Dr. Arif Husain Ansari, PhD Scientist D

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Research Interest

Origin of Life, Astrobiology, Organic Biomarkers, Evolution of Oceanic biogeochemical cycling.

I am a trained biogeochemist and have worked on various earth and environment domains that include rivers, oceans, Arctic glaciers, Precambrian sedimentary rocks, and hot springs. My main research interest lies in unraveling the fine details of modern and past C-N-S and trace elements cycling by analyzing major organic/inorganic chemical species and their stable isotopic compositions in the representative samples.

Awards and Honours

- Marie Curie Fellowship (2008-2011) at the University of Sheffield, UK.
- Junior Research Fellowship in Earth Sciences (June 2006) by Council for Scientific and Industrial, Research, Govt. of India.
- National Eligibility for Lectureship in Environmental Science (December 2005) by University Grant Commission, Ministry of Human Resource Development, Government of India.

Ten Selected Publications

- **1. Ansari AH**, Pandey SK, Ahmad S, Sharma M, Govil P, Chaddha AS, Sharma A (2023). High primary productivity in an Ediacaran shallow marine basin influenced by strong seasonal to perennial upwelling. *Geological Magazine* (Accepted).
- **2. Ansari AH**, Singh VK, Kumar P, Sharma M, Sharma A, Patnaik S, ... & Ramanathan, AL (2023). Hydrogeochemistry, Geothermometry, and Sourcing of High Dissolved Boron, Tungsten, and Chlorine Concentrations in the Trans-Himalayan Hotsprings of Ladakh, India. *Hydrology*, 10(6), 118.
- **3. Ansari AH** (2023). Detection of organic matter on Mars, results from various Mars missions, challenges, and future strategy: A review. *Frontiers in Astronomy and Space Sciences*, 10, 1075052.
- **4. Ansari AH**, Singh VK, Sharma M, Kumar K (2022). High authigenic Co enrichment in the non-euxinic buff-grey and black shale of the Chandarpur Group,

- Chhattisgarh Supergroup: Implication for the late Mesoproterozoic shallow marine redox condition. *Terra Nova*, *34*(1), 72-82.
- **5. Ansari AH**, Pandey SK, Kumar K, Agrawal S, Ahmad S, Shekhar M (2020). Palaeoredox link with the late Neoproterozoic–early Cambrian Bilara carbonate deposition, Marwar Supergroup, India. *Carbonates and Evaporites*, 35(2), pp.1-13.
- **6. Ansari AH**, Ahmad S, Govil P, Agrawal S, Mathews RP (2020). Mo-Ni and organic carbon isotope signatures of the mid-late Mesoproterozoic oxygenation. *Journal of Asian Earth Sciences*, 191, p.104201.
- **7.** Limaye SS, Mogul R, Smith DJ, **Ansari AH**, Slowik GP, Vaishampayan, P (2018). Venus' Spectral Signatures and the Potential for Life in the Clouds. *Astrobiology* 18(9), 1181 1198.
- **8. Ansari AH**, Pandey SK, Sharma M, Agrawal S, Kumar Y (2018). Carbon and oxygen isotope stratigraphy of the Ediacaran Bilara Group, Marwar Supergroup, India: Evidence for high amplitude carbon isotopic negative excursions. *Precambrian Research* 308, 75-91.
- **9. Ansari AH** (2016). Stable isotopic evidence for anaerobic maintained sulphate discharge in a polythermal glacier. *Polar Science*, 10(1), 24-35.
- **10.Ansari AH,** Hodson AJ, Heaton THE, Kaiser J, Marca-Bell A (2013). Stable isotopic evidence for nitrification and denitrification in a High Arctic glacial ecosystem. *Biogeochemistry* 113(1-3), 341-357.

Membership of Professional Societies

Member of Geochemical Society (USA).