

Dr. Salman Tariq



Personal Information

Date of birth: 4 July 1987

Nationality: Pakistani

Email: salmantariq_pu@yahoo.com

Address: 16-D Cantt view housing society, Bedian road, Lahore Cantt.

Contact No.: 00923008844797

ORCID ID: 0000-0002-9935-4516

Researcher ID: G-4311-2012

https://www.researchgate.net/profile/Salman_Tariq2

<https://publons.com/author/521614/salman-tariq#profile>

<https://www.scopus.com/authid/detail.uri?authorId=55914512600>

No. of impact factor publications: 28

Young Productive Scientist since 2015 (Pakistan Council for Science and Technology)

Education

- **PhD Space Science (Major in Meteorology), (Course work CGPA 3.87)** University of the Punjab – Lahore 2013-2017
Thesis title: A study on the spatio-temporal distribution, properties and transport of atmospheric aerosols over Pakistan using remote sensing
- **M.Phil Space Science (Major in Meteorology) (CGPA 3.91/4, with distinction)** University of the Punjab – Lahore 2010-2012
- **B.S. Space Science (Major in Meteorology) (CGPA 3.81/4, with distinction)** University of the Punjab – Lahore 2005-2009

Research Interests

- Atmospheric pollution & air quality monitoring
- Meteorology & Climate Change
- Remote Sensing & GIS

Professional Experience

- **November 2017 to Present:**
- **Assistant Professor** in the Department of Space Science, University of the Punjab, Lahore

- **June 2013 to October 2017:**
- **Lecturer** in the Department of Space Science, University of the Punjab, Lahore

➤ **December 2010 to May 2013:**

➤ **Research Scholar** in the Department of Space Science, University of the Punjab, Lahore

Teaching experience

Taught the following courses at University of the Punjab

1. Analytical Analysis (M.Phil.)
2. Meteorology (B.S)
3. Climatology (B.S)
4. Weather Forecasting and Analysis (B.S)
5. Remote Sensing (B.S)
6. Remote Sensing Lab (B.S)
7. Geographic Information System (B.S)
8. Geographic Information System Lab (B.S)
9. Space Science Lab (B.S)

Thesis/ Research reports supervised

Sr. No.	Degree	Session	Status	Capacity	Title of Research
1.	MS/M.Phil	2017-2019	Completed	First Supervisor	Air quality monitoring during intense smog events using satellite remote sensing data over Punjab, Pakistan
2.	MS/M.Phil	2017-2019	Completed	First Supervisor	Spatio-temporal assessment of aerosol optical properties using remote sensing over Baluchistan, Pakistan
3.	MS/M.Phil	2015-2017	Completed	First Supervisor	Validation & spatial temporal analysis of rainfall data retrieved from TRMM satellite over Pakistan
4.	MS/M.Phil	2012-2014	Completed	Second Supervisor	A Study of aerosol properties over Jambi (Indonesia) using remote sensing
5.	MS/M.Phil	2012-2014	Completed	First Supervisor	Remote sensing of Sinabung (Indonesia) volcanic aerosols
6.	M.Sc	2016-2018	Completed	First Supervisor	An analysis of precipitation trends and anomalies over Lahore (Pakistan) using satellite sensed and ground based data
7.	M.Sc	2016-2018	Completed	Second Supervisor	Study of meteorological parameters over Lahore

					during south Asian heat wave 2007 using RS & GIS techniques
8.	M.Sc	2016-2018	Completed	First Supervisor	Detection of transboundary air pollution over Lahore region
9.	M.Sc	2012-2014	Completed	First Supervisor	Effect of aerosols on climate
10.	B.Sc (Hons)	2013-2017	Completed	First Supervisor	Analysis of properties of Aerosols during Dust Storm using RS & GIS
11.	B.Sc (Hons)	2012-2016	Completed	First Supervisor	Genesis of heavy rainfall event during monsoon over Lahore using RS/GIS
12.	B.Sc (Hons)	2012-2016	Completed	First Supervisor	Fine/coarse mode analysis of atmospheric aerosols over Lahore using AERONET data
13.	B.Sc (Hons)	2009-2013	Completed	First Supervisor	To evaluate the characteristics of aerosols using remote sensing
14.	B.Sc (Hons)	2008-2012	Completed	First Supervisor	Impact of meteorological elements on flight dynamics
15.	B.Sc (Hons)	2005-2019	Completed	Second Supervisor	spatio-temporal study of lightning activity over Pakistan and its relationship with air quality using remote sensing
16.	B.Sc (Hons)	2015-2019	Completed	First Supervisor	spatio-temporal analysis of smog over Lahore using remote sensing
17.	B.Sc (Hons)	2015-2019	Completed	First Supervisor	Study of temporal analysis of aerosol optical properties and rainfall over Karachi

Projects

1-Title: Remote Sensing, GIS and Climatic Research Lab (RSGCRL)

Amount: 80.92 million PKR

Funding organization: Higher education commission of Pakistan.

2-Title: Air Quality monitoring in Pakistan using Satellite Remote Sensing (SRS) and Geographic Information System (GIS) techniques

Amount: 150000 PKR

Funding organization: University of the Punjab, Pakistan.

Paper setter and Examiner

- University of the Punjab, Lahore
- Board of Intermediate and Secondary Education, Lahore

Editor

- Lead guest Editor of a Special Issue of USA-based research Journal of “Advances in Meteorology” (Impact Factor 1.645) entitled “Aerosol and Trace Gas Monitoring for Climate Change Studies”

Reviewer

- Le Studium Research Fellowships Cofunded by a Horizon 2020 grant in the category of the Marie Skłodowska-Curie Actions
- Journal: Environmental Pollution, **Impact factor 5.099.**
- Journal: International Journal of Climatology, **Impact factor 3.760.**
- Journal: Environmental Science and Pollution Research, **Impact factor 2.741**
- Journal: International Journal of Remote sensing, **Impact Factor 1.724.**
- Journal: Remote Sensing Letters, **Impact factor 1.532**
- Journal: Atmospheric Pollution Research, **Impact factor 2.918**

Honours

- Won travel award to present one of my research papers at 18th World Clean Air Congress which will be held from 23rd to 27th September 2019 in Istanbul Hilton Maslak Hotel, Turkey.
- Selected and financially supported by International Global Atmospheric Chemistry (IGAC) project to present one of my research papers at IGAC/SPARC Chemistry-Climate Model Initiative (CCMI) Science Workshop (7–9 August 2019) in The Chinese University of Hong Kong, Hong Kong.
- Selected and financially supported by International Global Atmospheric Chemistry (IGAC) project to present one of my research papers at Atmospheric Composition and Asian Monsoon Workshop (ACAM 2019), Kuala Lumpur, Malaysia, 25-29, 2019.
- Selected and financially supported as **Expert Scientist** by World Climate research program (WCRP) and World Meteorological Organization (WMO) to participate in the scientific workshop “Developing process-based projections of the ice sheets’ contribution to future sea level” during 11th to 13th September 2018 in the Netherlands.
- Selected and financially supported as **Young Scientist** by Hohai University, China, to participate in “International Summer School on the Polar Climate System” held from 21 to 25 May 2018 in Nanjing, China.

- Invited by French Government on an official visit to France in the framework of its programme “Make Our Planet Great Again” during 11-17, December 2017.
- Selected and financially supported as **Young Scientist** by *Inter-American Institute for Global Change Research* (IAI) and the *INterdisciplinary CLimate INvestigation cEnter* (INCLINE) to present one of my research papers at “São Paulo School of Advanced Science on climate change: Scientific basis, adaptation, vulnerability and mitigation” held from 3rd to 15th July 2017 in São Paulo, Brazil.
- Selected and financially supported as **Expert Scientist** by World Climate research program (WCRP) and World Meteorological Organization (WMO) to present one of my research papers at CLIVAR Open Science Conference in Qingdao, China, September 19-23, 2016.
- Selected and won European Geosciences Union (EGU) grant to attend the training school on “Convective and volcanic clouds detection, monitoring and modeling”, Castiglione del Lago, Italy, 4-9 October 2015.
- Selected and financially supported as an **Early Career Researcher** by World Meteorological Organization (WMO) to present one of my research papers at World Weather Open Science Conference in Montréal, Canada in August 16-22, 2014.
- Selected as a **Young Scientist** by Chinese Academy of Sciences to present one of my research papers at Monsoon Asia Integrated Regional Study (MAIRS) Open science conference held on April 7-10, 2014 in Beijing, China.
- Stood 2nd in M.Phil Space Science
- Stood 2nd in B.S. (Hons) Space Science
- Stood 1st in exam conducted by Federal Public Service Commission of Pakistan for the post of Meteorologist
- Awarded merit scholarship by University of the Punjab, Pakistan, in BS (Hons)
- Won best student medals in 2003 and 2004 during F.Sc. from Govt. College for boys, Sadar, Lahore Cantt.

Professional software handling

- MATLAB
- Arc GIS
- SPSS
- Erdas Imagine
- C++
- MS Office

List of International Peer-reviewed Impact Factor Publications (28)

- 1) Usman Mehmood, Salman Tariq, 2020. Globalization and CO₂ emissions nexus: evidence from the EKC hypothesis in South Asian countries. *Environmental Science and Pollution Research*, <https://doi.org/10.1007/s11356-020-09774-1>. **Impact factor 2.914**
- 2) **Salman Tariq** and Zia ul-Haq, 2019. Investigating the Aerosol Optical Depth and Angstrom Exponent and their Relationships with Meteorological Parameters over Lahore in Pakistan. *Proceedings of the National Academy of Sciences, India Section A: Physical Sciences*, <https://doi.org/10.1007/s40010-018-0575-6>, ISSN: 0369-8203 (Print) 2250-1762 (Online). **Impact factor 0.681**
- 3) Asim Daud Rana, Shahid PARVEZ, Zia UL-HAQ, Syeda Adila BATOOL, CHAUDHARY, M. N.– MAHMOOD, K., **Salman Tariq**, 2019. Anthropogenic, Biogenic And Pyrogenic Emission Sources And Atmospheric Formaldehyde (HCHO) And Nitrogen Dioxide (NO₂) Columns Over Different Landuse/Landcovers Of South Asia, *Applied Ecology and Environmental Research*, ISSN 1589 1623, **Impact Factor 0.681**.
- 4) Shahid PARVEZ, Asim Daud Rana, Zia UL-HAQ, Syeda Adila BATOOL, ALI, M., **Salman Tariq**, MAHMOOD, K., BANO, S., 2019. Investigating Contributions Of Gases, Meteorological Parameters, And Aerosols Towards Tropospheric Ozone Variabilities Over Megacity LAHORE (PAKISTAN), *Applied Ecology and Environmental Research*, ISSN 1589 1623, **Impact Factor 0.681**.
- 5) Khalid Mahmood, Zia Ul-Haq, Fiza Faizi, **Salman Tariq**, Muhammad Azhar Naeem, Asim Daud Rana, 2019. Monitoring open dumping of municipal waste in Gujranwala, Pakistan using a combination of satellite based bio-thermal indicators and GIS analysis, *Ecological Indicators*, Volume 107, 105613, ISSN 1470-160X, <https://doi.org/10.1016/j.ecolind.2019.105613>. **Impact factor 4.49**
- 6) **Salman Tariq** and Zia ul-Haq, 2018. Ground Based Remote Sensing of Aerosol Properties over a coastal mega-city of Pakistan, *Advances in Meteorology*, vol. 2018, Article ID 3582191, 12 pages, <https://doi.org/10.1155/2018/3582191>. **Impact factor 1.577**.
- 7) **Salman Tariq**, Zia ul-Haq, Khalid Mahmood, Asim Daud Rana, 2018. Spatio-Temporal Distributions and Trends of Aerosol Parameters over Pakistan Using Remote Sensing, *Applied Ecology and Environmental Research*, 16(3):2615-2637. ISSN 1589 1623, DOI: http://dx.doi.org/10.15666/aeer/1603_26152637, **Impact Factor 0.681**.
- 8) Syeda Adila Batool, Zia ul-Haq, **Salman Tariq**, Asim Daud Rana, Khalid Mahmood, Muhammad Nawaz Chaudhry, 2018. Temporal and spatial variations of NO₂ over Saudi Arabia and identification of major hotspot areas during 2005-2014 by using satellite data. 5757-5770, *Applied Ecology and Environmental Research*. **Impact Factor 0.681**.

- 9) Zia ul-Haq, Asim Daud Rana, **Salman Tariq**, Khalid Mahmood, Muhammad Ali, Iqra Bashir, 2018. Modeling of tropospheric NO₂ column over different climatic zones and land use/land cover types in South Asia, *Journal of Atmospheric and Solar-Terrestrial Physics*. Volume 168, March 2018, Pages 80–99, **Impact factor 1.326**.
- 10) **Salman Tariq**, Zia ul-Haq, Ali Imran, Usman Mehmood, Muhammad Umar Aslam, Khalid Mahmood, 2017. CO₂ emissions from Pakistan and India and their relationship with economic variables, *Applied Ecology and Environmental Research*. 15(4), 1301-1312. **Impact Factor 0.681**.
- 11) Zia ul-Haq, Zertasha Ramzan, **Salman Tariq**, Syeda Adila Batool, Muhammad Ali, Javed Sami, 2017. Comparison of total ozone column observations from space-borne Ozone Monitoring Instrument with ground-based Dobson Ozone Spectrophotometer at an urban location in Indo-Gangetic Basin, *International Journal of Remote Sensing*, VOL. 39, NO. 2, 544–564, ISSN: 0143-1161 (Print) 1366-5901 (Online), An official journal of the Remote Sensing and Photogrammetry Society published by Taylor & Francis Group. **Impact Factor 1.724**.
- 12) Zia ul-Haq, **Salman Tariq**, Muhammad Ali, 2017. Spatiotemporal Patterns of Correlation between Atmospheric Nitrogen Dioxide and Aerosols over South Asia, *Meteorology and Atmospheric Physics*, vol 129, ISSN 0177-7971, pp 507–527, DOI 10.1007/s00703-016-0485-6, **Impact factor 1.159**.
- 13) Khalid Mahmood, Syeda Adila Batool, Fiza Faizi, Ch. Muhammad Nawaz, Zia ul-Haq, Asim Daud Rana, **Salman Tariq**, 2017. Bio-thermal effects of open dumps on surroundings detected by remote sensing - influence of geographical conditions, *Ecological Indicator* 82, 131–142. **Impact Factor 4.49**.
- 14) Zia ul-Haq, **Salman Tariq**, Muhammad Ali, Asim Daud Rana, Khalid Mahmood, 2017. Satellite sensed tropospheric NO₂ patterns and anomalies over Indus, Ganges, Brahmaputra and Meghna river basins, *International Journal of Remote Sensing*, An official journal of the Remote Sensing and Photogrammetry Society published by Taylor & Francis Group. VOL. 38, NO. 5, 1423–1450, **Impact Factor 1.724**.
- 15) Zia ul-Haq, **Salman Tariq**, Muhammad Ali, 2017. Spatiotemporal assessment of CO₂ emissions and its satellite remote sensing over Pakistan and neighboring regions, *Journal of Atmospheric and Solar-Terrestrial Physics*, 152, 11-19. <http://dx.doi.org/10.1016/j.jastp.2016.11.001>. **Impact factor 1.326**.
- 16) Zia ul-Haq, **Salman Tariq**, Muhammad Ali, 2016. Anthropogenic emissions and space-borne observations of carbon monoxide over South Asia, *Advances in Space Research*, 58 (2016), 1610–1626, ISSN 0273-1177, <http://dx.doi.org/10.1016/j.asr.2016.06.033>, **Impact factor 1.746**.

- 17) Zia ul-Haq, Muhammad Ali, Syeda Adila Batool, **Salman Tariq**, Zarmina Qayyum, 2016. Emissions quantification of refrigerant CFCs, HCFCs and HFCs in megacity Lahore (Pakistan) and contributed ODPs and GWPs, *Journal of Earth System Science*, Springer, DOI 10.1007/s12040-016-0724-8, 125, No. 6, August 2016, ISSN 0253-4126, pp. 1273–1284. **Impact Factor 0.955.**
- 18) Zia ul-Haq, **Salman Tariq**, Muhammad Ali, Khalid Mahmood, Asim Daud Rana, 2016. Sulphur dioxide loadings over megacity Lahore (Pakistan) and adjoining region of Indo-Gangetic Basin, *International Journal of Remote Sensing*, 37:13, 3021-3041, <http://dx.doi.org/10.1080/01431161.2016.1192701>, An official journal of the Remote Sensing and Photogrammetry Society published by Taylor & Francis Group. **Impact Factor 1.724.**
- 19) **Salman Tariq**, Zia-ul-Haq and Muhammad Ali, 2016. Satellite and ground-based remote sensing of aerosols during intense haze event of October 2013 over Lahore, Pakistan. *Asia-Pacific Journal of Atmospheric Sciences*, A publication of The Korean Meteorological Society and Springer, DOI: 10.1007/s13143-015-0084-3, 52(1), 25-33, ISSN 1976-7633, **Impact Factor 1.772.**
- 20) Khalid Mahmood, Zia ul-Haq, Syeda Adila Batool, Asim Daud Rana, **Salman Tariq**, 2016. Application of Temporal GIS to Track Areas of Significant Concern Regarding Groundwater Contamination. *Environmental Earth Sciences* 75:33, 1-11, ISSN 1866-6299, DOI: 10.1007/s12665-015-4844-2, **Impact factor 1.871.**
- 21) Zia-ul-Haq, **Salman Tariq**, and Muhammad Ali, 2015. Atmospheric variability of methane over Pakistan, Afghanistan and adjoining areas using retrievals from SCIAMACHY/ENVISAT, *Journal of Atmospheric and Solar-Terrestrial Physics*, doi:10.1016/j.jastp.2015.11.002, **135**, 161–173, **Impact factor 1.326.**
- 22) **Salman Tariq**, Zia-ul-Haq and Muhammad Ali, 2015. Analysis of Optical and Physical Properties of Aerosols during Crop Residue Burning Event of October 2010 over Lahore, Pakistan. *Atmospheric Pollution Research*, 6, 969–978, ISSN 1309-1042, <http://dx.doi.org/10.1016/j.apr.2015.05.002>, **Impact Factor 2.918.**
- 23) Zia ul-Haq, **Salman Tariq**, Muhammad Ali, 2015. Tropospheric NO₂ trends over South Asia during the last decade (2004-2014) using OMI data. *Advances in Meteorology*, Article ID 959284, 1-18, (Special Issue: Satellite Observation of Atmospheric Compositions for Air Quality and Climate Study (SOAC)), <http://dx.doi.org/10.1155/2015/959284>, **Impact factor 1.577.**
- 24) **Salman Tariq** and Muhammad Ali, 2015. Spatio-temporal Distribution of Absorbing Aerosols over Pakistan Retrieved from OMI Onboard Aura Satellite. *Atmospheric Pollution Research*, Volume 6, Issue 2 (March 2015), Pages 254-266, doi:

10.5094/APR.2015.030. A publication of Turkish National Committee for Air Pollution Research and Control (TUNCAP), ISSN 1309-1042, **Impact Factor 2.918**.

- 25) Zia ul-Haq, Asim Daud Rana, Muhammad Ali, Khalid Mahmood, **Salman Tariq**, Zarmina Qayyum, 2015. Carbon monoxide (CO) emissions and its tropospheric variability over Pakistan using satellite-sensed data, *Advances in Space Research*, VOL 56, 583-595, doi: <http://dx.doi.org/10.1016/j.asr.2015.04.026>, **Impact factor 1.401**.
- 26) Zia ul-Haq, **Salman Tariq**, Asim Daud Rana, Muhammad Ali, Khalid Mahmood and Shahid Pervez, 2015. Satellite remote sensing of total ozone column (TOC) over Pakistan and neighbouring regions, *International Journal of Remote Sensing*, 36:4, 1038-1054, doi: 10.1080/01431161.2015.1007255. An official journal of the Remote Sensing and Photogrammetry Society published by Taylor & Francis Group. **Impact Factor 1.724**.
- 27) Zia ul-Haq, **Salman Tariq**, Muhammad Ali, Khalid Mahmood, Syeda Adila Batool, Asim Daud Rana, 2014. A study of tropospheric NO₂ variability over Pakistan using OMI data. *Atmospheric Pollution Research*, Volume 5, Issue 4 (October 2014), Pages 709-720, doi: 10.5094/APR.2014.080, A publication of Turkish National Committee for Air Pollution Research and Control (TUNCAP), ISSN 1309-1042, **Impact Factor 2.918**.
- 28) Muhammad Ali, **Salman Tariq**, Khalid Mahmood, Asim Daud, Adila Batool, and Zia-ul-Haq, 2014. A Study of Aerosol Properties over Lahore (Pakistan) by Using AERONET Data, *Asia-Pacific Journal of Atmospheric Sciences*, Volume 50, Issue 2 (February 2014), Pages 153-162, doi:10.1007/s13143-014-0004-y, A publication of The Korean Meteorological Society and Springer, ISSN 1976-7633, **Impact Factor 1.772**.

List of Publications in HEC Recognized Local Journals

- 1) **Salman Tariq**, S. A. Batool, A. D. Rana, K. Mahmood, M. Batool, I. Murtaza, A. Hashim, 2013. Variability of size distribution, refractive index and asymmetry parameter of aerosols over Lahore derived from AERONET. *Science International* **24**, 137-139.
- 2) K. Mahmood, A. D. Rana, **Salman Tariq**, S. Kanwal, R. Ali, A. H. Ali and T. Tahseen, 2013. Groundwater Levels Susceptibility to Degradation in Lahore metropolitan. *Science International* **25**, 123-126.
- 3) Khalid Mahmood, Syeda Adila Batool, Asim Daud Rana, **Salman Tariq**, Zulfiqar Ali and Muhammad Nawaz Chaudhry, 2013. Assessment of leachate effects to the drinking water supply units in the down slope regions of municipal solid waste (MSW) dumping sites in Lahore Pakistan. *International Journal of Physical Sciences* Vol.8 (**28**), pp. 1470-1480. DOI:10.5897/IJPS2013.3927.

Book Chapter

Salman Tariq, Zia ul-Haq, 2018. Satellite remote sensing of aerosols and gaseous pollution over Pakistan. “Land-Atmospheric Research Applications in South and Southeast Asia” edited by Krishna Prasad Vadrevu, Toshimasa Ohara, Chris Justice - ISBN 978-3-319-67474-2, Series: Springer Remote Sensing/Photogrammetry, pp 543-549, DOI:10.1007/978-3-319-67474-2_24, published by Springer Nature.

Conference / Workshop

- 1) **Salman Tariq**, 2019. Optical, microphysical and radiative properties of aerosols at Barrow and Hornsund using AERONET measurements. 3rd PACES Open Science Meeting Oslo, 18-20 September, Norway.
- 2) **Salman Tariq**, 2019. Study of aerosol physical and optical properties and transport of aerosols over an Arctic location. Year of Polar Prediction (YOPP) Arctic Science Workshop, 14 to 16 January 2019 at the Finnish Meteorological Institute in Helsinki, Finland.
- 3) **Salman Tariq** and Zia Ul-Haq, 2017. An analysis of aerosol properties and HYSPLIT model estimates for aerosol transport pathways over an Arctic location Oliktok point (Alaska) (70 °N, 149 °W). 2nd PACES Workshop, 27-29 June 2017, Victoria, B.C., Canada.
- 4) **Salman Tariq** and Zia Ul-Haq, 2016. Aerosol optical depth and single scattering albedo variability over Arabian Sea during 2002-2015. CLIVAR Open Science Conference in Qingdao, China, September 19-23, 2016.
- 5) **Salman Tariq**, 2016. Investigating the properties of aerosols during intense haze events over Pakistan using remote sensing. 33rd International Geographical Congress (IGC 2016) held from 21-25 August in Beijing, China.
- 6) **Salman Tariq**, 2015. Characteristics of aerosol optical and physical properties during major dust storm and intense biomass burning events over a mega-city of Lahore (Pakistan). Our Common Future Under Climate Change Conference, **held in 7-10 July 2015**, Université Pierre et Marie Curie (UPMC), **Paris, France**.
- 7) Iqra Bashir, Muhammad Ali, **Salman Tariq**, 2015. Analysis of Aerosol Properties over Jambi (Indonesia) using Remote Sensing. Advances in Atmospheric Science and Applications (ATMOS 2015), 8-12 June 2015, University of Crete, Heraklion, Greece, organized by European Space Agency.
- 8) **Salman Tariq**, 2014. Variability in aerosol optical depth and its relationship with meteorological parameters over mega-city Lahore (Pakistan). World Weather Open Science Conference, August 16-22, 2014, in Montreal, Canada.
- 9) **Salman Tariq**, 2014. Variability of Aerosol Properties and HYSPLIT Model Estimates for Aerosol Transport Pathways over Lahore. Monsoon Asia Integrated Regional Study Open Science Conference 2014, April 7-10, 2014 in Beijing, China.
- 10) **Salman Tariq**. An analysis of aerosol optical properties using different remote sensing sensors, 2nd International Conference Energy & Meteorology 2013

Meteo-France International Conference Centre, Toulouse, France
25 - 28 June 2013.

- 11) **Salman Tariq** and Muhammad Ali. Variability in Single Scattering Albedo, Aerosol Index and Angstrom Exponent during different seasons, over mega-city Lahore. Atmospheric science conference (ATMOS 2012), Bruges 18-22 June 2012, organized by European Space Agency.
- 12) Attended training workshop on 'Disaster Risk Management' organized by NDMA, NIDM, UNDP & dept. of Geography, University of the Punjab, April 11-12, 2011, Lahore.
- 13) Attended training workshop on 'Youth Political School' organized by SPO and UNDP, November 24-29, 2008, Lahore.

Memberships

- European Geosciences Union (EGU)
- Association of Polar Early Career Scientists (APECS)
- Young Earth System Scientists community (YESS)

References

Dr. Zia ul-Haq,
Relation: Research group leader
Assistant Professor, Department of Space Science, University of the Punjab
Email: zia.spssc@yahoo.com, Cell No.: +92 3014352543

Dr. Syeda Adila Batool
Relation: PhD supervisor
Associate Professor, Department of Space Science, University of the Punjab
Email: aadila_batool@yahoo.com, Cell No.: +92 3314591316

Dr. Khalid Mahmood
Relation: Colleague
Assistant Professor, Department of Space Science, University of the Punjab
Email: Khalid.m270@yahoo.com, Cell No.: +92 3214025836