Thanks to the 'Royal Holloway Travel Award', I was able to visit one of the most important earth science and engineering conference in the world. Which called Paris 2017 including SPE EUROPEC.

In 2004, The Society of Petroleum Engineers (SPE) and EAGE jointly agreed to include SPE EUROPEC into the EAGE's annual event. This co-operation resulted in a truly multi-disciplinary event providing a fully diverse range of geoscientific and reservoir engineering contributions. The SPE EUROPEC programme runs parallel to the EAGE Paris 2017 programme and will include several sessions during the main conference days (13-15 June) and two short courses on the days before and after the main conference days.

That event was an amazing experience for me. In that conference, I had a chance to present part of my work for professionals from academia and industry. I also had brilliant opportunity to networking with institutions that are fund researchers in UK and Europe. My paper is right now available online and free access. I also attached its abstract here.

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Hydraulic Fracturing in Oil and Gas Resources and its Risks and Hazards While its Interacting with Natural Faults

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Summary

Naturally fractured reservoirs make up a large proportion of the planet's hydrocarbon resources. The permeability of these reservoirs is controlled by the connectivity of the fracture network. However, it should be pointed out that the development is still poorly understood especially during hydraulic fracturing operation in oil/gas or geothermal industry. Normally, in reality very high tensile stresses are generated around the tips of fractures when the fluid pressure inside them is high enough. Fracture linkage occurs when these areas of high stress within a minimum separation distance of each other and are greater than the tensile strength of the rock.

Multi-phase fluid flow is tested in fractured reservoir analogue models to view the effect of fracture networks in the case of optimizing enhanced oil recovery (EOR) and Enhanced Geothermal System (EGS). The results show extensive connectivity of fractures is crucial for efficient penetration of the injected phase into the reservoir. Finally, flowing fluid in a fractured reservoir, fractures act as faster pathways for injected materials to travel through than the matrix.