Curriculum Vitae

RAFIQUE AHMAD

PhD (GEOLOGY)
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Father's Name Saddique Ahmad
Date of Birth: 10th April, 1987
Domicile: Swabi

OBJECTIVES:

Set to learn, in a challenging and rewarding environment, which will provide me with an opportunity to nurture my professional growth, enable me to utilize my abilities to maximum so as to become a key player & valuable asset for the organization.

QUALIFICATION:

Degree	Subject	Year	Percentage	Institute/Board
PhD	Geology	2025	3.9 CGPA	University of Peshawar
M.Phil/MS	Geology	2017	3.9 CGPA	University of Peshawar
BS/M.Sc.	Geology	2009	73.66%	University of Peshawar
H.S.S.C	Pre-Medical	2005	76.28%	B.I.S.E Peshawar
S.S.C	Science Group	2003	77.53%	B.I.S.E Mardan

PHD THESIS TITLE:

Tectonic Evolution of The Karakoram Terrane, Huza, Gilgit Baltistan, NW Pakistan

MASTER THESIS TITLE:

Tectono-Metamorphic Evolution of the Lower Swat Buner Schistose Rocks, Northwestern Pakisan.

BACHELOR THESIS TITLE:

Sedimentology and Diagenetic Fabrics of the Samana Suk Formation (Jurrasic) and Sirban Dolomite (Cambrian) exposed in the Koth-e-Qabar, Abbotabad, NW Pakistan.

MAJOR COURSES IN BS, M.PHIL & PHD DEGREE:

- Igneous and Metamorphic Petrology
- Petroleum Geology and Petroleum Engineering
- Structural Geology
- Geotectonics
- Tectonics of Northern Pakistan
- Metamorphic Structures
- Biostratigraphy
- Computer Applications for Earth Sciences
- Gemology
- Marine Depositional Environments
- Chemical Methods in Rock Analyses
- Clastic Sedimentology, Carbonate Sedimentology and Sedimentary Depositional Systems
- Applied Geophysics
- Sequence Stratigraphy and Stratigraphy
- Economic Geology
- Optical and Descriptive Mineralogy
- Invertebrate and Micropaleontology

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GEOLOGICAL FIELD WORK EXPERIENCE:

I conducted detailed geological field work to the following geological sections/ranges/areas which covers stratigraphy of the area, regional and local geological structures, geological and structural mapping, high resolution sequence stratigraphy, paleontology and sedimentary depositional systems of Pre-Cambrian to Quaternary successions.

- Swat Metamorphic and Igneous Complexes, Swat District, KP
- ShanglaMelange Zone, Suture Zone and Fossil Subduction Complex, Shangla District, KP
- Kohistan Island Arc Igneous and Metamorphic Complexes, From Besham to Gilgit.
- Khair-e-Murat Ranges of NPDZ, Sub Himalayas, Fatehjang, Punjab
- Potwar Plateau: From Margalla Hills upto Salt Ranges, Punjab.
- Khewra Gorge Section, Eastern Salt Ranges, Punjab
- KallarKahar Road Section, Eastern Salt Ranges, Punjab
- Nammal Gorge Section, Central Salt Ranges, Punjab
- Zaluch Nala and Kalabagh Section, Western Salt Ranges, Punjab

PROJECTS & SUPERVISION:

- I have supervised more than 150 students in different fields for the partial fulfillment of BS degree in geology and 04 students for the partial fulfillment of MS degree in geology.

PUBLICATIONS:

1. Sami Ullah, **Rafique Ahmad**, Asher Samuel Bhatti, Fahad Ali, Manzoor Ahmad, Badshah Hussain, 2026. Petrographic and Geotechnical Characterization of Calcitic Marble from the Kashala Formation, Lower Swat, Khyber Pakhtunkhwa, Pakistan. *Journal of Himalayan Earth Sciences,* 1-19. **IF: 0.8**

2. **Rafique Ahmad**, Asghar Ali, Ondrej Nemec, Marián Putiš, **2026.** Tectonometamorphic evolution of the Karakoram Metamorphic Complex, Hunza Valley, North Pakistan: Insights into microstructures and thermodynamic modeling. *Geologica Carpathica*, 77, 6, 493–510. **IF: 1.2**

3. Ibad Ullah, Sebnem Arslan, Zahid Ullah, Zhanlong Chen, María V. Esteller, Hafiz Ullah, Muhammad Afaq Hussain, Waqar Ali, **Rafique Ahmad, 2026**. Integrated approach for arsenic prediction and health risk evaluation in community tube wells installed by public health department: comparative study of random forest, extreme gradient boosting, and deep neural networks. *Environmental Geochemistry and Health*, 48(6), 288. **IF: 4.3**

4. Muhammad Salman, Fahad Ali, Shiqi Zhang, **Rafique Ahmad,** Asher Samuel Bhatti, Syed Haroon Ali, Beenish Ali, and Taqweemul Haq Ali, **2026**. The geophysical approach to interpret reservoir characterization of the Middle Jurassic Shinawari Formation, Upper Indus Basin, Pakistan. *Journal of Himalayan Earth Sciences,* 59(1), 160-172. **IF: 0.8**

5. **Rafique Ahmad**, Asghar Ali, Ondrej Nemec, Marian Putiš, Patrik Konečný, **2025.** Geochronological constraints on the Karakoram Metamorphic Complex, Hunza Valley, Pakistan: Zircon and monazite dating of Tethyan collision events. *Geologica Carpathica*, 76(1), 23–36. **IF: 1.5**
6. Fahad Ali, Saeed Abbas, Muhammad Hanif, Shiqi Zhang, **Rafique Ahmad**, Yaxuan Zhang, Danish Khan, Eun Young Lee, Mohamed S. Ahmed and Douaa Fathy, **2025.** Biomarker and Geochemical Evaluation of Source Rock and Crude Oil Extract for Correlation, Depositional Setting and Source Rock Potential in the Indus Basin, Pakistan, *Journal of Geological Society of India*, 101(04), 252-264. **IF: 1.5**
7. Noor Ul Islam, Sarfraz Khan, Gohar Rehman, Liang Qiu, Taqweem Ul Haq Ali, **Rafique Ahmad**, Hussain Ahmed, **2025.** Structural setup of dolerite intrusions in granite: A case study of Chamyal Valley, District Mansehra, Pakistan. *Journal of Earth System Science*, 134(227). **IF: 1.7**
8. Fahad Ali, Zhang Shiqi, **Rafique Ahmad,** Beenish Ali, Hamid Iqbal, **2023.** Palynostratigraphical and oceanic anoxic events investigation in the Lower Jurassic Black Shale, Indus Basin, Pakistan. *Journal of Himalayan Earth Sciences*, 56(5), 73-88.
9. Matee Ullah, Urs Kl¨otzli, Bilal Wadood, Muhammad Khubab, Fakhrul Islam, Kamran Shehzad, **Rafique Ahmad, 2023.** Pb diffusion in perfect and defective zircon for thermo/petro-chronological investigations: An atomistic approach. *Chemical Geology*, 640, 121750, **IF: 4.2**
10. Muhammad Idrees, Asghar Ali, Nimatullah Khattak, **Rafique Ahmad**, Asad Khan, **2023.** Structural Controlled Metallic Mineralization in Lower Swat, NW Pakistan. *Himalayan Geology*, 44 (2), 36–56. **IF: 1.2**
11. **Rafique Ahmad,** Fazal Haq, Taqweem Ul Haq Ali, Gohar Rahman, **2022.** Characterization of Besak/Gandaf Quarries and Bada Clay Deposits Using in the Construction of Dams and Roads, District Swabi, KhyberPakhtunkha, Pakistan. *International Journal of Earth Sciences Knowledge and Applications*, 4 (3), 466-475.
12. Qazi Adnan Ahmad, Muhammad Irfan Ehsan, Nasir Khan, Aaqib Majeed, Ahmad Zeeshan, **Rafique Ahmad,** Farzan Majeed Noori, **2022.** Numerical simulation and modeling of a poroelastic media for detection and discrimination of geo-fluids using finite difference method. *Alexandria Engineering Journal*, 61, 3447–3462. **IF: 3.7**
13. **Rafique Ahmad,** Fahad Ali, Bilal Sadaqat, Taqweem ul Haq Ali, Abdul Mateen, Muhammad Idrees Ur Rehman, Mutahir Siddique, Hammad Ullah, **2021.** Microfacies analysis and depositional environment of the Cambrian Ambar Formation, Peshawar Basin, Pakistan. *Kashmir Journal of Geology*, 13, 85–93.
14. Asghar Ali, Muhammad Salman, **Rafique Ahmad, 2021.** Smectite illitization

of the Talhar shale, Lower Goru Formation, Southern Indus Basin, Pakistan. *Journal of Petroleum Exploration and Production Technology,* 11, 2315–2325. **IF: 2.07**

15. Jabir Nazir, Mubarak Ali, Erum Sana, Qazi Adnan Ahmad, Abuzar Ghaffari, Abdul Basit, Salik Javed, **Rafique Ahmad,** Beenish Ali, Nazir-ur-Rehman, **2020.** AVO analysis of Post-Stack Seismic data of Cretaceous Lumshiwal Formation in Kabirwala Block, Central Indus Basin Pakistan. *Journal of Himalayan Earth Sciences,* 53(2), 70-77.
16. Asghar Ali, Khaista Rehman, Owais Tayyab, Tahir Zaman, Mahad Jameel, Azeem Khan, **Rafique Ahmad,** Muhammad Irfan, **2020.** Exploring Placer Gold Deposits through Integrated Geophysical and Geochemical Techniques at the Confluence of the Indus and Kabul Rivers, NW Pakistan. *Acta Geologica Sinica (English Edition),* 94(5), 1440–1450. **IF: 1.9**
17. Asghar Ali, Saddam Hussain, Shehzad Khan, Awal Sher Khan, Sohail Mabood, **Rafique Ahmad, 2020.** Effects of tectonically induced fabrics on geomechanical properties of rocks, NW Pakistan. *Bulletin of Engineering Geology and the Environment*, 79, 4905–4916, **IF: 3.04**
18. Asghar Ali, Naveed Khan, Sohaib Ahmad, **Rafique Ahmad, 2019.** Pressure solution–dissolution imparted strike–slip movement: a case study from the Khyber Limestone, Pakistan. *Arabian Journal of Geosciences,* 12, 1866-7511, **IF: 1.3**
19. Kyle P. Larson, Asghar Ali, Sudip Shrestha, Mathieu Soret, John M. Cottle, **Rafique Ahmad, 2019.** Timing of metamorphism and deformation in the Swat valley, northern Pakistan: Insight into garnet-monazite HREE partitioning. *Geoscience Frontiers*, 10, 849-861. **IF: 4.2**
20. Maqsood Ur Rahman, Fahad Ali, Beenish Ali, **Rafique Ahmad, 2016.** Geotechnical investigation of Chitral Slates, Hindu Kush Ranges, Northern Pakistan: case study. *Journal of Himalayan Earth Sciences,* 49, 86-97.

FELLOWSHIPS & CONFERENCES:

Course	Diploma/Certificate	Field of study	Institution
PhD research work Under IRSIP program, sponsored by HEC	Fellowship Certificate	Geology (Tectonics and Thermobarometry)	University of Oxford, UK
PhD research work Under National Scholarship program (NSP), sponsored by Slovak Academic Information Agency (SAIA)	Fellowship Certificate	Geology (Tectonics and Thermobarometry)	Faculty of Natural Sciences, Department of Mineralogy, Petrology and Economic Geology, Comenius University Bratislava

Geological Field Work to North Pakistan	Appreciation Letter	Field work for professors of Oxford University, UK and Massachusetts Institute of Technology, US	Sponsored by Amherst College, USA
3rd International workshop on EPMA-ATHENS	Certificate	Applications in earth sciences of electron probe micro-analysis	Agricultural University of Athens, Athens, Greece
2nd International workshop on EPMA-ATHENS	Certificate	Applications in earth sciences of electron probe micro-analysis	Agricultural University of Athens, Athens, Greece
Detrital Geochronology and Thermochronology	Certificate	Modelling software's in Petrology	University of Melano Bicocca, Italy
Numerical Modelling Software's	Certificate	Numerical Softwares used in Petrology	Durham University, UK

COMPUTER SKILLS:

- Microsoft Office, Corel Draw, Adobe Illustrator, Global Mapper

LANGUAGES:

- English, Urdu, Pushto (Read, Write & Speak)