

Call for Proposals

No. 40

7 June 2022

Priority Programme “Dynamics of Ore Metals Enrichment – DOME” (SPP 2238)

In March 2019, the Senate of the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) has established the Priority Programme entitled “Dynamics of Ore Metals Enrichment – DOME” (SPP 2238). This call invites proposals for the **second** three-year funding period (2023–2026).

The Priority Programme DOME investigates the dynamics of ore metals enrichment in nature. Its aim is to develop knowledge-based predictive models of how metals enrichment takes place and where to look for new deposits that can provide the resources for present and future societal growth. Ore deposits are defined and exploited at the mine scale, but they can only be understood as the result of a process chain in large and complex geological systems operating over longtime scales. The enrichment of metals in nature involves coupled processes of mineral dissolution, transport of metals in multicomponent solutions, and precipitation of ore minerals due to changes in pressure-temperature-compositional conditions. Biotic processes may play key roles in near-surface environments. Therefore, the DOME programme solicits research proposals that take an integrative approach to solve outstanding problems of ore formation.

Proposals should contribute to one or both of the following key areas:

(A) Field studies of natural ore-forming systems and exemplary deposits. The choice of deposit type and study area is open and should be based on the potential for research excellence, for major advancement in understanding ore-forming processes, and for synergies with other projects in the DOME programme, past or present. Research on mid- to low-temperature deposits in sedimentary basins is particularly welcome and applicants should consider that access to active marine systems may be provided through the site of the German Exploration License in the Indian Ocean (INDEX).

(B) Laboratory and/or numerical simulation studies to constrain material properties, behaviours, and process parameters that control metals enrichment in systems addressed in (A). Aspects to consider include mineral solubility and metal speciation in complex high- and low-temperature fluids, the effects of phase transitions, fluid properties, dynamics of fluid flow and fluid-rock interaction, equilibrium vs. kinetic conditions, and the role of organic matter and micro-organisms in metals enrichment. We encourage numerical studies that aim at bridging the gap in scale between laboratory experiments and geologically relevant time and length scales. Collaborations between experimental and field-based projects are particularly welcome.

Proposal Submission

The call is open to current and new members of the SPP. All proposals must be written in English. The deadline for proposal submission is **26 October 2022**.

In preparing your proposal, please read the programme guidelines (form 50.05, section B) and follow the recent proposal preparation instructions (form 54.01). These forms can either be downloaded from DFG website or accessed through the elan portal. If you would like to submit a proposal for a new project within the existing Priority Programme, please go to Proposal Submission – New Project – Priority Programmes and select “SPP 2238” from the current list of calls. Previous applicants can submit a proposal for the renewal of an existing project under Proposal Submission – Proposal Overview/Renewal Proposal. Applicants must be registered in elan prior to submitting a proposal to the DFG.

Young scientists seeking their own post-doctoral funding (“Eigene Stelle”) are encouraged to apply with a project hosted at one of the eligible German institutions. Applicants may contact the programme committee for assistance in finding a suitable host.

Applicants are encouraged to contact the programme coordinator (Professor Dr. Max Wilke, max@geo.uni-potsdam.de) prior to submission to ascertain if their proposal fits the scientific scope of the programme.

Further Information

More information on the Priority Programme is available under:
www.uni-potsdam.de/spp2238

The elan system can be accessed at:
<https://elan.dfg.de/en>

DFG forms 50.05 (04/21) and 54.01 (03/22) can be downloaded at:
www.dfg.de/formulare/50_05
www.dfg.de/formulare/54_01

For scientific enquiries please contact the Priority Programme coordinator:
Professor Dr. Max Wilke, Universität Potsdam, Institut für Geowissenschaften, Karl-Liebknecht-Straße 24–25, 14476 Potsdam, phone +49 331 977-5108, max@geo.uni-potsdam.de

Questions on the DFG proposal process can be directed to:
Programme contact: Dr. Iris Sonntag, phone +49 228 885-2253, iris.sonntag@dfg.de
Administrative contact: Jasmin Sowa-Rother, phone +49 228 885-2364, jasmin.sowa-rother@dfg.de