Muhammad Latif, PhD

Assistant Professor

Department of Meteorology
COMSATS University Islamabad (CUI)
Park Road, Tarlai Kalan, 45550, Islamabad, Pakistan
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URL: https://ww2.comsats.edu.pk/Meteorology/
Google Scholar: https://scholar.google.com/citations?user=5Xh-27wAAAAJ&hl=en

Key Research Areas

- Climate variability and change: Key drivers and associated impacts.
- Climatic hazards: Spatiotemporal patterns and large-scale dynamics.
- Atmospheric teleconnection patterns: Local & regional climate influence.
- Monsoon dynamics: Interaction mechanisms with large-scale circulations.
- Climate modelling: Regional and global model performance assessment.

Education

PhD in Meteorology
February 2012 – September 2017
COMSATS University Islamabad (Pakistan)
Research title: *Dynamics of South-Asian Summer Monsoon System and Climate Change with Special Focus on Pakistan.* For more information, please refer to the following website:
http://ww2.comsats.edu.pk/phd_graduates/GraduateDetails.aspx?id=151
International research fellowship: Carried out part of PhD research at Stockholm University, Sweden, funded by the Higher Education Commission (HEC) of Pakistan.

Master of Science (MS) in Meteorology
September 2007 – July 2009
COMSATS University Islamabad (Pakistan)
Research title: *Atmospheric Water Vapor Estimation using GPS Technology*
International research fellowship: Conducted MS research thesis at the University of Illinois at Urbana-Champaign (UIUC), USA, funded by the COMSATS University Islamabad.

Master of Science (MSc) in Space Science
July 2004 – September 2006
University of the Punjab, Lahore (Pakistan)
Research title: *Architectural Designing of Dense Wavelength Division Multiplexing System*

Bachelor of Science (BSc)
2001 – 2003
Baha-ud-Din Zikrya University, Multan (Pakistan)
Major: Mathematics and Physics

Work Experience

Department of Meteorology, CUI, Islamabad Campus (Pakistan)
Assistant Professor
April 2022 – Present

Department of Meteorology, CUI, Islamabad Campus (Pakistan)
Lecturer
February 2010 – April 2022

Department of Meteorology, CUI, Islamabad Campus (Pakistan)
Research Associate
September 2009 – February 2010

Peer-Reviewed Journal Articles (** represents corresponding author)

- Latif, M., Usman, M., Malik, A., Masabathini, S., Ahmad, B., Atique, L., Alhammadi, F., & Hoteit, I. (2025) Tropical-Extratropical Interactions: The Atmospheric Dynamics Behind Dubai's Extreme Precipitation in April 2024. *Natural Hazards*, 1-31.

- Sipra, H., Hussain, A., Ahmed, N., & Latif, M. (2025) Solar geoengineering impacts on precipitation under projected climate change in Pakistan. *Pakistan Journal of Meteorology*. (Accepted).

- Hussain, A., Latif, M., Shoaib, M., & Khan, V. (2025) Projected Malaria Transmission Risk Under Climate Intervention in South Asia. *Environmental Research Communications*, 7(3), 035020.

- Bibi, A., Adnan, S., Latif, M., Khan, A. H., Zahgium, A., & Ullah, K. (2024) Diagnostic Study on extreme Precipitation over Karachi during August 2020. *Meteorology and Atmospheric Physics*, 136(46), 1-13.

- Latif**, M., Shireen, H., Adnan, S., Ahmed, R., & Hannachi, A. (2024) Drought variability in Pakistan: Navigating historical patterns in a changing climate with global teleconnections. *Theoretical and Applied Climatology*, 155, 8379-8400.

- Latif**, M., Zoon, M., Adnan, S., Ahmed, R., Hannachi, A., Mahmood, R., & Umar, M. (2024). Spatiotemporal analyses of temperature and equivalent temperature and their relationship with crop health across Pakistan's cropland. *Theoretical and Applied Climatology*, 155(4), 3473-3491.

- Elfeki, A., Bahrawi, J., Latif, M., & Hannachi, A. (2022). Spatiotemporal analysis of monthly rainfall over Saudi Arabia and global teleconnections. *Geomatics, Natural Hazards and Risk*, *13*(1), 2618-2648.

- 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*(3), 1093-1116.

- Imtiaz, I., Umar, M., Latif**, M., Ahmed, R., & Azam, M. (2022). Landslide susceptibility mapping: improvements in variable weights estimation through machine learning algorithms—a case study of upper Indus River Basin, Pakistan. *Environmental Earth Sciences*, *81*(4), 112.

- Lee, J. E., Azam, M., Rehman, S. U., Waseem, M., Anjum, M. N., Afzal, A., Cheema, M. J. M., Mehtab, M., Latif, M., Ahmed, R., Umar, M., Sarwar, A., & Rehman, S. A. U. (2022). Spatio-temporal variability of drought characteristics across Pakistan. *Paddy and Water Environment*, 20, 117-135.

- Dar, M. A., Ahmed, R., Latif, M., & Azam, M. (2022). Climatology of dust storm frequency and its association with temperature and precipitation patterns over Pakistan. *Natural Hazards*, *110*(1), 655-677.

- Malik, S., Ahmed, R., Latif, M., Azam, M., Haroon, E., & Iqbal, M. B. (2021). Convective available potential energy (CAPE) in Pakistan and its association with precipitation and temperature. *Theoretical and Applied Climatology*, *146*, 191-212.

- Qaiser, G., Tariq, S., Adnan, S., & Latif, M. (2021). Evaluation of a composite drought index to identify seasonal drought and its associated atmospheric dynamics in Northern Punjab, Pakistan. *Journal of Arid Environments*, *185*, 104332.

- Adnan, S., Hanif, M., Khan, A. H., Latif, M., Ullah, K., Bashir, F., Kamil, S., & Haider, S. (2021). Impact of heat index and ultraviolet index on COVID-19 in major cities of Pakistan. *Journal of occupational and environmental medicine*, *63*(2), 98-103.

- Al-Wagdany, A., Bahrawi, J., Latif, M., Elfeki, A., & Hannachi, A. (2020). Effect of reservoir models and climate change on flood analysis in arid regions. *Arabian Journal of Geosciences*, *13*(16).

- Pongpiachan, S., Surapipith, V., Hashmi, M. Z., Latif, M., Sohail, M., Eqani, S. A. M. A. S., Charoenkalunyuta, T., & Promdee, K. (2022). Latitudinal transects and quantitative ecological risk assessments of polycyclic aromatic hydrocarbons in terrestrial soils of Pakistan and King George Island, Antarctica. *Polycyclic Aromatic Compounds*, *42*(3), 771-790.

- Ain, N. U., Latif**, M., Ullah, K., Adnan, S., Ahmed, R., Umar, M., & Azam, M. (2020). Investigation of

seasonal droughts and related large-scale atmospheric dynamics over the Potwar Plateau of Pakistan. *Theoretical and Applied Climatology*, *140*, 69-89.

- Ahmed, F., Adnan, S., & Latif, M. (2020). Impact of jet stream and associated mechanisms on winter precipitation in Pakistan. *Meteorology and Atmospheric Physics*, *132*(2), 225-238.

- Hwang, J. H., Azam, M., Jin, M. S., Kang, Y. H., Lee, J. E., Latif, M., Ahmed, R., Umar, M., & Hashmi, M. Z. (2020). Spatiotemporal trends in reference evapotranspiration over South Korea. *Paddy and water environment*, *18*, 235-259.

- Syed, F. S., Latif, M., Al-Maashi, A., & Ghulam, A. (2019). Regional climate model RCA4 simulations of temperature and precipitation over the Arabian Peninsula: sensitivity to CORDEX domain and lateral boundary conditions. *Climate dynamics*, *53*(11), 7045-7064.

- Pongpiachan, S., Deelaman, W., Choochuay, C., Iadtem, N., Surapipith, V., Hashmi, M. Z., Latif, M., Sohail, M., Eqani, S. A. M. A. S., Charoenkalunyuta, T., & Promdee, K. (2019). Data relating to spatial distribution of polycyclic aromatic hydrocarbons in terrestrial soils of Pakistan and King George Island, Antarctica. *Data in brief*, *25*, 104327.

- Ahmed, R., Latif, M., Adnan, S., & Abuzar, M. K. (2019). Thunderstorm frequency distribution and associated convective mechanisms over Pakistan. *Theoretical and applied climatology*, *137*, 755-773.

- Latif**, M., Hannachi, A., & Syed, F. S. (2018). Analysis of rainfall trends over Indo-Pakistan summer monsoon and related dynamics based on CMIP5 climate model simulations. *International Journal of Climatology*, *38*, e577-e595.

- Asmat, U., Athar, H., Nabeel, A., & Latif, M. (2018). An AOGCM based assessment of interseasonal variability in Pakistan. *Climate Dynamics*, *50*, 349-373.

- Latif**, M., Syed, F. S., & Hannachi, A. (2017). Rainfall trends in the South Asian summer monsoon and its related large-scale dynamics with focus over Pakistan. *Climate Dynamics*, *48*, 3565-3581.

- Latif**, M., & Syed, F. S. (2016). Determination of summer monsoon onset and its related large-scale circulation characteristics over Pakistan. *Theoretical and applied climatology*, *125*, 509-520.

- Latif**, M., Syed, F., & Hannachi, A. (2016, April). Rainfall Trends over the Indo-Pak Summer Monsoon and Related Large-Scale Dynamics. In *EGU General Assembly Conference Abstracts* (pp. EPSC2016-18334).

- Khan, M. S., Naqvi, M. R., Khan, M. A., Latif, M., Ullah, K., Khan, R. D., Wali, R., & Leitgeb, E. (2013, July). Optical attenuation estimation from measured visibility data in Islamabad, Pakistan. In *Proceedings of the 2013 18th European Conference on Network and Optical Communications & 2013 8th Conference on Optical Cabling and Infrastructure (NOC-OC&I)* (pp. 203-208). IEEE.

    - Azam, M., Kwon, S. A., Lee, J. E., Altaf, M. N., Anjum, M. N., Afzal, A., Hussain, F., Ahmed, R., Latif, M., & Waseem, M. (2025) Spatio-temporal Analysis of Drought at Bivariate Framework; A Case Study of Balochistan Pakistan. Paddy and Water Environment (Under Review).

    - Hussain, A., Shoaib, M., & Latif, M. (2025) Malaria Transmission Dynamics Under Climate Change and Solar Geoengineering in South Asia: A GLENS-Based Assessment. Malaria Journal (Under Review).

Book Chapters and Reports

- Adnan, S., Baig, M. B., Chaudhry, Q. u. Z., Khan, S., Latif, M., Ullah, K., Bibi, A., Hayat Khan, A., & Haider, S. (2024). Climate change challenges and its preparedness toward agriculture using climate-smart agriculture in Potohar Plateau of Pakistan. In M. Behnassi, A. A. Al-Shaikh, R. Hussain Qureshi, M. Barjees Baig, & T. K. A. Faraj (Eds.), *Climate-smart and resilient food systems and security* (pp. 343–356). Springer, Cham.

- Ahmed, W., Ejaz, M. S., Memon, U., Khair, S., Khilji, A. R., Tarin, R., Ahmad, F., Qureshi, A. L., Khan, M. R., Amin, M., Latif, M., Ahmed, M., & Punthakey, J. F. (2021). *Improving groundwater management to enhance agriculture and farming livelihoods: Groundwater model for Kuchlak Sub-basin,*

Balochistan. (ILWS; No. 160). Institute for Land, Water and Society.

Projects

- Project 1: *Implications of SRM under Marine Cloud Brightening for Climate and Malaria Dynamics in South Asia,* funded by "The DEGREES Initiative" – Co-Principal Investigator (Co-PI)

- Project 2: Evidence-based Assessments to Guide Perceptions, Governance, and Ethical Frameworks for South Asia: Comparing Marine Cloud Brightening Deployment Strategies vis-à-vis Carbon Dioxide Removal and Mitigation Efforts, funded by the "Advanced Research and Invention Agency (ARIA)" – Team member

- Project 3: *The Impact of Climate Change and SRM on Malaria in South Asia*, funded by "The DEGREES Initiative" – Team member

Teaching Experience

I have had the privilege of teaching the following courses at postgraduate and undergraduate levels within the Department of Meteorology, Department of Physics, Department of Chemistry, and Department of Mathematics at COMSATS University Islamabad:

MS/PhD level	Programming for Meteorologists (MET669), Climatology (MET624), General Meteorology (MET615), Atmospheric Thermodynamics (MET675), Tropical and Synoptic Meteorology (MET677), Advanced Applied Climatology (MET745), and Monsoon Meteorology (MET716)
BS level	Meteorology (MET101), Introduction to Climatology (MET105), Satellite Remote Sensing (MET201), and Fundamentals of Environmental Sciences (ENV101)

For more details regarding specific course titles, types, semester, and other information, please visit the following webpage: https://ww2.comsats.edu.pk/faculty/FacultyDetails.aspx?Uid=646

PhD Student Supervision

- Ms. Asma Haghi Abdullahi (PhD Meteorology, International Student – In progress)
  PhD Research Topic: Drought Characteristics, Variability, and Trends in Somalia Under a Changing Climate

MS Student Supervision

- Mr. Muhammad Asif (MS Meteorology)
  Research Title: Predicting Future Trends of Heatwaves in Pakistan using Climate Model Simulations

- Mr. Usama Mukhtar (MS Remote Sensing and GIS)
  Research Title: Assessment of Climate Extremes and Regional Vulnerability in Pakistan: A Satellite-Based Approach

- Mr. Hammad Shahid Qureshi (MS Remote Sensing and GIS
  Research Title: Assessing NDVI Variability Over Pakistan in the Changing Climate

- Ms. Attia Rafiq (MS Remote Sensing and GIS)
  Research Title: Unraveling the Mechanisms Behind Extreme Precipitation During Monsoon 2022 in Pakistan

- Mr. Asmad Hussain (MS Remote Sensing and GIS)
  Research Title: Analysis of Dry/Wet Conditions in South Asia and Associated Global Teleconnections

- Ms. Sumar Munir (MS Remote Sensing and GIS)
  Research Title: Assessing the Reliability of Satellite-Derived Precipitation Estimates for Drought Identification in Pakistan

- Ms. Momina Abid (MS Meteorology)
  Research Title: Future Projections of Temperature and Precipitation for South Asia using a Regional Climate Model

- Mr. Syed Husnain Shah (MS Remote Sensing and GIS)
  Research Title: Evaluation of Satellite-Derived Products to Detect Precipitation Patterns, Extremes, and Drought Over Pakistan

- Ms. Romeen Sohail (MS Meteorology)
  Research Title: Localized Changes in Heatwave Dynamics Across Pakistan and Large-Scale Climate Patterns

- Mr. Muhammad Hashim (MS Meteorology)
  Research Title: Comparison of CMIP5 and CMIP6 Model Performance in Simulating South Asian Summer Monsoon Characteristics

- Ms. Hira Shireen (MS Meteorology)
  Research Title: Historical Drought Patterns over Pakistan and their Association with Global Teleconnections

- Mr. Mubahil Ahmad (MS Meteorology)
  Research Title: Comparison of CMIP5 and CMIP6 Models in Simulating Drought Conditions Over Pakistan

- Ms. Ukkasha Sheikh (MS Meteorology)
  Research Title: Droughts over Thal Region of Pakistan: Occurrence, Associated Mechanisms and Future Projections

- Mr. Pervaiz Iqbal (MS Remote Sensing and GIS)
  Research Title: Rainfall Variability and Its Effects on Crop Yield in the Agricultural Plains of Punjab, Pakistan.

- Ms. Momel Zoon (MS Meteorology)
  Research Title: Spatio-Temporal Analyses of Temperature and Equivalent Temperature and Their Link to Different Land-Cover Types Over Pakistan.

- Mr. Sayed Waseem Iqbal (MS Meteorology)
  Research Title: Performance evaluation of observed and reanalysis gridded precipitation datasets over Pakistan.

- Ms. Noor-Ul-Ain (MS Meteorology)
  Research Title: Investigation of Seasonal Droughts over the Potwar Plateau of Pakistan.

- Mr. Ifran Ahmad (MS Meteorology)
  Research Title: Diagnosis and Prediction of Fog Formation in the Plains of Punjab.

Academic Honors, Awards and Achievements

- Invited and sponsored by the Institute of Desert Meteorology (IDM), China Meteorological Administration (CMA), to participate as a speaker in the “Fifth International Workshop of Meteorological Science and Technology in Central Asia” held in Nanjing, **China** from October 14th to 29th, 2019.

- Invited and sponsored by the Department of Meteorology, Stockholm University (MISU), under the International Meteorological Institute (IMI) program for a two-week duration from March 18th to March 31st, 2019, to discuss and initiate possible scientific research collaboration with MISU, **Sweden**.

- Awarded the HEC-based scholarship "International Research Support Initiative Program (2015 –16) (IRSIP)" to undertake part of PhD research work at the Department of Meteorology (MISU), Stockholm University, **Sweden**, from August 15th to March 16th.

- Sponsored by ICTP to participate in the activity titled “Targeted Training Activity (TTA): Challenges in Monsoon Prediction” at Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, **Italy**, from June 23rd to July 4th, 2014.

- Sponsored by ICTP to participate in the activity titled “Weather Regimes and Weather Types in the Tropics and Extra-tropics: Theory and Application to Prediction of Weather and Climate” at ICTP, **Italy**, from October 21st to October 31st, 2013.

- Participated in a short-term training course sponsored by Vaisala Oyj on the “Maintenance, Installation, and Reconfiguration of Vaisala’s advanced Meteorological Instruments” held in Helsinki, **Finland**, from March 31st to April 6th, 2013.

- Awarded a CUI-based scholarship to undertake MS research work titled “Estimation of Atmospheric Water Vapors using GPS Technology” in the Department of Geology, University of Illinois at Urbana-Champaign (UIUC), **USA**, from January 2009 to May 2009.

- Obtained a full merit scholarship from CUI for the degree of Master of Science (MS) in Meteorology in the Department of Meteorology, CUI, Islamabad, Pakistan, from September 2007 to July 2009.

Invited Talks, Trainings, and Workshop Participation

- Delivered a talk entitled **“Impact of SRM on Malaria Transmission in South Asia: A Comparative Analysis of Climate Intervention and Climate Change Scenarios”** at the Asia Oceania Geosciences Society (AOGS) 22nd Annual Meeting, 2025, Singapore, from July 27th to August 1st, 2025.

- Accepted to present a poster titled **“Projected Malaria Transmission Risk Under Climate Intervention in South Asia”** at the Degrees Global Forum, held May 11th to 17th, 2025, in Cape Town, South Africa.

- Presented a talk entitled **“Fundamentals of Climate Change and Solar Radiation Modification (SRM)”** at the Harvard CID GEM Incubation Fund Stakeholder Engagement Meeting on “Solar Radiation Modification Impacts-Based Dashboard for Health Policy Makers in South Asia,” organized by the Centre for Climate Research and Development (CCRD), COMSATS University Islamabad (CUI), on December 12, 2024.

- Delivered a talk entitled **“Weather Extremes and Drought Variability in Pakistan Under Changing Climate”** at the international Scientific Forum on Flash Drought, jointly organized by the Food and Agriculture Organization (FAO) of the United Nations (UN) and the Pakistan Meteorological Department (PMD), on July 10, 2024.

- Presented a talk entitled **“Climate-Induced Drought Variability in Pakistan and Large-Scale Circulation Patterns”** at an international workshop on Droughts over Pakistan in the Changing Climate, organized by the Pakistan Meteorological Department (PMD) at Islamia University Bahawalpur (IUB), Pakistan, on February 21st and 22nd, 2024.

- Delivered a talk entitled **“Climate-Induced Drought Patterns in Pakistan: Variability, Trends, and Global Teleconnections”** at an international conference, jointly organized by Quaid-I-Azam University (QAU), the Chinese Academy of Sciences (CAS), the Higher Education Commission of Pakistan (HEC), the China-Pakistan Joint Research Center on Earth Sciences (CPJRC), and the Pakistan Academy of Sciences at QAU, Islamabad, from October 25th to 27th, 2023.

- Delivered a talk entitled **“South Asian Summer Monsoon and Climate Change Impacts in Pakistan: Insights from 2022”** in a seminar organized by the Department of Meteorology at the seminar hall, Business Incubation Center (BIC), COMSATS University Islamabad (CUI), Islamabad Campus, on June 9th, 2023.

- Presented a talk entitled **“Research and Career Opportunities in Meteorology and Climate Science in Pakistan”** in a seminar organized by the Department of Meteorology at the seminar hall, Business Incubation Center (BIC), COMSATS University Islamabad (CUI), Islamabad Campus, on January 6th, 2023.

- Delivered a talk entitled **“Dynamics of South-Asian Summer Monsoon System with Focus Over Pakistan”** at the 8th National Monsoon Forum organized by Pakistan Meteorological Department (PMD) and Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES), held at Ramada Hotel, Islamabad, Pakistan, on July 6th, 2022.

- Presented a talk entitled **“Monitoring Drought in Pakistan: Teleconnections and Uncertainties in Changing Climate”** at the virtual capacity building workshop on Establishment of ECO-SDI to Combat

the Challenge of Food Security in the ECO region organized by Survey of Pakistan, Ministry of Defense at Survey Training Institute (STI), Islamabad, Pakistan, from July 5th to 7th, 2022.

- Participated in the training workshop on **"Shanghai Cooperation Organization (SCO) Advanced International Training Course on Meteorological and Disaster Prevention Technology"** organized by the Institute of Desert Meteorology (IDM), China Meteorological Administration (CMA), Nanjing, China, from October 14th to 29th, 2016.

- Participated in the training workshop on **"Transition to Latest Version of QMS ISO 9001:2015"** organized by COMSATS University Islamabad (CUI) and conducted by Constech-Pakistan, held from August 23rd to 24th, 2016.

- Participated in the training workshop on **"Research Methods and Techniques for Pure Sciences"** organized by the Faculty Development Academy (FDA), COMSATS Headquarters, Islamabad, from December 8th to 10th, 2014.

- Participated in and successfully completed the **"Vaisala Weather Station Training Course"** for Meteorological Instruments held in Helsinki, Finland, from March 31st to April 6th, 2013. The training, sponsored by Vaisala Oyj and CUI, aimed to provide technical expertise on the installation and configuration of weather measuring instruments.

- Participated in the training workshop on **"Curriculum Planning & Assessment"** organized by the Higher Education Commission (HEC) at COMSATS University Islamabad (CUI), from January 31st to February 2nd, 2011.

- Participated in the training workshop on **"Communication Skills"** organized by the Higher Education Commission (HEC) at COMSATS University Islamabad (CUI), from July 29th to August 1st, 2011.

- Participated in and successfully completed the **"First Pre-Service Training Course"** organized by the Faculty Development Academy (FDA) at COMSATS Headquarters, Islamabad, from October 10th to November 4th, 2011.

Professional and Academic Engagements

Journal Reviewer:	Tellus A: Dynamic Meteorology & Oceanography, Climatic Change, Quarterly Journal of the Royal Meteorological Society, Journal of Water and Climate Change, and Earth Systems and Environment
Thesis Examiner:	External evaluator for PhD/MS/BS theses at Arid Agriculture University, Rawalpindi, and Bahria University, Islamabad.

Data Analysis and Computing Expertise

Climate Data Analysis:	Skilled in handling diverse climate datasets, encompassing gridded observational, atmospheric reanalysis, seasonal forecast, climate model datasets, and satellite-based products. Experienced in generating high-resolution climate datasets using statistical downscaling methods and bias corrections to evaluate regional-scale climate change impacts.
VECTRI Model:	Proficient in utilizing the VECTRI Malaria Model to simulate malaria transmission dynamics and assess the impacts of climate change and climate interventions on vector-borne diseases. Skilled in integrating environmental factors and human demographics to inform public health strategies.
HYSPLIT Model:	Experienced in using the HYSPLIT model for atmospheric transport and dispersion simulations, including trajectory analysis to track the movement of air parcels and pollutant dispersion.
Computing Skills:	Proficient in utilizing Grid Analysis and Display System (GrADS) and Climate Data Operators (CDO) for analyzing and visualizing climate datasets. Capable of effectively utilizing NCAR Command Language (NCL), MATLAB, and R programming languages for climate research.

Operating Systems: Linux (Ubuntu) and Windows

Administrative Roles

- Member, Quality Assurance & Assessment Process of Academic Programs.
  Responsibilities: preparation, revision, and submission of document (assessment of departmental facilities, program need, teacher's/student's evaluation, self-assessment reports, etc. for MS/PhD programs) to Quality Enhancement Cell (QEC).

- International Organization for Standardization (ISO) coordinator.
  Responsibilities: preparation, revision, and submission of document (SOPs, departmental Objectives, JDs, etc.) as per ISO 9001:2015 standards) on DOC Mate software.

- Member, Departmental Academic Review Committee (DARC)
  Responsibilities: to manage and streamline the academic issues (ensuring class timings, course folder maintenance, lecture as per course contents, monitoring of classes, etc.) of the Department.

- Member, COMSATS Industrial Liaison Committee (CILC)
  Responsibilities: fostering collaborations between academic institutions and industries, organizing industry-academia partnership events, and advising on strategies to enhance industry-academic linkages for research and development.

- Compilation of Departmental performance reports.
  Responsibilities: compiling data to prepare departmental weekly, monthly, and annual progress reports.

- Member, Departmental/Guest Seminar Committee.
  Responsibilities: contact with a resource person/speaker and to ensure the necessary arrangements for the seminar.

In addition to the above administrative roles, I also serve on various committees and hold additional responsibilities. These include ensuring adherence to student conduct standards, maintaining and operating meteorological instruments, overseeing departmental web affairs, organizing sports events, and managing updates and activities on the departmental web portal.

Language Proficiency: English, Urdu, Punjabi

References

1. **Dr. Abdel Hannachi**
   Associate Professor,
   Department of Meteorology (MISU), Stockholm University,
   SE-106 91, Stockholm, Sweden
   Office: +46 8-16 4343
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2. **Prof. Dr. Athar Hussain**
   Professor/HoD,
   Department of Meteorology, COMSATS University Islamabad (CUI),
   Park Road, Tarlai Kalan, 45550, Islamabad, Pakistan
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3. **Dr. Syed Faisal Saeed**
   Director,
   National Drought Monitoring Centre (NDMC),
   Pakistan Meteorological Department (PMD), Headquarters Office,
   Sector H-8/2, Islamabad, Pakistan.
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