Curriculum-Vitae

Dr. Meraj Alam (M.Sc. Ph.D. Geology)
(Assistant Professor)
Department of Geology
Indira Gandhi National Tribal University
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Education Qualification

Course	Specialization	Institution	Year
Ph.D.	Petrology & Geochemistry (Thesis Topic: Geochemistry and petrogenesis of mafic magmatic rocks of Bhandara-Balaghat granulite (BBG) belt of Central Indian Tectonic zone (CITZ), central India"	University of Delhi, New Delhi	2015
PG	M.Sc. (Geology)	University of Delhi, New Delhi	2008

Area of Specialization/Research Field: Igneous petrology, Geochemistry, Isotope Geochemistry, and Precambrian Geology

Teaching Experience (Subjects/Courses Taught):

- (w.e.f. Feb 24, 2016- Present) at UG and PG levels (Igneous & Metamorphic Petrology and Isotope Geochemistry, Precambrian Geology)
- < 2 years' experience as "Geologist and Research Assistant" at Civil Engineering Department, Jamia Millia Islamia and had honorary opportunity to teach a large group of B.Tech in Geology.

Awards/Fellowships/recognitions:

- Junior Research Fellow (JRF) of Department of Science and Technology (DST) (November 2009-2011)
- Senior Research Fellow (SRF) of Department of Science and Technology (DST) (Nov-2011- 2013)
- Received the International Travel Grant from INSA to participate in the International Conference, 2012.
- Received the International Travel Grant from IGCP-SIDA 599 to participate the meeting and field trip, 2012.
- Received the sponsorship from Fermor Fund of the Geological Society of London to attend the Granulites and Granulites field and workshop, 2013.
- Received the International Travel Grant from DST-SERB to participate in the International Conference, 2015.
- Received the International Travel Grant from 36th International Geological Congress Society to participate in the International Conference, 2016.

- Member, Board of Studies (BoS), Department of Geology, Indira Gandhi National Tribal University, Amarkantak (MP).
- Member, Department Research Committee (DRC), Department of Geology, Indira Gandhi National Tribal University, Amarkantak
- Ex-member of Academic Council, Indira Gandhi National Tribal University, Amarkantak, MP
- Ex-Chairman and convener of Board of Studies (BoS) in Geology, Indira Gandhi National Tribal University, Amarkantak (MP)
- Ex-Head (I/c) at Department of Geology, Indira Gandhi National Tribal University, Amarkantak (MP)
- Member, Geological Society of Japan, Japan
- Member, Geological Society of India, India
- Member, American Geophysical Union, US

Editor of Journal/Reviewer of Journal /Member of Academic Bodies/Advisor:

Reviewer Service:

- International Geology Review (Taylor & Francis)
- Journal of Petrology (Oxford University Press)
- International Research Journal of Environmental Sciences
- Journal of Scientific Research, Bangladesh Academy of Science
- Reviewer of Earth Science (Earth) in Science PG Science Publishing Group, New York, USA

Academic Supervision

Ph.D. thesis

1. Ph.D. thesis entitled "Geochemistry and Petrogenesis of the Granitoids in the Eastern Part of Central India" by Indrajeet Saket, Department of Geology, Indira Gandhi National Tribal University, Amarkantak on 11.10. 2023

2. Geochemistry and Petrogenesis of the Granitoids from Bilaspur-Raigarh belt, Chhattishgarh, Central Indian Shield: Constraints on Crustal Evolution (On going)

Research articles published:

1. Prajapati, S.K., Alam, M., Mishra, P. *et al.* (2024). Geochemistry and petrogenesis of magnesian high-K granitoids from Bundelkhand Craton, Central India: New insights into crustal evolution. *Acta Geochim* (2024). https://doi.org/10.1007/s11631-024-00717-y

2. Mishra, M.K., **Alam, M.,** Kaulina, T.V., Ahmad, Talat (2024). Geochemical characterization and zircon U–Pb geochronology of the Tirodi Gneissic Complex, Central Indian Tectonic Zone (CITZ): constraints on petrogenesis, Proterozoic crustal evolution and tectonic setting. *Mineralogy and Petrol*ogy. https://doi.org/10.1007/s00710-024-00853-6

3. **Meraj Alam**, Tatiana v. Kaulina, Rakhi R. Varma[3], Talat Ahmad (2023). Zircon U-Pb geochronology, Nd-Sr isotopes and geochemistry of mafic granulites from the Central Indian Tectonic Zone (CITZ): constraints on Proterozoic crustal evolution. The Geological Society of London special publication, 537 (1) https://doi.org/10.1144/SP537-2022-135

4. **Meraj Alam** (2024) Geochemical Constraints on Granulites of the Central Indian Shield: Key Insights into Crustal Evolution. J Miner Sci Materials 5: 1088.

5. Indrajeet Saket, **Meraj Alam** (2023). Geochemistry and petrogenesis of A-type granites from the Gavilagarh-Tan Shear Zone, Central India: implications for Tectonic Settings. Journal of Applied Geochemistry, Vol. 25, No. 4, pp. 211-226.

6. **Alam, M.,** Mukesh, K. Mishra., Kaulina, T.V., Ahmad, T. (2022). Elemental and Nd-Sr isotopic characteristics and petrogenesis of the Proterozoic granitoids from the Central Indian Tectonic Zone (CITZ): constraints on Proterozoic crustal evolution in the CITZ. Geochemical Journal. 56, 160–176.

7. **Meraj Alam**, Indrajeet Saket, Vikram P. Singh, Arunanshu Ojha, Debabrata Nayak, Pushpraj Tiwari, Ashwin Pundalik (2021). Comparative Study of Amarkantak, Shahdol, and Umaria Basalt lava Flows from the Eastern Deccan Volcanic Province (EDVP): Field and Petrographic characteristics. Xplore - The Xavier's Research Journal, 12(2), 88-104

8. **M. Alam**, A.K. Choudhary, H. Mouri & T. Ahmad. 2017. Geochemical characterisation and petrogenesis of mafic granulites from Central Indian Tectonic Zone (CITZ), India. Geological Society, London, Special Publications, 449, 207-229, https://doi.org/10.1144/SP449.1**.**

9. **Alam, M.,** Naushad, M., Wanjari, N. and Ahmad, T. 2009. Geochemical characterizations of mafic magmatic rocks of the Central Indian Shield: Implication for Precambrian crustal evolution. Virtual Explorer, Australia, volume 32, 1-21.

Proceedings

1. Mishra, M., **Alam, M.,** Kaulina, T., Ahmad, T. (2024). Geochemical Constraints on the Petrogenesis of Tirodi Gneissic Complex (TGC) from Central India. In: Çiner, A., *et al*. Recent Research on Sedimentology, Stratigraphy, Paleontology, Geochemistry, Volcanology, Tectonics, and Petroleum Geology. MedGU 2022. Advances in Science, Technology & Innovation. Springer, Cham. https://doi.org/10.1007/978-3-031-48758-3_2

2. Saket, I., **Alam, M.,** Raza, M.A., Sadiq, M. (2024). Petrography and Mineral Chemistry of the Granitoids in the Eastern Part of Central India, Central Indian Tectonic Zone (CITZ). In: Çiner, A., *et al*. Recent Research on Sedimentology, Stratigraphy, Paleontology, Geochemistry, Volcanology, Tectonics, and Petroleum Geology. MedGU 2022. Advances in Science, Technology & Innovation. Springer, Cham. https://doi.org/10.1007/978-3-031-48758-3_28

3. **Meraj Alam,** Talat Ahmad, Tatiana Kaulina (2025). Petrogenesis and geochemical characterization of mafic magmatic rocks from the Central Indian Tectonic Zone (CITZ): Insights into crustal evolution In: proceedings of Mediterranean Geoscience Union, Annual Meeting, Istanbul, 25-28 (2023)

Scientific Presentations in Conferences:

1. Meraj Alam, Mukesh K. Mishra, Tatiana Kaulina, Talat Ahmad (2025). Geochronological and geochemical evidence of magmatic linkages between Mafic granulites and Tirodi granitoids in the

Central Indian Tectonic Zone (CITZ): Implications for the Columbian Supercontinent Fragmentation. Goldschmidt 2025, **Prague, Czech Republic**

2. **Meraj Alam,** Talat Ahmad, Md. Naushad, Aswini K. Choudhary (2024). Geochemical and Petrogenetic Insights into Proterozoic Mafic Magmatism in The Central Indian Tectonic Zone (CITZ): Isotopic Constraints on Crustal Evolution. American Geophysical Union (AGU) USA
3. Mukesh Mishra, **Meraj Alam,** Tatiana Kaulina, Talat Ahmad (2022). Geochemical constraints on the petrogenesis of Tirodi Gneissic Complex (TGC) from central India In: proceedings of Mediterranean Geoscience Union, Annual Meeting, Istanbul, 25-28 (2022)
4. **Meraj Alam,** Talat Ahmad, Mukesh K. Mishra, Tatiana V. Kaulina. (2021). Zircon U-Pb geochronology, Nd-Sr (whole-mineral) isotopic and geochemical characterization of mafic granulites from the Central Indian Tectonic Zone: Age constraints on crustal evolution for central Indian Shield. Goldschmidt Virtual 2021.
5. **Alam, M.,** Naushad, Md., Ahmad, T. (2020). Geochemical and Sm–Nd isotopic constraints on the petrogenesis and tectonic significance of magmatism in Mahakoshal belt, central India. **Goldschmidt 2020, Hawaii, USA**.
6. **Alam, M.,** Ahmad, T. 2016. Geochemical characterization and petrogenesis of mafic and Felsic granulite from the Bhandara-Balaghat Granulite (BBG) belt, Central Indian Tectonic Zone (CITZ). National Conference on Precambrian of India & Field Work, Bundelkhand University, Jhansi
7. **Alam, M.,** Mishra, M.K., Kaulina, T.V., Ahmad, T. 2016. Geochemical characterization, Sm-Nd and U-Pb zircon chronology of the Tirodi Gneissic Complex (TGC), Central Indian Tectonic Zone (CITZ): constraints on Proterozoic crustal evolution. **35th IGC, Cape Town, South Africa**
8. **Alam, M.,** Chaudhary, A., Naushad, M., Ahmad, T. 2015. Geochemical and isotopic characterization of felsic magmatism from Central Indian Tectonic Zone (CITZ), central India: implication of Nd model ages and Crustal growth processes. ***Goldschmidth-2015, Prague, Czech Republic. Abstract number: 2659***
9. **Alam, M**., Ahmad, T., Choudhary, A. K. 2013. Geochemical characterizations of mafic magmatic rocks of the Central Indian Tectonic Zone (CITZ): implication for Precambrian crustal evolution. ***"IGCP-SIDA 599 meeting and Field trip to Archean Granitoids, Supracrustals and Crust Formation Bundelkhand Craton Central India". Abstract vol. pp.9.***
10. **Alam, M.,** Ahmad, T., Kaulina T. 2012. Geochemistry and petrogenesis of mafic magmatic rocks of Bhandara-Balaghat Granulite Belt, Central India. ***IGCP-SIDA 599 meeting and Field trip to the Early Archaean Dniester-Bug Complex in southern Ukraine. Abstract vol. pp. 9.***
11. **Alam, M.,** Ahmad, T. 2012. Geochemistry and petrogenesis of mafic magmatic rocks of Bhandara-Balaghat Granulite Belt, Central India: Significance of tectonic setting and age**.** ***34th International Geological Congress, Brisbane, Queensland, Australia. Abstract vol. pp.44.***
12. **Alam**, M., Shukla, S., Mishra, M. K., Naushad, M., Ahmad, T. 2011. Geochemistry and petrogenesis of Mafics magmatic rocks of Balaghat-Bhandara Granulite Belt- constraints on tectonic setting. ***International Symposium on Precambrian Accretionary Orogens and Field Workshop in the Dharwar Craton, Southern India. Abstract vol. pp. 84.***

13. **Alam, M.,** Naushad, M., Wanjari, N. and Ahmad, T. 2010. Geochemical characterizations of mafic Dyke of Central Indian Tectonic Zone (CITZ): Implication for crustal evolution. ***6th International Dyke Conference 2010 Varanasi India. Abstract vol. pp. 4***

14. T Ahmad, MK Mishra, KC Longjam, **M Alam**, KB Joshi, MD Naushad, SJ Devi, KC Dass, S Kumar (2010). Characterization of the Proterozoic mafic magmatism in the Central Indian Shield–constraints on crustal evolution. *National Symposium on Geology and Mineral Resources of Bundelkhand Craton (GMRB-2010).*

15. **Alam, M.,** Ahmad, T., 2009. Geochemistry and Petrogenesis of Mafic Dykes from Chhindwara District, M.P, Central Indian Tectonic Zone (CITZ), Central Indian Shield. **2nd*International Conference on Pre-Cambrian Continental Growth and Tectonism. Jhansi India. Abstract vol. pp. 31.***

Workshops attended: 01 (International) + 01 (National) = 02

Symposia in International Conference: 01 (35th IGC-2016, Cape Town, South Africa)

Session chair: 03 (35th IGC-2016, Cape Town, South Africa)

Academic visit abroad:

S.No	Institution visited	Academic activities
1.	IGC-2012 Brisbane, Australia	Abstract paper presentation
2.	IGCP-SIDA 599 meeting and Field trip to the Early Archaean Dniester-Bug Complex in southern Ukraine	Attend meeting, abstract paper presentation and field trip
3.	Goldschmidt 2015, Prague, Czech Republic	Abstract paper presentation
4.	IGC-2016, Cape Town	Key note speaker and 3-sessions chaired