

Postdoctoral research position in geochemistry and organic petrology

Topic: Organic Matter Dynamics and Phosphogenesis in Phosphorite Formations: A Comparative Study of the Mishash, Monterey, and Phosphoria Systems

International Geochemical & Petrological Study of Phosphorites (Israel & USA)

This research aims to advance our understanding of the processes governing organic matter (OM) preservation, degradation pathways, and phosphogenesis in phosphorite systems, focusing on three globally significant formations: the Late Cretaceous Mishash, Miocene Monterey, and Permian Phosphoria formations. These phosphorites are not only critical geological archives of paleoenvironmental and oceanographic conditions but also serve as major reservoirs of oil, gas, and phosphorus, a nonrenewable resource essential for agriculture and food security. By clarifying the connections between OM, mineral composition, and diagenetic pathways, this study contributes directly to strategies for sustainable exploration and management of phosphorite resources.

We are seeking a highly motivated postdoctoral researcher to join a cutting-edge international collaboration. Expected salary about 3100\$ per month

Location: Jerusalem, Israel

Start date: mid-2026 to early 2027 – flexible

Postdoctoral length: two to three years (minimum of 18 months)

The position: this project offers a unique opportunity to conduct interdisciplinary research based in Israel, combined with targeted expeditions to the United States. The selected candidate will engage in:

- Diverse sampling: conducting fieldwork sampling campaigns in Israel and sampling at a national core repository in the U.S.
- Advanced analysis: Utilizing state-of-the-art geochemical and petrological methodologies.
- High-end instrumentation: Gaining hands-on experience in advanced analytical laboratories.
- International mobility: Funded research trips to the USA for specialized petrology work.

Candidate Profile: we are looking for a curious, independent, and ambitious researcher with a strong background in Geology, Geochemistry, or Earth Sciences. Advanced written communication skills are essential, as evidenced by a demonstrated history of successful scholarly publication.

To Apply: Please send your CV to Aya Schneider-Mor- ayas@gsi.gov.il