

Call for Participation

Workshop 'Drilling into Seismogenic Zone of M2.0 – 5.5 earthquakes in South African gold mines'

October 31 – November 3, 2015, Potchefstroom, South Africa

Several times a year, mining-induced earthquakes with magnitudes larger than 2 occur in deep South African gold mines. The largest event recorded so far is the M5.5 earthquake near Orkney, South Africa on 5 August 2014 whose activated fault is only some hundred meters below the nearest mine operations (at 3.0 km depth). Similar structures will be exhumed by mining in the near future. This provides the very rare opportunity to sample fresh fault material by drilling and to study stress and the environment using near-field monitoring tools.

In order to discuss the scientific objectives and technical feasibility of active fault zone drilling and monitoring in mines, we will hold an ICDP-sponsored workshop from October 31 to November 3 in Potchefstroom, South Africa with co-sponsoring from Ritsumeikan University. The workshop will include reviews of regional geology, tectonics and induced seismicity as well as ICDP/IODP fault drilling projects, followed by discussion of a tentative drilling and monitoring plan. On November 2, participants will be offered the opportunity to visit potential drilling sites underground and on November 3, working groups will prepare a full proposal to ICDP, including discussions on drilling, logging, core management, stress measurements, post-drilling monitoring, followed by a plenary wrap-up session.

We invite interested individuals from academia and experts in mine safety and induced seismicity to attend the workshop. Please submit a brief application with contact details, 2-page resume, and a summary of relevant expertise and intended contribution to the workshop and planned project to Hiroshi Ogasawara (ogasawara.icdp@gmail.com). The deadline of application is October 10, 2015, the workshop participation is limited to a maximum number of 80 attendees.

A steering committee will decide on invitations and travel support (fully or partially) taking into account the relevance of the applicants' research relevant to the goals of the workshop and the need for balanced representation of countries and disciplines. Preference will be given to scientists from ICDP member countries (or countries with an interests in joining ICDP) and to scientists whose expertise complements that of existing project participants. Further information about the workshop is available at http://www.icdp.net.za.