datasets over Pakistan

Jaziba Ishtiaq: MS Meteorology 2016-2018 (COMSATS University Islamabad)

Thesis Title: Understanding the Sources and Impacts of Meteorological Conditions on Occurrence and Variations of Atmospheric Polycyclic Aromatic Hydrocarbons in Urban Areas of Pakistan

Masroor Ahmad: MS Environmental Sciences 2018-2020 (Karakorum International University, Gilgit)
Thesis Title: Temporal Variation of Carbonaceous Aerosols in Gilgit City: Trends, Characterization and Source Apportionment

Mushtaq Ahmad: MS Remote Sensing & GIS (COMSATS University Islamabad)
Thesis Title: Investigating Air Quality Changes in Mega Cities of Pakistan during COVID-19 Lockdown using Sentinel-5 Observations

Awais-ul-Rehman: MS Remote Sensing & GIS (COMSATS University Islamabad)
Thesis Title: Mapping Change Detection and Land Suitability Analysis for Extension of Forest Zones in Khyber Pakhtunkhwa Province, Pakistan

Mavia Mumtaz Abbasi: MS Remote Sensing & GIS (COMSATS University Islamabad)
Thesis Title: Evaluating the Association between COVID-19 Lockdown and Air Quality in Asia

Jaweria Ahmad: MS Remote Sensing & GIS (COMSATS University Islamabad)
Thesis Title: Comparative Analysis and Validation of Aerosol Optical Depth and Ground-Based PM_{2.5} over Different Cities of Pakistan

Umair Ali: MS Remote Sensing & GIS (COMSATS University Islamabad)
Thesis Title: Impact Assessment of Urbanization on Arable Land Using Remote Sensing and Geographical Information System Approaches in Sahiwal District

Muhammad Waqas Khan: MS Remote Sensing & GIS (COMSATS University Islamabad)
Thesis Title: Evaluating Land Use Land Cover Dynamics and Impacts of Urban Extension on Agricultural Landscape of District Swat using Remote Sensing & GIS

Kholla Bashir: MS Remote Sensing & GIS (COMSATS University Islamabad)
Thesis Title: Habitat Characterization and Evaluation of Great Indian Bustard (*Ardeotis nigriceps*) in Cholistan Desert, Pakistan

Muhammad Izhaar Hussain: MS Remote Sensing & GIS (COMSATS University Islamabad)
Assessing the Spatio-Temporal Effects of Climate Variations on Rice Yield in Pakistan

Muhammad Khalid: MS Remote Sensing & GIS (Completed; COMSATS University Islamabad)
Thesis Title: Identification of Debris Flow Hazards using GIS Techniques and Flow-R in Gilgit District, Pakistan

Ali Irtiza: MS Remote Sensing & GIS (COMSATS University Islamabad)
Thesis Title: GIS-Based Transportation Planning for Estimation of Optimal Route: Case Study of Twin Cities from Pakistan

Abdul Aziz: MS Remote Sensing & GIS (COMSATS University Islamabad)
Thesis Title: Assessing the Impacts of Climate Variations on Vegetation of Azad Jammu & Kashmir Using Geospatial Techniques

Mehran Ahmad: MS Remote Sensing & GIS (COMSATS University Islamabad)
Thesis Title: Soil Erosion Susceptibility Mapping of District Kohat, Pakistan

Syed Hashim Abbas: MS Remote Sensing & GIS (COMSATS University Islamabad)
Thesis Title: GIS-Based Landslide Susceptibility Mapping of Shahrah-e-Baltistan, Pakistan

References:

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