Jabir H. Syed, PhD Tenured Associate Professor Head, Center for Climate Research & Development (CCRD) Department of Meteorology COMSATS University Islamabad Park Road Islamabad, 45550 Pakistan Tel (Mobile): +92 345 4824 777 Tel (Office): +92 51 9249 5461 Email: jabir.syed@comsats.edu.pk URL: http://ww3.comsats.edu.pk/faculty/FacultyDetails.aspx?U id=25793



### Key Qualifications:

#### 10 years of experience in research and development

• **Project management** supporting planning, development, implementation, and monitoring and evaluation (M&E) for funded development projects with specialized experience in Environmental and Atmospheric Chemistry, Environmental Biology and Ecotoxicology, Waste Management, Air Quality Monitoring, Environmental Monitoring & Assessment, Climatology, and Regional Climate Modeling.

• **Monitoring & evaluation and reporting specialist** developing and implementing effective and reliable M&E tools to collect, analyze, and report environmental data/results to organizational leadership, host governments, research institutes, academia, and other stakeholders.

• **Team coordinator and facilitator** leading multi-cultural, cross-organizational teams in specialized research projects, and in day-to-day project management situations.

• **Highly effective communicator** applying excellent oral and written skills to the preparation and presentation of materials for conferences, organizational meetings, workshops, and training events, and to the development of written learning materials, evaluations, organizational communications, and reports.

• **Relationship builder** adept at developing and maintaining productive associations with local governments, civil society partners, international and national researchers, and scientists to strengthen consensus and cooperation.

• **Excellent scientific writing and reviewing skills** with around **65** research publications in international highly reputed scientific journals with **4500 plus** Google Scholar Citations (**h-index: 37**). Part of reviewing committee of international highly reputed environmental sciences scientific journals including Environmental Science & Technology, Environmental Pollution, Science of the Total Environmental Chemosphere, Atmospheric Environment, Environmental Pollution and Research, Environmental Research, Ecotoxicology and Environmental Safety.

#### **Professional/Work Experience:**

- ✓ May 2023 to-date: Tenured Associate Professor at Department of Meteorology, COMSATS University Islamabad
- ✓ May 2017 to May 2023: Assistant Professor (TTS) at Department of Meteorology, COMSATS University Islamabad
- ✓ May 2015-April 2017: PIFI Post-Doctoral Fellow at Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, China

✓ May 2014-April 2015: GIG Post-Doctoral Researcher at Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, China

# Academic Profile:

- Sep 2009-Jan 2014: Ph.D Environmental Biology GIG-CAS China/Quaid-I-Azam University, Islamabad, Pakistan
   PhD Thesis Title: Residual Status and Air-Soil Exchange Fluxes of Persistent Organic Pollutants (POPs) in the Environment of Punjab Province, Pakistan
- Sep, 2007-July 2009: M.Phil Environmental Biology Quaid-I-Azam University, Islamabad, Pakistan
   M.Phil Thesis Title: Pesticides residues (OCPs) in the surrounding surface soils of Ittehad Chemical Industries, Kala Shah Kaku, Lahore, Pakistan
- ✓ Aug 2003- June 2007: B.Sc. (Hons) Soil Sciences (Agriculture) Pir Mehr Ali Shah University of Arid Agriculture Rawalpindi, Pakistan

### **Research Projects:**

- Project Lead "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-GCR)).
- Principal Investigator (PI) of PSF/TUBITAK Project "Investigation of selected Persistent Organic Pollutants (POPs) and heavy metals pollution from E-waste processing facilities" (2019-2022; Pakistan Science Foundation).
- International Young Researcher Project as Principal Investigator (PI) (Role of carbonaceous aerosols in the formation of South Asian brown clouds from Pakistan: Characterization and source apportionment by using radiocarbon and organic tracers) (2016-2017; Funded by Natural National Science Foundation, China).
- Country Coordinator for the research project "Monitoring and Risk Assessment of Toxic Chemicals in the Air, MORATOXA (Funded by The Alliance of International Science Organizations (ANSO); 2021-2024).
- 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 (2017-2019; Chinese Academy of Sciences).
- Principal Investigator of NRPU Project "Molecular Epidemiology and Prevalence of Antibiotic Resistance Genes in Smog Particulate Matter: Implication for Human Exposure in Pakistan" (2020-2022: Funded by Higher Education Commission of Pakistan).
- Monitoring of air quality data by using active air sampling technique from major cosmopolitan cities of Pakistan (Hong Kong Polytechnic University, Hong Kong).
- Investigation of organic and pharmaceuticals pollutants through passive water samplers in the five major rivers from Pakistan.
- Evaluation of POPs contamination in different environmental compartments from the Indus delta system of Pakistan (In collaboration with Quaid-I-Azam University, Pakistan).
- Monitoring of sediment and water quality of riverine ecosystem of Pakistan.
- Field surveys to selected wetlands of Pakistan with "Pakistan Wetland Program" WWF, Pakistan.

# Consulting Projects:

- Individual Consultant for the Project "Ecological Assessment of Significant Wetlands in Gilgit-Baltistan to Develop Ramsar Information Sheets" (2023: WWF-Pakistan).
- **Consultant for the Research Study** "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 "Climate Adaptation and Resilience (CARE) for South Asia" (2021-2022: Project Implemented by Asian Disaster Prepared Center (ADPC) & Funded by World Bank; Project Duration: 2021-2025).
- 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).
- 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).
- 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).
- Resource Person & Lead Consultant of Project "Mapping Agro-Biodiversity in Cotton Landscape" (2021; WWF-Pakistan & SEM Pvt Ltd).
- Team Expert of "Development of National Chemical Policy of Pakistan" (2020; Funded by UNDP Pakistan).

### Awards/Fellowships/Scholarships:

- 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
- Indigenous Scholarship for PhD Study 2009-2014 by Higher Education Commission (HEC) of Pakistan

# **Teaching Experience (Key Courses):**

- Environmental Analysis (MS/PhD)
- Advanced & Applied Climatology (PhD)
- RS & GIS in Environmental Management (PhD)
- Land Information System (PhD)
- Climatology (MS)
- Forest Management (MS)
- Natural Resources Exploration (MS)
- Air Pollution Meteorology (MS)
- Basics of Environmental Monitoring (BS)

# Conferences/Workshops/Meetings (Speaker/Presenter):

- Focal Person to organize **"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 **(Jan-June 2024)**.
- Participated as a Speaker in 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 (December 5, 2023).
- Participated as a Resource Person in 2 days training workshop on 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) (16 – 17 November 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 26, 2023).
- Participated in a training workshop "Application of RS/GIS in Environmental Pollution Studies" as a resource person at Rawalpindi Women University, Rawalpindi (October 20, 2023).
- Participated in a panel discussion as an Expert Panelist entitled "National Youth Policy Dialogue on Climate Change" at Marriot Hotel Islamabad (September 13, 2023).
- Organized a 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 (August 2, 2023).
- Delivered talk as a Keynote Speaker entitled "Environmental Pollution & Biodiversity Loss" at Capital University of Science & Technology (CUST), Islamabad Pakistan (June 14, 2023).
- Delivered a Keynote talk on Plastic Pollution on Environment Day Celebration at Fatima Jinnah Women University (FJWU), Rawalpindi Pakistan (June 05, 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 (May 8-10, 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 (April 24, 2023).
- 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 (November 26 December 02, 2022).
- 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 (November 05 – November 12, 2021).
- International Academics Exchange visit to Chongqing Institute of Green & Intelligent Technology, Chinese Academy of Sciences, Chongqing China (October 25- 01 November 2019).
- Southern Contamination Programme (SCP) Workshop at Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou China (May 25-27, 2019).
- SETAC A/P: Focus Meeting on Environment Pollution and Health in Coastal Zones along the 21st Century Maritime Silk Road, Guangzhou China (April 23-26, 2019).
- 18th International Symposium on Aerosol & Climate Change: Observations, Modeling & Interaction. Institute of Atmospheric Physics, Chinese Academy of Sciences Beijing China (July 15-17, 2019)

- International Training Workshop on Atmospheric Aerosol: Observation, Modelling, and Impact. Institute of Atmospheric Physics, Chinese Academy of Sciences Beijing China (July 18-20, 2019).
- Dioxin 2019- Kyoto, Japan (August 25-30, 2019).
- Capacity Strengthen for Young Scientists Study Visit to Scotland UK (March 25-31, 2018).
- Seminar and Workshop for PhD Study in University of Dundee, Scotland UK (March 27, 2018).
- Particulate Matter (PM) Pollution and its Control Technologies in Subway. Hong Kong Polytechnic University Hong Kong (October 04, 2017).
- The 1st International Conference on Environment, Livelihood and Services (ICELS, 2015). Bangkok Thailand (November 2-5, 2015).
- Research Collaboration Visit University of Malaya, Kula Lumpur Malaysia (14-20 December 2014).
- Final Workshop for Validation of Persistent Organic Pollutants (POPs) Inventories and Development of Action Plans for POPs Management in Pakistan, Margalla Hotel Islamabad (12-14 February 2019).
- Training Course on "Remote Sensing and GIS Applications in Flood Management. National University of Science & Technology (NUST) Islamabad (July 18-31, 2017).
- Workshop on Geospatial Tools for Multidisciplinary Applications. Comsats University Islamabad (July 2-4, 2018).
- International Workshop on Mesoscale Modeling Using Weather Research and Forecasting (WRF) Model. Comsats University Islamabad (November 5-7, 2018).
- National Workshop on Inventory of Initial and New Persistent Organic Pollutants (POPs) in Pakistan (August 31, 2018).
- Provincial Coordination Meeting on Inventory of Initial and New Persistent Organic Pollutants (POPs) in Pakistan (December 26, 2018).

# **Research Supervision:**

- Muhammad Taqui; PhD (In-progress; Comsats University Islamabad) Approved Thesis Title: Assessment of Climate Change Impacts and Adaptation Strategies for Wheat in Potohar Region of Pakistan.
- Mureed Kazim; PhD (In-progress; International Islamic University Islamabad) Approved Thesis Title: Assessing the Spatio-Temporal Trends of Selected Toxic Substances from Ewaste Recycling Facilities in Pakistan
- Summaira Mudassir; PhD (In-progress; Bahria University Islamabad) Approved Thesis Title: Biomonitoring of Hazardous Substances in Workers Associated with Electronic Waste Processing Facilities in Pakistan
- 4. Muhammad Abdul Shakoor Khan; PhD (In-progress; Bahria University Islamabad) Thesis Title: Estimation and Analysis of Atmospheric Emissions from Ship Breaking Industry in Gadani Ship Breaking Yard Balochistan, Pakistan
- Syed Waseem Iqbal: MS Meteorology 2017-2019 (Completed; Comsats University Islamabad) Thesis Title: Performance Evaluation of Observed and Reanalysis Gridded Precipitation Datasets over Pakistan
- 6. Jaziba Ishtiaq: MS Meteorology 2016-2018 (Completed; 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
- 7. Masroor Ahmad: MS Environmental Sciences 2018-2020 (Completed; Karakorum International University, Giligit)

**Thesis Title:** Temporal Variation of Carbonaceous Aerosols in Gilgit City: Trends, Characterization and Source Apportionment

- 8. Mushtaq Ahmad: MS Remote Sensing & GIS (Completed; Comsats University Islamabad) Thesis Title: Investigating Air Quality Changes in Mega Cities of Pakistan during COVID-19 Lockdown using Sentinel-5 Observations
- 9. Awais-ul-Rehman: MS Remote Sensing & GIS (Completed; Comsats University Islamabad) Thesis Title: Mapping Change Detection and Land Suitability Analysis for Extension of Forest Zones in Khyber Pakhtunkhwa Province, Pakistan
- **10. Mavia Mumtaz Abbasi: MS Remote Sensing & GIS** (Completed; Comsats University Islamabad) **Thesis Title:** Evaluating the Association between COVID-19 Lockdown and Air Quality in Asia
- Jaweria Ahmad: MS Remote Sensing & GIS (Completed; Comsats University Islamabad)
  Thesis Title: Comparative Analysis and Validation of Aerosol Optical Depth and Ground-Based
  PM2.5 over Different Cities of Pakistan
- Umair Ali: MS Remote Sensing & GIS (Completed; Comsats University Islamabad)
  Thesis Title: Impact Assessment of Urbanization on Arable Land Using Remote Sensing and Geographical Information System Approaches in Sahiwal District
- 13. Muhammad Waqas Khan: MS Remote Sensing & GIS (Completed; 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 (Completed; COMSATS University Islamabad)
  Thesis Title: Habitat Characterization and Evaluation of Great Indian Bustard (Ardeotis nigriceps)
  in Cholistan Desert, Pakistan
- **15.** Muhammad Izhaar Hussain: MS Remote Sensing & GIS (Completed; COMSATS University Islamabad) Thesis Title: Assessing the Spatio-Temporal Effects of Climate Variations on Rice Yield in Pakistan
- 16. 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
- 17. Ali Irtiza: MS Remote Sensing & GIS (Completed; COMSATS University Islamabad)
  Thesis Title: GIS-Based Transportation Planning for Estimation of Optimal Route: Case Study of Twin Cities from Pakistan

# **Research Publications (International):**

- 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 watersoluble chromophores in particulate matter from Karachi in Pakistan. Science of the Total Environment, 914, 169890.
- 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.
- **3.** 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.
- 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.

- 5. 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.
- 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.
- 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, <a href="http://dx.doi.org/10.1016/j.ecohyd.2021.11.001">http://dx.doi.org/10.1016/j.ecohyd.2021.11.001</a>.
- 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, <u>https://doi.org/10.1016/j.sjbs.2021.06.035</u>
- 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, <u>https://doi.org/10.1016/j.chemosphere.2021.129811</u>
- 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 Kafr El-Sheikh, Egypt: implications for human health. Environmental Science & Pollution Research <u>https://doi.org/10.1007/s11356-020-08786-</u>
- 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 <a href="http://dx.doi.org/10.3390/ijerph17249543">http://dx.doi.org/10.3390/ijerph17249543</a>
- **12.** Sipra, H., Aslam F., **Syed, J.H.**\*, Awan, T.M. **(2020)**. Investigating the Implications of COVID-19 on PM<sub>2.5</sub> in Pakistan. **Aerosol & Air Quality Research**, <u>https://aaqr.org/articles/aaqr-20-07-covid-0459</u>.
- **13.** Aslam, F., Awan, T.M., **Syed, J.H.** *et al.* **(2020)**. Sentiments and emotions evoked by news headlines of coronavirus disease (COVID-19) outbreak. Humanities and Social Sciences Communications 7, 23. https://doi.org/10.1057/s41599-020-0523-3.
- 14. 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, <u>https://doi.org/10.1016/j.scitotenv.2020.140874</u>.
- 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.
- **16.** 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.
- 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.
- **18.** 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).

- **19.** 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.
- 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: <u>10.1016/j.wasman.2018.11.026</u>.
- Iqbal, M., Syed, J.H.\*, and 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, <u>DOI: 10.1021/acs.est.7b03159</u>.
- 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).
- 23. 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.

- 24. 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). DOI: 10.1016/j.scitotenv.2017.11.080.
- 25. 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. <u>Doi.org/10.1016/j.chemosphere.2017.10.097</u>.
- 26. Xie, <u>S.,</u> Junaid, M., Bian, <u>W.,</u> Luo, J., <u>Syed</u>, 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. <u>https://doi.org/10.1016/j.jhazmat.2017.11.021</u>.
- 27. 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. doi:10.1038/s41598-017-02999-0.
- 28. 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. (Accepted).
- 29. 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.
- 30. M Iqbal, 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.
- 31. 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.
- **32.** I Hussain, **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.

- **33.** 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**.
- **34.** 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**.
- **35.** 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.**
- 36. N Hamid, Syed, J.H.\*, A Kamal, F Aziz, S Tanveer, U Ali, A Cincinelli, 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.
- **37.** 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.**
- **38.** A Kamal, **JH Syed**, 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**
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- **40.** 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**.
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# Additional Information:

- Software Skills: Knowledge of editing, presenting and graphic software's including ERDAS, SPSS and ArcGIS
- Languages: Urdu (Native), English (Advanced) and Chinese (Spoken)