

Dr. Arif Husain Ansari, PhD

Scientist E

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Research Interests

Precambrian Biogeochemistry; Sedimentary Geochemistry; Stable Isotope Geochemistry; Organic Geochemistry; Astrobiology; Palaeoenvironmental Reconstruction.

Academic Appointments

Scientist E (2026–Present); Scientist D (2022–2025); Scientist C (2018–2021); Scientist B (2013–2017), BSIP. Marie Curie Initial Stage Training Fellow, University of Sheffield (2008–2011). CSIR-JRF, National Institute of Oceanography (2007–2008).

Education

PhD, University of Sheffield (2013); MSc, Jawaharlal Nehru University (2006); BSc, DDU Gorakhpur University (2004).

Selected Publications

- **Ansari AH**, Shukla Y, Singh GK, Singh AK, Sonker A, Ansari MA (2026). Biogenicity of amorphous carbonaceous matter in the hemispheroidal microbialites of Paleoproterozoic Bajna Dolomite: AH Ansari et al. *Journal of Earth System Science*, 135(2), p.114.
- **Ansari AH**, Das A, Ansari NG, Sonker A (2025). Tracing early life on Mars: lessons from organics produced in high-altitude hotspots of Ladakh. *Progress in Earth and Planetary Science*, 12(1), 1-19.
- **Ansari AH**, Das A, Sonker A, Ansari NG, Ansari MA (2024). Assessment of the health risks associated with heavy metal contamination in the groundwaters of the Leh district, Ladakh. *Environmental Geochemistry and Health*, 46(10), 369.
- Ansari MA, **Ansari AH**, Mishra R, Arif M, Jena PS, Dabhi A, ... & Agrawal S (2024). Centennial-millennial scale global climate-linked monsoonal and non-monsoonal changes in the eastern Arabian Sea during the last 42,800 years. *Marine Geology*, 472, 107307.
- **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*, 160(8), 1607-1623.
- **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.

- **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.
- **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.
- 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.
- **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.

Extramural Grants

- **MoES Grant (2025-2028) – Co-Project Investigator**
Project Title: Terrestrialisation of Plant during Palaeozoic in Tethyan Himalaya: Biomarker, floral and isotopic evidences and causative factors for shift in floral diversity. (INR 61 Lakh)
- **SERB-CRG Grant (2023-2026) – Project Investigator**
Project Title: Biomolecule preservation in modern and relict Ladakh hot spring deposits, with implications for finding life on Mars. (INR 41.6 Lakh)
- **KDMIPE-ONGC Grant (2022-2024) – Project Member**
Correlation of the Vindhyan in Son and Chambal Valley by using High-resolution Biostratigraphy, Chemostratigraphy, Palaeoredox reconstruction, Palaeoenvironment, and Palaeogeography. (INR 48 Lakh)
- **SERB-DST Young Scientist Grant (2015-2018) – Project Investigator**
Project Title: High-resolution stable isotopic and geochemical studies of the Late Neoproterozoic-Early Cambrian Bilara Group, Marwar, Rajasthan, to understand the contemporary carbon cycle and the Shuram enigma. (INR 12 Lakh)

Field Research Experience

Himalayan hydrothermal systems (Ladakh); Precambrian sedimentary basins of India; Arctic glacial environments (Ny-Ålesund, Svalbard); Arabian Sea research cruise; Coastal and estuarine environments of western India

Teaching

AcSIR Pre-PhD Courses: Biogeochemistry, Organic Geochemistry, Inorganic Geochemistry.