

PERSONAL INFORMATION**Dr. Umair Bin Nisar**

Centre for Climate Research and Development (CCRD), COMSATS University Islamabad,
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WORK EXPERIENCE

August 2019-Present

Lecturer

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

Job Description

- Involved in teaching and research activities related to water and climate change
- Involved in proposal writing for different funding agencies
- Member of Seminar Organizing Committee
- Coordinator CCRD Website
- CCRD Coordinator for UIBN
- Incharge CCRD Facebook page
- Any other task assigned by Head CCRD

December 2011 – August 2019

Lecturer

Department of Earth Sciences, COMSATS University Islamabad, Abbottabad Campus, Pakistan

Job Description

- Involved in extensive teaching of geological and geophysical subjects (Seismic Exploration, Introduction to geophysics, Well logging, Sequence Stratigraphy, Resistivity Methods, Petroleum Geology, Seismic Stratigraphy, Hydrogeology)
- Supervision of BS student thesis
- Seminar Conduction
- Worked as member of BS project evaluation committee
- Incharge Geophysical field trips for students
- Worked as Departmental Coordinator
- Departmental Sports coordinator

December 2010 – December 2011

Research Associate

Department of Earth Sciences, COMSATS University Islamabad, Abbottabad Campus, Pakistan

Job Description

- Teaching and managing labs for senior faculty members
- BS thesis supervision
- Involved in research projects

July 2007 – March 2009

Processing Geophysicist

Spectrum

Job Description

- Involved in various local and international seismic data processing projects
- Data loading, Geometry building, Refraction statics, deconvolution, Velocity picking, migration

May 2007 – July 2007

Field Geophysicist

- Job Description
- Involved in managing the seismic layout, drilling crew, layout crew and survey crew

EDUCATION

2019 **Ph.D. (Geology / Hydrogeology)**

Institute of Geology, University of Azad Jammu and Kashmir, Muzaffarabad, Azad Kashmir, Pakistan

Ph.D. Dissertation entitled 'Impact of Hattar Industrial Estate on Groundwater Resources and its Environment in Haripur Basin, Pakistan: An Integrated Geophysical Approach

2009 – 2011 **M.Phil (Geophysics)**

Department of Earth Sciences, Quaid-I- Azam University, Islamabad, Pakistan

M.Phil Dissertation entitled 'Structural and stratigraphic interpretation of Dhulian Oil Field by using Seismic and Well log data

2005-2007 **M.Sc. (Geophysics)**

Department of Earth Sciences, Quaid-I- Azam University, Islamabad, Pakistan

M.Sc. Dissertation entitled 'Structural and stratigraphic interpretation of Tajjal area, Lower Indus basin by using Seismic and Well log data.

PERSONAL SKILLS

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

- Projects/consultancies
- Aquifer modelling and vulnerability for Haripur basin
 - Acquisition processing and interpretation of Electrical resistivity tomography data in vicinity of Essa-khel, Punjab for delineation of subsurface cavities before construction of cement factory
 - Acquisition of Vertical electrical resistivity sounding data for delineation of tube well sites in Mansehra, Kp, under the flagship of Al-Khidmat foundation.

- Job-related skills
- IPI2WIN
 - RES2DINV
 - Seisup
 - Hamspon Russel GLI 3D
 - Petral, 2010
 - Geografix, 2007
 - Surfer
 - Rockworks
 - Coral draw

- Computer skills
- Competent with Microsoft Office

ADDITIONAL INFORMATION

Published Articles

- **Nisar, U.B.**, M.R., Khan, Farooq, M et al. 2021, Groundwater investigations in the Hattar Industrial Estate and its vicinity, Haripur district, Pakistan: An integrated approach *Kuwait Journal of science*.48(1),pp.51-61. 10.48129/kjs.v48i1.7820
- EHSAN, S.A., Khan, M.J., **Nisar, U.B.**, Syed, S.A., Qazi, H.H. and Khan, S., 2021. Delineating Weak Zones in Limestone based on Borehole Drilling and Electrical Resistivity Tomography. *Kuwait Journal of Science*.10.48129/kjs.14773
- Khan, S., **Nisar, U.B.**, Ehsan, S.A., Farid, A., Shahzad, S.M., Qazi, H.H., Khan, M.J. and Ahmed, T., 2021. Aquifer vulnerability and groundwater quality around Brahma Bahtar Lesser Himalayas Pakistan. *Environmental Earth Sciences*, 80(13), pp.1-13.
- Ahmed, K.A., Khan, S., **Nisar, U.B.**, Mughal, M.R. and Sultan, M., 2021. Machine seismic: an automatic approach for the identification of subsurface structural models. *Soft Computing*, pp.1-8.
- Ahmad, T., Naz, A., Khursheed, M., **Bin Nisar, U.**, Zafar, F. and Hasnain, A., 2021. Impacts of seasonal variations on water quality, waterborne diseases, and related health risks. *DESALINATION AND WATER TREATMENT*, 223, pp.264-279.
- Amjad, M.R., Khan, S., **Bin Nisar, U.**, Shakir, U. and Ahmed, K.A., 2021. Exploring the untapped gas potential of Ghazij shale in Pirkoh area, Pakistan: Integrated approach of attribute analysis and maturity modeling. *TURKISH JOURNAL OF EARTH SCIENCES.* , 30, doi:10.3906/yer-2105-36
- Toosy, M., Khan, S., Shakir, U., **Nisar, U.B.**, Ullah, K., Qadir, A. and Siddique, M., 2021. Depositional Architecture of Eocene and Cretaceous Reservoirs (Blending Seismic and Well Data) in Mubarik Area, Central Indus Basin, Pakistan. *Pure and Applied Geophysics*, 178(4), pp.1297-1315.
- Khan N. M., Farooq, M., Rizwan, M., **Nisar, U.B.** 2021. Mesozoic Structural Architecture and Petrophysical analysis of Badin South Block, Lower Indus Basin, Pakistan. *Kashmir Journal of Geology*. 13.
- Khawar, A. A., Khan, S., Sultan M., **Nisar, U. B.** et al. 2020. Landslides assessment using geophysical and passive radon exhalation detection techniques in Murree Hills, northern Pakistan: Implication for environmental hazard assessment. *Journal of Earth system Sciences*.129, 53(2020). <https://doi.org/10.1007/s12040-019-1327-y>
- **Nisar, U. B.**, Khan, R. M. Rizwan, 2019. Identification of sealing potential through fault seal analysis: a case study of Badin area, Lower Indus Basin, Pakistan. *GEOFISICA INTERNACIONAL*. 58-2: 139-150.
- Khan, S., Waseem, M., Khan, M.A. **Nisar, U.B** et al. 2019. Microzonation map of the Abbottabad basin and immediate surroundings. *Journal of Seismology*. doi:10.1007/s10950-019-09895-2.
- Mughal, M. R., Akhtar, G., Mustafa, M., **Nisar, U. B.** et al.2018, Amplitude versus offset (AVO) modelling and analysis for quantitative interpretation of porosity and saturation: A case study for Sawan gas field, middle Indus basin, Pakistan. *Geofis. Intl.* vol.57, n.2, pp.151-160.
- Khawar, A. A., Khan, S., Sultan M., **Nisar, U. B.** et al. 2019. Precise Seismic Substructural Model of the Eocene Chorgali Limestone in the Turkwal Oil Field, Central Potwar, Pakistan. *Acta geologica Sinica (English Edition)* 93(6).1711-1720. <https://doi.org/10.1111/1755-6724.13813>.
- Khan, S., **Nisar, U. B.** 2018. Is Ziarat a potential site for conventional or Unconventional energy resources?.*Acta Geologica Sinica (English Edition)*. 92(4). 1544-1557.

ADDITIONAL INFORMATION

Published Articles

- Nawaz, M., Khan, M.R., Farooq, M., Nazir, J., **Nisar, U. B.*** 2019. Fault seal evaluation of lower sands of Lower Goru Formation by using seismic and well data: A case study of Jherruck block, Lower Indus Basin, Pakistan. *Journal of Himalayan Earth Sciences*. 52(2):14-26.
- Niaz, A., Khan, M.R., **Nisar, U.B** et al. 2019. Application of electrical resistivity method in delineating aquifer properties along with vulnerability mapping in Gujrat District and surrounding areas of Punjab province, Pakistan. *Journal of Himalayan Earth Sciences Volume*, 52(2), pp.106-128.
- **Nisar, U.B.**, Khan, M.R., Khan, S., Farooq, M., Mughal, M.R., Ahmed, K.A., Razzaq, S.S. and Niaz, A., 2018. Quaternary Paleo-depositional Environments in relation to Ground water occurrence in lesser Himalayan Region, Pakistan. *Journal of Himalayan Earth Sciences Volume*, 51(1), pp.99-112.
- **Nisar, U. B.**, Khan, S., Khan, R. M. 2016. Structural and reservoir interpretation of cretaceous lower Goru formation, Sanghar area, lower indus basin, Pakistan. *Journal of Himalayan Earth Sciences*. 49(1). 41-49.

Accepted Articles

- Daud, S., Monalisa, **Nisar, U.B***, Sipra, H. 2022. Hydrochemical and Geophysical Appraisal for Effects of Gadoon Amazai Industrial Estate on Water Resources, Swabi District, Pakistan. Accepted in *Desalination and water treatment*.
- Farooq, M., Nisar, **U.B***, Khan, **S.**, Jalees, T. 2022. Electrical resistivity tomography for delineating ground water potential zones in fractured metasedimentary rocks, Lesser Himalayas, Pakistan. Accepted in *Journal of Earth System Science*
- Niaz, A., Usman, Rashid, F., **Nisar, U.B.**, et al. 2022. Integrated approach for Delineating Groundwater Potential and Quality in District Bagh, Azad Jammu & Kashmir, Pakistan. Accepted in *Desalination and water treatment*.

Conference Abstracts

- Junaid Alam, **Umair Bin Nisar**, Abrar Ahmed, Muhammad Farooq, Muhammad Rustam Khan, Aurangzeb Jadoon, Amir Shahzad and Syed Amjad Ali Bukhari. **2016**. Integrated Geophysical techniques for ground water exploration in lesser Himalayan region: A case study from Haripur region. *Abstract Volume: Earth Sciences Pakistan 2016 (July 15-17)*, Baragali Summer Campus, University of Peshawar, *Journal of Himalayan Earth Sciences*, p. 20.
- **Umair Bin Nisar**, Mona Lisa, Syed Amjad Ali Bukhari, **2014**. Seismic Attribute analysis of dhulian area, upper indus basin Pakistan by using seismic and well log data. *Abstract Volume: Earth Sciences Pakistan 2014 (August 29-31)*, Baragali Summer Campus, University of Peshawar, *Journal of Himalayan Earth Sciences*, p. 101.
- **Umair Bin Nisar**, Jabir Nazir, Muhammad Rustam Khan, Naqash Mehmood and Amir Shahzad, **2016**. Fault Seal Analysis to identify sealing potential of a fault: A case study of Badin area lower Indus basin, Pakistan. *Abstract Volume: Earth Sciences Pakistan 2016 (July 15-17)*, Baragali Summer Campus, University of Peshawar, *Journal of Himalayan Earth Sciences*, p. 115.
- **Umair Bin Nisar**, Muhammad Farooq, Naqash Mehmood, Jabir Nazir, Sarfraz Khan, and Aurangzeb Jadoon, **2016**. Integrated geophysical techniques for structural interpretation and characterization of Eocene reservoir, Indus offshore, Pakistan. *Abstract Volume: Earth Sciences Pakistan 2016 (July 15-17)*, Baragali Summer Campus, University of Peshawar, *Journal of Himalayan Earth Sciences*, p. 116.

Newspaper Article

- <https://pakobserver.net/face-masks-and-covid-19-by-dr-umair-bin-nisar>

ADDITIONAL INFORMATION

Research Projects

- Working as a Co-PI in National Research Program for Universities (NRPU) funded project entitled “ identification of groundwater potential and quality of Muzaffarabad, Rawalakot and Bagh Cities of Azad Jammu and Kashmir , Pakistan by integrated resistivity and Hydrochemical Analysis worth 3.91 million Rupee.
- Working as a Co-PI in National Research Program for Universities (NRPU) funded project entitled “Identification of Groundwater Recharge zones in twin cities of Pakistan: Geophysical and GIS/RS Approaches” worth 3.56 million Rupee.
- Working as a Co-PI in D-8 Secretariat funded project entitled “ Feasibility study of Provision of Safe Drinking Water through Water Conservation (SDWC)” worth 04 million Rupee.

Seminars and Trainings

- Participated in “Summer Geophysical Training Workshop” organized by Pakistan Geophysical Network at Department of Earth Sciences, Quaid-i-Azam University Islamabad from 5th to 30th July 2010.
- Participated in one day training entitled “Brand Yourself” organised by Pakistan Association of Petroleum Geoscientists on February 10, 2018 in Islamabad **Nisar, U.B.**, Khan, M.R., Khan, S., Farooq, M., Mughal, M.R., Ahmed, K.A., Razzaq, S.S. and Niaz, A., 2018. Quaternary Paleo-depositional Environments in relation to Ground water occurrence in lesser Himalayan Region, Pakistan. Journal of Himalayan Earth Sciences Volume, 51(1), pp.99-112.
- Participated in Second Pre-Service Training Course in Faculty Development Academy, COMSATS Secretariat from 02-27 January, 2012.
- Completed Hands on training on “Climate Change Impact Assessment and Adaptation Strategies for Wheat and Groundwater production using Decision Support System” on 4th - 5th September, 2019, organized by Department of Agronomy, PMAS-Arid Agriculture University, Rawalpindi.
- Organized one day Seminar on “ Sustainable Alternatives to Plastic Bags: Conserving Environment” on 03, October, 2019 at Centre for Climate Research and Development COMSATS University Islamabad
- Organized one day Seminar on “Awareness and Management of Parthenium Weed” at Centre for Climate Research and Development (CCRD) in coordination with CABI on 25th November, 2019.
- Organized workshop on “Gaming Climate Change in collaboration with Centre for Policy Studies at COMSATS University Islamabad on 23rd December, 2021

References

- Will be Furnished on demand