ABSTRACT: This talk presents an invitation to participate in an international research initiative that provides the fundamental science basis for reducing uncertainties in harvesting resources from conventional and unconventional reservoirs. The approach aims specifically at safely unlocking resources that are deeper and hotter than ever reached before. Such unconventional resources are Geothermal Energy, Shale gas, Shale Oil, Tight Gas, Coal Bed Methane. They are trapped in a low porosity/permeability environment and are difficult to produce. We propose to tackle this challenge through a new multidisciplinary fundamental science approach. We combine a recent multiphysics, multiscale geomechanics theory with laboratory and modern computational assisted petrophysics and material science concepts.

Non-Skoltech attendees should request access to the building in advance by sending their passport details to energy.colloquium@skoltech.ru

Colloquium schedule and information on how to get to the colloquium can be found at http://www.skoltech.ru/en/energy-colloquium/