

PERSONAL INFORMATION

Anjum Rasheed

 Centre for Climate Research and Development (CCRD), COMSATS University Islamabad, Park Road, Islamabad 44000, Pakistan
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WORK EXPERIENCE

September 2015-Present

Assistant Professor

Centre for Climate Research and Development (CCRD)
COMSATS University Islamabad, Pakistan.

- Responsible for air quality assessments and climate change mitigation activities
- Completed the project 'Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) of European Union's Rural Development Programmes in Pakistan'
- Completed 'Pakistan Country Environment Profile' for the European Union
- Completed the project 'Pakistan Low Carbon Scenario Analysis' funded by CDKN

October 2014 – May 2015

Research Associate

Atmosphere Initiative, International Centre for Integrated Mountain Development (ICIMOD)

- Exhaustive database of meteorological and air quality measurements collected across the Hindu Kush-Himalayan (HKH) region from 1990 to present for WRF

Sector: Intergovernmental Organization

March 2009 – December 2011

Chief Coordinator

Technical Cooperation for Establishment of Environmental Monitoring System in Pakistan, Japan International Cooperation Agency (JICA)

Job Description

- Coordination with the Counterpart (Federal & Provincial EPAs) regarding implementation of the project 'Technical Cooperation for Establishment of Environmental Monitoring System in Pakistan'
- Follow-up and Monitoring of Federal & Provincial EPAs regarding preparation and implementation of 'Environmental Monitoring Plans' and 'Uniform Standard Operational Procedures' for Air & Water Quality Monitoring in Pakistan
- Management of counterpart trainings at Federal and Provincial EPAs
- Coordination with the focal persons and working group members from Planning Commission, Ministry of Environment, Economic Affairs Division and Federal & Provincial EPAs for implementation of activities under Technical Cooperation Project
- Implementation of technical cooperation activities

Sector: Donor Agency

October 2008 – March 2009

Technical Officer

UNEP's project '*Malé Declaration on Control and Prevention of Air Pollution and its likely Transboundary Effects for South Asia*', Pakistan Environmental Protection Agency (Pak-EPA), Islamabad, Pakistan.

- Job Description**
- Contribution to implementation of projects '*Establishment of Environmental Monitoring System in Pakistan*' and '*Male Declaration on Control and Prevention of Air Pollution and its likely Transboundary Effects for South Asia*'.
 - Coordination with Ministry of Environment and Provincial EPAs on various environmental issues
 - Evaluation of Environmental Assessment Reports and various project proposals
 - Developing project proposals at Pak-EPA

Sector: Government Agency

November 2005 – October 2008

Technical Assistant

- UNEP's project '*Male Declaration on Control and Prevention of Air Pollution and its likely Transboundary Effects for South Asia*', Pakistan Environmental Protection Agency (Pak-EPA), Islamabad, Pakistan.
- Royal Netherland Embassy's project '*Pakistan Environment Project*'

- Job Description**
- As mentioned above for position at Pak-EPA

EDUCATION

2014 **Ph.D. (Environmental Sciences)**
Fatima Jinnah Women University, The Mall, Rawalpindi, Pakistan

2012 – 2013 **Research Scholar**
Department of Marine, Earth and Atmospheric Sciences, North Carolina State University, Raleigh, NC 27695-8208, United States of America
Ph.D. Dissertation entitled '*Assessment of Impacts of Climate Change on Air Quality of Pakistan: A Dynamic Analysis using Modeling Techniques*'

2003 **M.Sc. (Environmental Sciences)**
Fatima Jinnah Women University, The Mall, Rawalpindi, Pakistan

PERSONAL SKILLS

- Communication skills**
- Strong interpersonal and communication skills
 - Professional, articulate and confident speaking abilities

- Organizational / Managerial skills**
- Proven managerial skills
 - Leadership and organizational managerial abilities
 - Proper planning and time management
 - Flexible to adapt to changes in accordance with the working conditions
 - Ability to work independently and as a team member to produce good quality results

- Job-related skills**
- WRF Model
 - GRADS

- Computer skills**
- Competent with Microsoft Office, SPSS, LINUX

ADDITIONAL INFORMATION

Publications

- Khan, S. N., Rasheed, A., and Sarwar, F., 2018 (Submitted). 'Carbon Footprint of Various Higher Education Institutes (HEIs) of Islamabad, Pakistan: A Way Forward towards Carbon Neutral Campuses', *Journal of Cleaner Production*.
- Butt, F.M., Shahzad, M.I., Khalid, S., Iqbal, N., Rasheed, A., Raza, G., 2017 (Submitted). **Air Pollution Comparison of Aerosol Optical Depth products through remote sensing**. *International Letters of Natural Sciences*.
- Surapipith, V., Rasheed, A., Adhikary, B., Bhave, P., Panday, A., and Ghimire, S., 2017 (Submitted). 'Atmospheric Model Evaluation with Observation Data for Persistent Fog Prediction in Lower Region of the Himalayas', 'Aerosol and Air Quality Research'.
- Rasheed, A., Aneja, V.P., Aiyyer, A., and Rafique, U., 2015. 'Measurement and analysis of fine particulate matter (PM_{2.5}) in urban areas of Pakistan', *Aerosol and Air Quality Research*, doi: 10.4209/aaqr.2014.10.0269, v.15, pp. 426-439.
- Rasheed, A., Farooq, F., and Rafique, U., 2015. 'Analysis of Sorption Efficiency of Activated Carbon for Removal of Anthracene and Pyrene for Wastewater Treatment', *Desalination and Water Treatment*, doi: 10.1080/19443994.2015.1015304, pp. 1-6.
- Rasheed, A., Aneja, V.P., and Aiyyer, A., Rafique, U., 2014. 'Measurements and analysis of air quality in Islamabad, Pakistan', *AGU Earth's Future*, ISSN: 2328-4277, DOI: 10.1002/2013EF000174, v. 2 (6), pp. 303-330.
- Rasheed A., Farooq F., Rafique U., 2013, 'Kinetic study of metal removal using apple peels: closed batch approximation model', *International Journal of Chemical and Environmental Engineering*, ISSN: 2078-0737, v. 4(5), p. 281-285.
- Rafique, U., Parveen, K., and Rasheed, A., 2013, 'In-Situ remediation of metals in industrial effluents on prepared peel biosorbents', *International Journal of Chemical and Environmental Engineering*, ISSN: 2078-0737, v. 4(5), p. 286-291.

Presentations

- Presentation on 'Simulation of High Ozone Episodes in Islamabad, Pakistan Using WRF Model' at the Workshop & Science-Policy Dialogue on 'Air Pollution, Climate and Health in Southern Asia and the Hindukush Himalaya' held on November 27-30, 2017 at ICIMOD, Nepal.
- Presentation on 'Overview of CCRD and Project Proposal for COMSATS' ITRG' at COMSATS International Thematic Research Group (ITRG) meeting held on September 28, 2016 in Beijing, China.
- Presentation on 'Measurements and analysis of air quality in Islamabad, Pakistan' at 'The Second Workshop on Atmospheric Composition and the Asian Summer Monsoon (ACAM)' held on 8th – 10th June, 2015, Bangkok, Thailand.
- Presentation on 'Ambient Air Quality Analysis in Urban Areas of Pakistan' at 'Better Air Quality Conference (BAQ-2014)' held on 19th – 21st November, 2014, Colombo, Sri Lanka.
- Presentation on 'Ambient Air Quality Analysis in Urban Areas of Pakistan' at 'Second Annual Regional Atmospheric Science Workshop' held on 7th – 9th June, 2014, Pokhara, Nepal.
- Presentation on 'Air Quality Analysis in Urban Areas of Pakistan' at the 'International Conference on Environmental Issues of Sindh and Remedies (ICEISR-2013)' held on 9th – 10th April, 2014 at Shah Abdul Latif University, Khairpur Mir's, Pakistan.
- Presentation of research paper entitled 'Ambient Air Quality of Islamabad-A Monitoring Based Analysis' at the International Workshop on 'Atmospheric Composition and the Asian Monsoon (ACAM)' held on 9th-12th June, 2013, Kathmandu, Nepal.

- Presentation of research paper entitled '**Ambient Air Quality of Islamabad-A Monitoring Based Analysis**' at the international workshop on 'Changing Chemistry in Changing Climate: Monsoon 2013" held on 1st - 3rd May, 2013 at Indian Institute of Tropical Meteorology, Pune, India.
- Presentation of research paper entitled '**Characterization of Fine Particulate Matter (PM_{fine}) in Urban Areas of Pakistan-An Observational Based Analysis**' in session 'Atmospheric Chemistry: Gas-Particle Interactions and Climate Change - II' in The Southeastern Regional Meeting of the American Chemical Society held on 14th - 17th November, 2012, Raleigh, N.C., U.S.A.
- Presentation on '**Characterization of Fine Particulate Matter (PM_{fine}) in Urban Areas of Pakistan**' on PAMS Access Day on 6th September, 2012 organized by College of Physical and Mathematical Sciences (PAMS), North Carolina State University, Raleigh N.C., U.S.A.
- Seminar Presentation of research project entitled '**Adsorption of Polycyclic Aromatic Hydrocarbons (PAHs) on Activated Carbon**' on 9th August, 2011 at Fatima Jinnah Women University, Rawalpindi, Pakistan.
- Presentation on '**Toxicity Evaluation of Personal Care Products - Moving towards Sound Chemical Management in Cosmetic Industry**' presented at 'Advancing Sound Chemical Management for Sustainable Development and a Toxic Free Asia – Session II' at the SDPI's Thirteenth Sustainable Development Conference on Peace and Sustainable Development in South Asia: The Way Forward held on 21st – 23rd December, 2010 in Islamabad, Pakistan.
- Presentation on '**Groundwater Fluoride Toxicity in Punjab, Pakistan**' at National Chemicals Forum on Strategic Approach to International Chemicals Management (SAICM) organized by Ministry of Environment on 30th – 31st March, 2010 in Islamabad, Pakistan.
- Presentation on research paper entitled '**Impacts of Industrial Effluents on the Quality of River Soan, Pakistan**' presented at the 4th International 14th National Chemistry Conference organized by Chemical Society of Pakistan on 16th -18th May, 2004 in Lahore, Pakistan.

Training Workshops

- Workshop on '**Geospatial Tools for Multidisciplinary Applications**' organized by COMSATS University Islamabad in collaboration with University of Houston on July 2-4, 2017, Islamabad, Pakistan.
- '**Training of Moderators (ToM-10)**' organized by Friedrich Naumann Foundation for Freedom (FNF) on November 23-26, 2017, Islamabad, Pakistan.
- Training Workshop on '**Climate Development Mechanism**' organized by United Nations Climate Change Secretariat and Ministry of Climate Change on August 21-22, 2017 in Islamabad, Pakistan.
- '**International Lecture Course on Atmospheric Aerosols**' held on September 25-27, 2016 at the CAS-TWAS center of excellence for Climate and Environment Sciences, Beijing, China.
- '**ACAM Training School on Satellite and Model Data Use for Aerosols and Air Quality**' held on June 11-12, 2015 at the Asian Centre of Technology (AIT), Bangkok, Thailand.
- '**WRF-Chem Tutorial – Training Workshop for Hindu Kush Himalaya (HKH) Region**' held on June 1-5, 2014 at The International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal.
- '**Community Multiscale Air Quality Model (CMAQ) Training**' held on 18th - 19th October, 2012 at Community Modeling and Analysis System (CMAS) Center, University of North Carolina, Chapel Hill, USA.
- '**Air Quality Workshop**' organized by Environmental Science Institute, U.S. Environmental Protection Agency (US EPA) held on 9th – 10th July, 2012 at US-EPA, Research Triangle Park, Raleigh N.C., USA.
- Short Course on '**Activated Carbon and its Applications in the Environment**' by Dr. Laurent Duclaux, Professor, Universite de Savoie, Bourget du Lac, France organized by Pakistan Institute of Engineering and Applied Sciences (PIEAS) on 13th – 14th December, 2010, Islamabad, Pakistan.
- Counterpart Training on '**QA/QC System for Laboratory Management**' by Mr. Kazuyoshi Kageyama and Mr. Mitsuru Fujimura on 28th – 29th June, 2010 jointly organized by Japan International Cooperation Agency (JICA) and Pak-EPA, Islamabad, Pakistan.
- Counterpart Training on '**Monitoring Planning II**' by Mr. Daisaku Kiyota, Leader / Monitoring Planning Expert, JICA Expert Team, held on 17th – 21st August, 2009 jointly organized by Japan International Cooperation Agency (JICA) and Pak-EPA, Islamabad, Pakistan.

Workshops / Seminars /
Conferences

- Counterpart Training on '**Monitoring Planning I**' by Mr. Daisaku Kiyota, Leader / Monitoring Planning Expert JICA Expert Team, held on 13th – 17th July, 2009 jointly organized by Japan International Cooperation Agency (JICA) and Pak-EPA, Islamabad, Pakistan.
- Workshop on '**Addressing Climate Change through Better Air Quality Management**, held on 20th – 24th October, 2008, organized by International Union for Conservation of Nature (IUCN), Lahore, Pakistan.
- Training Workshop on '**Eco-Housing**' held on 31st March - 5th April, 2008, jointly organized by UNEP, SEI & SIDA at Chulalongkorn University and Asian Institute of Technology, Bangkok, Thailand.
- Short Course on '**Waste Management: Challenges & Options**' held on 29th June, 2006 at HQ National University of Science & Technology (NUST), Rawalpindi, Pakistan.
- Training Course on '**Environmental Impact Assessment (EIA) of Development Projects**' held on 13th - 18th February, 2006 in National Centre for Research & Development & Municipal Administration, Ministry of Local Government and Rural Development, Islamabad, Pakistan.
- Training Workshop on '**Project Management**' held on 27th - 29th December, 2005 organized by Sustainable Development Policy Institute (SDPI), Islamabad, Pakistan.
- Installation cum training on '**Monitoring Air Pollution**' under 'Malé Declaration on Control and Prevention of Air Pollution and its likely Transboundary Effects for South Asia' held on 6th -10th December, 2005, jointly organized by Pak-EPA, SACEP, SEI & UNEP, Islamabad, Pakistan.
- '**National Project Steering Committee Meeting of Pakistan's First Biennial Update Report (BUR1) under United Nations Framework Convention on Climate Change (UNFCCC)**' at Ministry of Climate Change on July 10, 2018, Islamabad, Pakistan.'
- '**Consultative Meeting to Review the Contents of Mitigation Analysis Chapter of Second National Communication**' organized by National Energy Efficiency and Conservation Authority (NEECA) on May 10, 2018, Islamabad, Pakistan.'
- '**Consultative Meeting to Review the Contents of Mitigation Analysis Chapter of Second National Communication**' organized by National Energy Efficiency and Conservation Authority (NEECA) on May 10, 2018, Islamabad, Pakistan.'
- '**Ozone 2 Climate (O2C) Industrial Roundtable**' organized by **National Ozone Unit, Ministry of Climate Change** on April 05, 2018, Islamabad, Pakistan.
- Seminar on '**Preparing Rural Communities to Cope with Climate Change through South-South and Triangular Cooperation**' organized by International Fund for Agricultural Development (IFAD) and Global Change for Impact Study Centre (GCISC) on March 14, 2018, Islamabad, Pakistan.
- Workshop on '**Kigali Amendment**' organized by National Ozone Unit, Ministry of Climate Change on October 25, 2017, Islamabad, Pakistan.
- Represented CCRD at the '**National Workshop on Greenhouse Gas Inventories**' organized by Global Change Impact Study Centre (GCISC), Coalition for Rainforest Nations (CFRN) and Ministry of Climate Change on July 18, 2017.
- Attended a '**Brainstorming Session with the Stakeholders on Sustainability of CESTaC**' at Center for Environmentally Sustainable Transport and Climate Change (CESTaC), Fatima Jinnah Women University, Rawalpindi on February 03, 2017.
- PUAN International Climate Change Conference: "**Changing Minds for Climate Change**" organized by U.S. Mission in Pakistan, in collaboration with the Pakistan-U.S. Alumni Network (PUAN), and the United States Educational Foundation in Pakistan (USEFP) on November 12, 2016 in Islamabad, Pakistan.
- International Conference of CAS-TWAS-WMO Forum on Climate Science (CTWF) '**15th AeroCom and 4th AeroSat**' September 19-24, 2016, Beijing, China.
- Seminar on '**Net-Metering at Parliament House: Experience Sharing**' held on September 05, 2016 at the Pakistan Institute for Parliamentary Services (PIPS), Islamabad, Pakistan.
- Attended Stakeholders Consultation on '**Intended Nationally Determined Contributions (INDCs)**' organized by Ministry of Climate Change on August 29, 2016.
- National Roundtable on '**Sustainable Consumption and Production**' by UNEP on August 3-4, 2016 in Islamabad, Pakistan.
- Conference on '**Mitigation of Open Agricultural Burning in the Wider Himalayan Region**' by Climate and Clean Air Coalition (CCAC), 20-21 February, 2015, Kathmandu, Nepal.

- **'ICIMOD's First Annual Regional Atmospheric Science (FARAS) Workshop'** organized by International Centre for Integrated Mountain Development (ICIMOD) held on 13th-14th June, 2013, Kathmandu, Nepal.
- **'Working Group Seminar on Technical Cooperation for Establishment of Environmental Monitoring System in Pakistan'** held on 30th November, 2011 organized by Japan International Cooperation Agency (JICA) in Islamabad, Pakistan.
- **'World Environment Day'** held on 6th June, 2011 organized by National Cleaner Production Centre (NCPC) in collaboration with Punjab-Environmental Protection Agency, Rawalpindi, Pakistan.
- **'Working Group Seminar on Technical Cooperation for Establishment of Environmental Monitoring System in Pakistan'** held on 25th January, 2011 organized by Japan International Cooperation Agency (JICA) in Islamabad, Pakistan.
- Workshop on **'Mapping of Environmental Impact Assessment (EIA) in Pakistan'** organized by International Union for Conservation of Nature (IUCN) on 22nd – 23rd April, 2010, Islamabad, Pakistan.
- Workshop on **'Launching of National Drinking Water Policy and Strategies Development'** organized by Ministry of Environment on 22nd March, 2010, Islamabad, Pakistan.
- **'Working Group Seminar on Technical Cooperation for Establishment of Environmental Monitoring System in Pakistan'** held on 16th February, 2010 organized by Japan International Cooperation Agency (JICA), Islamabad, Pakistan.
- Consultation Workshop on **'Institutional Analysis of Air Quality Management in Urban Pakistan'** held on 13th January, 2010 organized by The World Bank, Islamabad, Pakistan.
- Consultation Workshop on **'World Bank Group Environment Strategy'** held on 12th January, 2010 organized by The World Bank, Islamabad, Pakistan.
- Stakeholders Consultative Workshop on **'Development of Medium-Term Renewable Energy Policy for Pakistan'**, held 10th – 11th November, 2008 organized by Asian Development Bank (ADB), Islamabad, Pakistan.
- Seminar on **'Frontiers of Environment: WEHAB & MDGs'** held on 8th April 2006, Fatima Jinnah Women University in collaboration of Ministry of Environment, Government of Pakistan.

Academic Service

- Invited Lecture on **'Climate Change: Science and Mitigation'** at Training on 'Mitigation Analysis for Climate Change Communications' jointly organized by Ministry of Climate Change and National Energy Efficiency and Conservation Authority (NEECA) on August 30, 2018 at Islamabad, Pakistan.
- Invited Lecture on **'Environmental Impact Assessment'** **'Climate Change Science & Mitigation'** and **'Environmental Health'** on June 25, 2018 at Health Services Academy, Islamabad, Pakistan.
- Invited Lecture on **'Climate Change Challenges'** during 24th Mid-Career Management Course organized for BS-19 officers at National Institute of Management, Islamabad on August 21, 2017.
- Invited Lecture on **'Assessment of Effects of Climatic Conditions on Ambient Air Quality'** at a seminar organized by Global Change Impact Study Centre (GCISC), Ministry of Climate Change on August 4, 2017, Islamabad, Pakistan.
- Represented CCRD as a jury member for 'Environmental Models Competition' and 'Speech Competition' at **5th Environment Mela** on the theme 'Connecting People to Nature- in the city and on the land, from the poles to equator' organized by National Cleaner Production Centre (NCPC) and JICA Alumni Association of Pakistan on March 26, 2017.
- Interview at PTV News' Programme **'Chotha Sutoon'** on launching of 'Green Pakistan Programme by the Prime Minister of Pakistan' on February 08, 2017
- Invited lecture on **'Leadership for Climate Change'** organized by Devcom-Pakistan (Development Communications Network) on December 08, 2016 at Pakistan Mountain Youth Forum, Rawalpindi Arts Council, Pakistan.
- Lecture on **'Climate Change Mitigation'** during interactive community service outreach project of **'Wall-Painting on the Theme of Climate Change'** organized by COMSATS IIT and U.S. Embassy as part of PUAN International Climate Change Conference: **'Changing Minds for Climate Change'** on November 14, 2016 at COMSATS IIT, Islamabad.

- Delivered lectures on '**Climate Change and its Impacts**', '**Environmental Laws and Regulations**' and '**Environmental Impact Assessment (EIA)**' on May 19, 2016 at the Health Services Academy, Islamabad, Pakistan.
- Represented CCRD as a jury member for 'Environmental Models Competition' at **4th Environment Mela** on the theme 'Join the Race to Make the World a Better Place' organized by National Cleaner Production Centre (NCPC), Pakistan on April 16, 2016.
- Provided expert view on '**Sea-level Rise due to Climate Change**' through live call during a PTV News programme on February 24, 2016.
- Provided expert view on '**Climate Change Mitigation & Federal Government's Ten-million Tree Plantation Plan in Islamabad**' through live call during a PTV programme on February 17, 2016.
- Conducted a training workshop on '**Knowledge Management for Climate Change Adaptation**' organized by Rural Support Programmes Network (RSPN) on December 8-11, 2015 in Lahore, Pakistan.
- Invited Lecture on '**Global Scenario of Climate Change**' at the Training of Master Trainers on Climate Change Issues held on October 5-8, 2015 in Bhurban, Pakistan.
- Invited Lecture on '**Carbon Sequestration**' on the event of World Environment Day organized by UNIDO-National Cleaner Production Centre (NCPC) Foundation held on 6th June, 2011, Rawalpindi, Pakistan.
- Technical Expert for a graduate student's thesis on '**Evaluation of Environmental Impact Assessment (EIA) System Performance Process in Pakistan by Using Quality Indicators**' at Fatima Jinnah Women University, Rawalpindi, Pakistan in 2009.
- Invited Lecture on '**Population Growth, Environmental Security and Conflict**' on 24th October, 2007 in National Centre for Rural Development, Ministry of Local Government and Rural Development, Islamabad, Pakistan.
- Invited Lecture on '**Implementation of Environmental Impact Assessment (EIA) in Pakistan**' on 14th February, 2007 in National Centre for Rural Development, Ministry of Local Government and Rural Development, Islamabad, Pakistan.

Thesis Supervision

- Fatima, A. Undergraduate Thesis, co-supervisor with Dr. Uzaira Rafique, Fatima Jinnah Women University, Rawalpindi, Pakistan. Title: '**Assessment of Variation in Climate Induced Sediment Transport in Natural River System**', (2018).
- Khan, S.N. Masters Thesis, co-supervisor with Ms. Fiza Sarwar, Bahria University, Islamabad, Pakistan. Title: '**Investigation of Carbon Footprint of Five Selected Higher Education Institutions (HEIs) of Islamabad, Pakistan**'. (2016-2017).

Awards

- **Gold Medal** awarded by National Cleaner Production Centre (NCPC), Pakistan at the convocation ceremony of Fatima Jinnah Women University on 23rd January, 2014.
- **Best Paper Award-Consolidation Prize for the paper 'Ambient Air Quality in Islamabad: A Monitoring Based Analysis' at the international workshop on 'Changing Chemistry in Changing Climate: Monsoon 2013' held on 1st - 3rd May, 2013 at Indian Institute of Tropical Meteorology, Pune, India.**