

Call for Participation

Workshop: Middle Jurassic Earth system and Timescale (M-JET)



2-6 June 2025 (provisional dates), Figueira da Foz, Portugal

We invite applications for participation in an ICDP-sponsored scientific (and field) workshop on Middle Jurassic geology, stratigraphy and Earth system science. Aims of the workshop are to (i) discuss and identify outstanding research questions and formulate a detailed scientific plan in preparation of a full proposal for drilling and recovering core spanning the entire Middle Jurassic sedimentary strata of the Cabo Mondego Formation (northern Lusitanian Basin, Portugal) and/or auxiliary strata elsewhere, and (ii) develop ideas and foster collaborations for future proposals to fund drilling.

The Middle Jurassic (~174–161 Ma), a crucial but overlooked time in Earth's history, represents the dawn of the modern era, when plate configuration, oceanographic currents and biological evolution first started to resemble Earth's present-day conditions. The Middle Jurassic is characterized by significant global climatic fluctuations between hot- and icehouse states associated with major sea level changes and environmental upheaval, reorganization of global oceanographic currents with the opening and closure of ocean gateways during the break-up of Pangea, major evolutionary and ecosystem changes on land and in the oceans, the onset and rapid expansion of carbonate burial fluxes to the deep ocean, and perturbations to global (bio-) geochemical cycling, including the carbon cycle. However, the lack of well-studied complete and expanded sedimentary stratigraphic archives and large uncertainties on the Middle Jurassic geological timescale hampers constraints on Middle Jurassic Earth system processes.

We propose to drill a continuous and complete sedimentary archive spanning the Middle Jurassic to obtain fresh and unaltered sedimentary rocks to apply a wide spectrum of geoscientific methods to study the above-mentioned geological and Earth system processes and to constrain a detailed geological timescale spanning the Middle Jurassic stages.

We invite researchers from the international scientific community, representing a broad range of disciplines, including but not limited to sedimentology, chemo-/bio-/cyclo-/magnetostratigraphy, isotope (including clumped isotopes) and sedimentary geochemistry, organic geochemistry, geochronology, paleobiology, palaeoclimatology, -oceanography, -magnetism, and structural geology/tectonics, to participate in the workshop.

The workshop will be held in Figueira da Foz (Portugal) and will include a one-day field excursion to the Cabo Mondego coastal outcrops. ICDP will (partly) support travel and expenses for selected participants, with financial support preferentially given to early career scientists and participants from low-income countries.

Please submit a brief application with contact details, 2-page CV, and a (maximum) 2-page summary of relevant expertise and intended contributions to the workshop to Micha Ruhl (micha.ruhl@tcd.ie) and Ricardo L. Silva (ricardo.silva@umanitoba.ca), prior to 1st November, 2024.

Participants will be selected by a steering committee and invited on the basis of the relevance of their expertise to the aims of the project and workshop, and the need for a balanced representation of expertise, disciplines, and career stages. Early career scientists are encouraged to apply. Preference will be given to scientists from ICDP member countries.

For more information, see:

https://www.icdp-online.org/projects/by-continent/europe/m-jet-portugal/