### The Institute of Geotechnical Engineering (IGT), BOKU,

warmly invites you to participate in the courses of

## Guest professor

# Annan Zhou, Ph.D.

Associate Professor and HDR Manager for Civil and Infrastructure Engineering Royal Melbourne Institute of Technology (RMIT)

University of Natural Resources and Applied Life Sciences, Vienna Department of Structural Engineering and Natural Hazards



Professor Annan Zhou from the Royal Melbourne Institute of Technology (RMIT) will visit the Institute of Geotechnical Engineering from the 9th-20th December, 2019 and teach the courses **Thermo-hydro-mechanical coupled behaviour of soils** and **Numerical simulation of soil-atmosphere subjected to global climate change**.

You are warmly welcome to take part in his lectures!

# 873014 Thermo-hydro-mechanical coupled behaviour of soils

This short course will give you a brief introduction to soil's basic behaviour under thermal, hydraulic and mechanical loads, with highlights on the coupling among thermo-hydro-mechanical responses. This course will cover the following topics (1) Soil's mechanical behaviour and testing methods; (2) Water retention behaviour and tests; (3) Unsaturated soils and its general behaviour; (4) Advanced testing method on unsaturated soils; (5) Soil behaviour in non-isothermal conditions; and (6) Temperature effect on water retention behaviour.

#### Time: 9th-13th December 2019

# 873015 Numerical simulation of soil-atmosphere subjected to global climate change

This short course will give you a brief introduction to soil's constitutive modelling method regarding the basic soil behaviour under thermal, hydraulic and mechanical loads, with highlight on the coupling among thermo-hydro-mechanical responses. This course will cover the following topics: (1) Shear strength criteria for soils; (2) Cam-clay model for saturated soils; (3) Advanced soil model: UH model; (4) Water retention equations and shear strength for unsaturated soils; (5) Constitutive modelling for unsaturated soils and (6) Constitutive modelling for soils in non-iso-thermal conditions.

#### Time: 16th-20th December 2019

For further information, including lectures time, please visit;

#### https://boku.ac.at/baunat/igt/guestprof

Place: University of Natural Resources and Life Sciences (BOKU), Seminar room 19, Simonyhaus (Top floor, SIMH-DG/01), Peter-Jordan-Straße 65, 1180 Vienna