Dr. Abid Ali

Assistant Professor

Seismic Explorations, Structural and petroleum geology

Research Interests

Seismic exploration techniques, Seismic Site Characterizations, Seismic Risk Assessment, Seismic Microzonation, Remote Sensing and GIS techniques, Disaster Risks Estimation, Unconventional resources, petrophysical evaluations

Qualifications

- Ph.D. (Geophysics), 2016, Kangwon National University, South Korea
- MPhil Applied Geology (Petroleum/ structural Geology), 2012, Institute of Geology, University of the Punjab
- BS Applied Geology, 2010, Institute of Geology, University of the Punjab

Experience

- Assistant Professor at Institute of Geology, University of the Punjab, Lahore (2020–till date)
- Senior Assistant Professor at Bahria University, Islamabad (2018 – Jan 2020)
- Assistant Professor (IPFP) at Bahria University, Islamabad (2017– Jan 2018)
- Research Assistant at Department of Geophysics, Kangwon National University, South Korea (2013 – 2016)

Teaching

Geophysics, Remote Sensing and GIS, Seismic interpretations, Tectonics, Computing and Geostatistics

Research Projects/ Funding

- Seismic Hazard Assessment of Eastern Sulaiman and Fold and Thrust belt, Central Indus Basin, Pakistan (2024-25)
- Source rock potential evaluation of Chichali Formation (Cretaceous) in Hazara Basin, Pakistan (2022-23)
- Seismic risk evaluation and Microzonation studies of Abbottabad, North-Western Himalaya, Pakistan (2021-2022)
- A study on the crustal structure of the Korean peninsula using seismic interferometry (2015 – 2016)
- Site classification for seismic-hazard assessment using geophysical methods in major cities (Chuncheon, Wonju and Gangneung) in Gangwon province, Korea (2013 – 2015)

Awards and Honors

Performance Based increments (PBI) awards, Best Student Paper awards KSEG 2015, BEST-KNU scholarship for PhD

Conferences

- Integrated approach to reveal subsurface structural features and reservoir characterization in Eastern Sulaiman Fold and Thrust belt, Pakistan, American Geophysical Union (AGU) AGU 25, New Orleans, USA.15-19 December 2025.
- Seismic Hazard Assessment and Earthquake Forecasting In Northern Pakistan, NW Himalayas Using Machine Learning American Geophysical Union (AGU) AGU 25, New Orleans, USA.15-19 December 2025
- Fracture and lineaments density and seismic risk mapping in the Abbottabad area, Hazara Region, Northern Pakistan, 5th Annual meeting Mediterranean Geosciences Union (MedGU-25), Athens, Greece, 10 to 12 November 2025.
- A comprehensive analysis of geothermal resources exploration using geophysical techniques of the sandstone reservoir, 5th Annual meeting Mediterranean Geosciences Union (MedGU-25), Athens, Greece, 10 to 12 November 2025.
- Paleostress Analysis and Geodynamic Hazard Assessment in Eastern Sulaiman Fold and Thrust Belt, Central Indus Basin, Pakistan, 4th Mediterranean Geosciences Union, 25-28 November 2024, Barcelona, Spain.
- Advanced Seismic Interpretation, Multivariate Attribute Analysis, and Petrophysical Evaluation techniques for holistic Structural and Reservoir Characterization of the Joya Mair Oilfield, NW-Himalayas, Pakistan, International Geomechanics Symposium, October 30–November 2, 2023, Al Khobar, Saudi Arabia.
- Structural Lineament Analysis of the Potwar sub-basin, Pakistan, using Seismic and DEM Data, 29th Annual Technical Conference, 07-08 November 2023, Islamabad, Pakistan.
- Source Rock Potential Evaluation, Joyamair Oil Field, 8th Pakistan Geological Congress (PGC), 09-11 February 2023, Lahore, Pakistan.
- Separation of reflections from diffractions using the CRS-technique on simple one diffractor and one reflector-controlled dataset, 28th Annual Technical Conference and Oil show 2022, 9-11 January 2023, Islamabad, Pakistan.
- Quantitative Seismic Interpretation of Lower Goru Formation in Kadanwari-Latif Area, Central Indus Basin, Pakistan, 16th International Congress of the Geological Society of Greece, 17-19 October 2022 - Patras, Greece.
- Estimation of the seismic risk in major cities of Gangwon province, Korea using shear-wave velocities, 35th International Geological Congress (IGC), Cape Town, South Africa, 27 August– 4 September 2016.
- Assessment of seismic site conditions in Gangwon province, Korea using inverted shear-wave velocities, 2016 KSEG symposium, Seoul, Korea, 12–13 April 2016.