



Sveučilište u Zagrebu
**RUDARSKO
GEOLOŠKO
NAFTNI FAKULTET**



Rudarsko-geološko-naftni fakultet poziva vas na predavanje

Dr.sc. Renato Zagorščak:

**Pregled znanstvenih aktivnosti i pristupa u rješavanju geo-okolišnih problema -
Geoenvironmental Research Centre (GRC), Cardiff University**

23.05.2017. u 14 h

**Rudarsko-geološki-naftni fakultet, Pierottijeva 6, Zagreb
prizemlje, učionica P6 002**

Dr. sc. Renato Zagorščak, Research Associate - Flexis Project, Geoenvironmental Research Centre, Cardiff School of Engineering, Cardiff University, Wales, UK

<http://grc.engineering.cf.ac.uk/people/226/>



Životopis:

Diplomirao na Rudarsko-geološko-naftnom fakultetu, studij Rudarstva - smjer Geotehnika. Od 2013. zaposlen je na Sveučilištu u Cardiffu, gdje sudjeluje u 2 istraživačka projekta financirana od strane EU (£10.1mil. SEREN i £24.5mil FLEXIS). Bavi se znanstvenim istraživanjima u području geo-okolišnog inženjerstva. Pod mentorstvom Prof.dr.sc. Hywel Rhys Thomas-a izradio je i nedavno obranio (2017. g.) doktorski rad pod nazivom "An investigation of coupled processes in coal in response to high pressure gas injection". U sklopu projekta FLEXIS, dr.sc. Renato Zagorščak voditelj je znanstvenih istraživanja na području eksploatacije nekonvencionalnih ležišta prirodnog plina i podzemnog uplinjavanja ugljena.

Sažetak predavanja:

U predavanju će biti prikazan detaljan pregled istraživačkih aktivnosti i znanstvenih dostignuća postignutih na Cardiff University-u (UK) u sklopu rada Geoenvironmental Research Centre-a (GRC). Detaljnije će biti prezentirane mogućnosti GRC-a u modeliranju ponašanja tla i stijena, laboratorijskih i terenskih istraživanja te procjene rizika vezanih uz temu geo-okolišnog inženjerstva s fokusom na geološko skladištenje nuklearnog otpada, plitku geotermalnu energiju, podzemno uplinjavanja ugljena, eksploataciju nekonvencionalnih ležišta prirodnog plina i geološkog skladištenja ugljikovog dioksida.

Molimo potvrdu dolaska na e-mail: mia.pavlica@rgn.hr do 19.5.2017.



FLEXIS (Flexible Integrated Energy Systems) Project – 2016-2021

FLEXIS is a five year, £24.5m pan-Wales energy research project, supported through the Welsh European Funding Office (WEFO). Led by Cardiff University, FLEXIS includes the leading energy academics from Cardiff University, Swansea University and the University of South Wales, FLEXIS will focus on the development of an energy systems research capability in Wales, building on the world-class capability that already exists in these Universities in the energy area. The project will tackle some of the most pressing issues currently facing society, such as climate change, rising energy prices and fuel poverty. As a part of the FLEXIS Project, the SEREN2020 team within the GRC will focus on following key areas, ensuring legacy for the world class results achieved by its predecessor:

- Smart Thermal Energy
- Unconventional Gas
- Carbon Sequestration in Coal and Soil
- Geoinformatics and Environmental Monitoring

SEREN (Sustainable Earth Energy) Project – 2010-2015

Led by the GRC in partnership with the British Geological Survey (BGS), Seren was a £10.1 million European Regional Development Fund (ERDF) research project, aimed at developing innovative engineering technologies for commercial applications within the following geo-energy themes:

- Ground Source Heat
- Underground Coal Gasification
- Carbon Sequestration in Coal and Soil
- Geoinformatics: Low Carbon Toolkit
- Advanced Computational Modelling