Abhisikta Goswami



POSTDOCTORAL RESEARCHER | GEOLOGY • GEOCHEMISTRY • EARLY EARTH

Gwangju, Republic of Korea • 82-010-4681-9063 • abhisikta002@gmail.com
Google Scholar: https://scholar.google.com/citations?user=CvbNMC0AAAAJ&hl=en

PROFILE

Postdoctoral Researcher at the G-LAMP Research Institute, Chonnam National University, Gwangju, Republic of Korea (Dec 2024–Present), working on an NRF-funded multidisciplinary project. Over seven years of research experience in marine carbonate and metasedimentary geochemistry, with expertise in stable isotopes (C, O), TN/TOC, trace elements, REE, geochronology, and Precambrian basins. Strong background in field geology, sedimentology, sequence stratigraphy, and structural geology.

CURRENT POSITION

Postdoctoral Researcher — G-LAMP Research Institute, Chonnam National University, Gwangju, Republic of Korea | Dec 2024–Present

NRF-funded multidisciplinary research on geochemistry, Precambrian basins, isotope geochemistry, and geochronology.

SELECTED PUBLICATIONS

- Goswami, A., Mohanty, S.P., Das, S., Sarangi, S., Mohanty, D. & Barik, A. (2025). Ocean paleo-redox condition during early Lomagundi-Jatuli event: records from major and trace element proxies in carbonate rocks of the Aravalli Supergroup, India. International Journal of Earth Sciences.
- Goswami, A., Sarangi, S., Mohanty, S.P., et al. (2023). Negative δ13Ccarb excursions within early part of the Lomagundi event recorded in the Paleoproterozoic sedimentary carbonates, Aravalli Supergroup, Rajasthan, India: Chemostratigraphy and basin evolution. Precambrian Research 399, 107240.
- Ananth, C., Bhadra, S. & Goswami, A. (2020). Contrasting kinematics of brittle-shears within the Salem–Attur and Bhavani shear zone, south India: Tectonic implications. Journal of Earth System Science 129(1).

BOOK CHAPTER

Goswami, A. & Kundu, G. (2024). Geological and Geomorphological Interaction of Landslides in the Himalayan Region. Springer, Disaster Risk Book Series.

EDUCATION

Ph.D., Applied Geology | IIT (ISM) Dhanbad, India | 2024

Thesis: Geochemistry of metasedimentary rocks of Aravalli Supergroup, Rajasthan: With special reference to the Great Oxidation Event (GOE).

M.Sc., Applied Geology | Pondicherry University. India

Thesis: A Comparison of the Kinematics of Salem–Attur and Bhavani Shear Zone, South India.

B.Sc., Geology | Durgapur Government College, University of Burdwan, India

RESEARCH EXPERTISE

- Precambrian geology & basin evolution
- Geochemistry of carbonates & metasediments
- Stable isotopes (C, O), TN & TOC
- Trace elements & REE geochemistry
- Geochronology & tectonothermal histories
- Paleoweathering, paleoredox & early Earth processes
- Field geology, sedimentology & sequence stratigraphy
- Structural geology

ANALYTICAL & TECHNICAL SKILLS

- ICP-MS / HR-ICPMS
- XRF / XRD / SEM / EPMA
- TIMS / IRMS
- Stable-isotope geochemistry
- Zr geochronology
- QGIS / Xpert HighScore
- Adobe Illustrator

SELECTED CONFERENCES

- Goldschmidt 2023
- EGU General Assembly 2022
- Goldschmidt 2019

RESEARCH FOCUS

Aravalli Supergroup; Lomagundi–Jatuli Event; Great Oxidation Event; paleosols; carbonate geochemistry; isotope systematics; Precambrian environmental change.