

AKE 11: Geothermal Energy from Unconventional (Volcanic) Resources

Time: Wednesday 15:00–15:30

Location: RW HS

Invited Talk

AKE 11.1 Wed 15:00 RW HS

Geothermal energy - from conventional to unconventional resources — •EGBERT JOLIE, ERNST HUENGES, and DAVID BRUHN — GFZ German Research Centre For Geosciences, Telegrafenberg, 14473 Potsdam, Germany

Since conventional geothermal resources are successfully explored and utilized in various regions around the world, research activities started focusing on solutions for different, so far untouched resources. Therefore, unconventional geothermal systems such as Enhanced Geothermal Systems received more and more attention for geothermal exploitation during the past decades. In addition, the development and

exploitation of high-temperature geothermal fields with supercritical conditions are emerging as a new hot topic in various parts of the world. These resources provide a large potential for the future development of the geothermal sector; however, they require also extensive research efforts in the fields of exploration, resource assessment, reservoir characterization and development of exploitation and utilization concepts. Currently, several projects are targeting this type of renewable energy resource in Italy, Iceland, Japan, USA, Mexico, New Zealand and Kenya. As an example the GEMex project will be presented, which is a collaboration effort of a Mexican and European consortium on two unconventional geothermal resources in the Trans-Mexican Volcanic Belt.