UNIVERSITA' DEGLI STUDI DI PADOVA DIPARTIMENTO DI GEOSCIENZE Via Gradenigo 6 35131 Padova

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Geosciences and geoenergy: will there be a future beyond the black gold era?

Thursday, 27 May 2021 - 16:30

Webinar "Live" on-line at Zoom link: https://unipd.zoom.us/j/82978693795?pwd=TmlBSDBVRFVNL3NwTUpGSW8rWFdpQT09

Speaker: **Prof. Andrea Moscariello**

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In order to cope with the climate changes observed in recent decades accompanied by weather instability, excessive periods of drought, catastrophic events such as hurricanes or torrential rains and the threat of unstoppable sea level rise, in 2015 many nations signed the Paris Agreement to limit anthropogenic global warming. To achieve these long-term goals, countries aim to peak global greenhouse gas emissions as soon as possible to achieve a climate-neutral world by mid-century. A major consequence, this postulate the gradual but relatively fast abandon of exploration and production of hydrocarbons which represented the largest industry that has shaped the modern world for the past 150 years. Petroleum geoscience, besides providing a large opportunity for employment for long period, has been also one of the key driver behind major of scientific breakthrough such as the improved of understanding of plate tectonics and effect of relative sealevel of stratal pattern also known as sequence stratigraphy.

Will the end of a hydrocarbon-dominated society have therefore an impact on the development of geoscience?

In this talk we will offer some reflections and points of discussion on this matter providing some examples from the ongoing study and exploration activities in Switzerland where a new focus on geo-energy is looking at subsurface energy resources in a holistic approach combining research activities in petroleum systems with geothermal and geological sequestration of CO2 demonstrating how the skills and competence required for exploring and developing hydrocarbons are the same to those ones required to ensure a successful and effective development of 'greener' energy source contributing to the energy transition.

Proposer: Prof. Massimiliano Ghinassi