Technical Workshop

Soil and groundwater remediation: sustainable management strategies, effective clean-up methods and emerging contaminants

16-17th May 2013
AGH University of Science and Technology in Krakow, Poland

The aim of the workshop is to explore the principles and application of sustainable management strategies for soil and groundwater remediation, considering innovative clean-up methods and emerging contaminants. It also provides the opportunity to put theory into practice via group exercises and case studies. The workshop is presented by the ADVOCATE Marie Curie Initial Training Network (www.theadvocateproject.eu/). After attending this workshop, participants will be able to:

1. Understand the principles, advantages and limitations of selected novel and innovative soil and groundwater remediation methods
2. Understand the methodology for selecting the most appropriate site-specific strategy for clean-up of contaminated soil or groundwater
3. Develop appropriate site-specific management strategies to deal with emerging contaminants in soil and groundwater

The workshop will be presented by experienced training facilitators from Krakow University of Science and Technology (Poland), the University of Sheffield (UK) and external experts.

Technical Programme

Thursday 16th May

- Managing soil and groundwater contamination at military airports (Polish airforce bases)
- Innovations in approaches for soil and groundwater remediation
- *In situ* stimulation and remediation of contaminated fractured soils
- Numerical contaminant fate and transport modelling as a tool for designing effective groundwater remediation measures
- Overview of conceptual site models (CSM) and their formulation for contaminated soil and groundwater management
- Introduction to group-based exercise

Friday 17th May

- Group-based exercise using a case study to develop a methodology for selecting the most appropriate site-specific strategy for the management of contaminated land and groundwater. This will consider the development of a conceptual site model, defining appropriate site characterisation objectives and data needs, laboratory/pilot tests and numerical modelling scenarios, to formulate recommendations for data collection, devise management strategies and select remediation options.
- Group presentation and plenary session

The workshop will start at 09.00 on Thursday 16th May and end at 17.00 on Friday 17th May. Information on the venue, accommodation options and travel to the workshop is given below.

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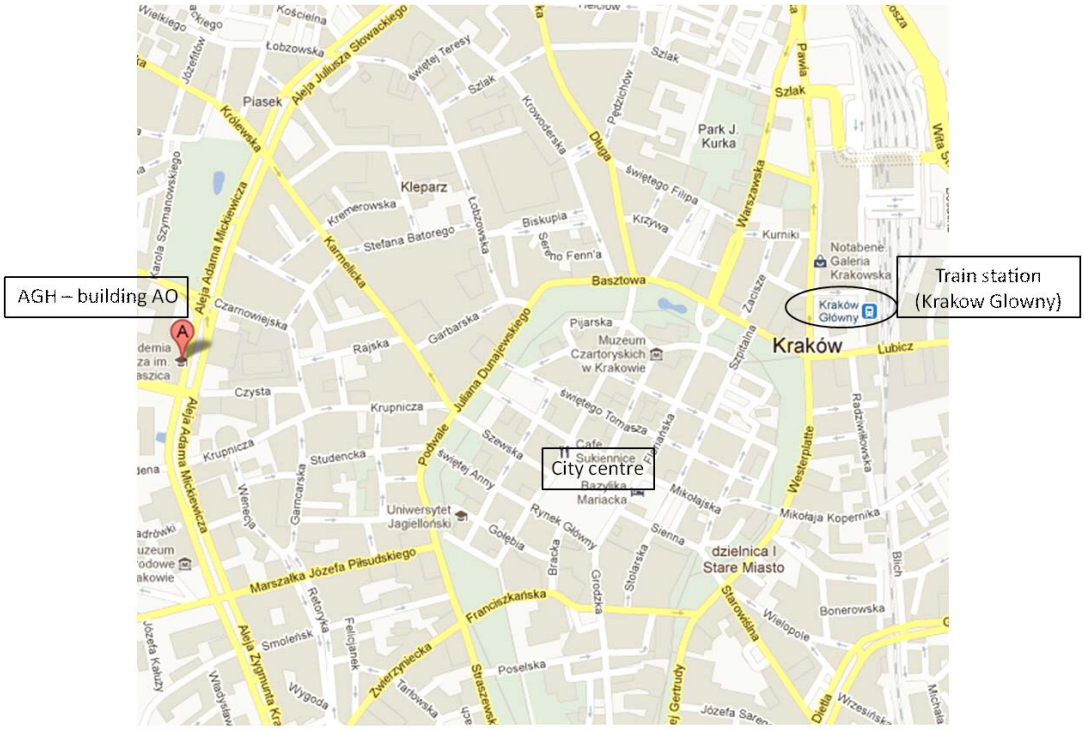
Venue Information

The workshop will be delivered in the Main Building A-0, located in the Faculty of Geology, Geophysics and Environmental Protection, AGH University of Science and Technology, Al. Mickiewicza 30, 30-059 Krakow. There will be notices to direct you to the specific teaching room. More information about AGH can be found at www.agh.edu.pl

The venue is located within walking distance of the main railway station Krakow Glowny (ca 20 minutes) and the city centre (ca 15 minutes). There is also public transportation (tram/bus services) from the station and city centre. The names of the bus/tram stations closest to the venue are: 'AGH' or 'Plac Inwalidow'. Bus and/or tram tickets (3.80 PLN for a single ticket) can be purchased from the ticket machines in most buses, or in small shops selling newspapers and tobacco called 'kiosk'. The taxi fare from the railway station is ca 20 PLN.



Location of AGH University - building A-0 - the venue of the workshop

AGH: building A-0 - the venue of the workshop

Further Information

Getting to Krakow

Krakow can be reached:
by plane:

- Direct flights to Krakow are available from many airports like Munich, Frankfurt, Prague, Vienna, Brussels, Helsinki, Athens and others
- Balice-Krakow International Airport is very close and well connected to the city centre by public transportation (train/bus services) and by taxis; bus tickets to the main station/city centre (4.00 PLN single trip, bus no. 292) can be purchased from the bus driver, the RELAY newsagent's shop – T1 international terminal, mezzanine, the ticket machine at the bus stop, ticket vending machines can be found on 292 line buses; train tickets to the main railway station (12 PLN one-way ticket, return ticket 20 PLN - valid for 30 days from the first journey) can be purchased on a train from train attendant/automated cashier, in terminal T1 from automated cashier located near centre exit; taxi fares to the city centre start from ca 50 PLN - for details, please visit the website: www.krakowairport.pl

- Katowice-Pyrzowice International Airport – direct mini-bus service from the airport to Krakow is available (ca 50 PLN one-way ticket) - for details, please visit the website: www.katowice-airport.com/en

- Chopin (Okecie) International Airport (Warsaw) – for details, please visit the website: www.lotnisko-chopina.pl

by train:
Krakow is well connected with Warsaw by InterCity trains (ca 3 hours, fares from 65 to 130 PLN depending on the type of trains) and InterRegio trains (ca 3.5 hours, fare 55 PLN). For details and train timetables, please visit the website: www.intercity.pl

Many relevant details concerning travel to Krakow can be found at:
http://www.krakow-info.com/travel.htm
http://www.krakow-info.com/trains.htm
For other information relevant for Krakow visitors, please visit: http://www.krakow.pl/en

Accommodation

A range of accommodation to suit all budgets is available in Krakow. The following websites provide examples of the options available.

http:www.cracow-life.com/sleep/hotels.php
http://www.cracowonline.com/accomodation.php
http://www.staypoland.com/krakow-hotels.asp
http://www.krakow.pl/en

There is also Hotel Polonez, situated 500 metres from the AGH University of Science and Technology – for details see: http://www.booking.com/hotel-polonez

Participants should make their own arrangements for accommodation and contact specific providers directly with enquiries.

Further Information

What is provided?

The workshop is free to attend. A hardcopy copy of the lecture notes for each session will be provided to participants. Complimentary refreshments will be provided on each day, but participants are expected to pay for their own meals and accommodation during the workshop.

Participants should please note that the group exercise will require a scientific calculator and graduate level knowledge or experience of hydrogeology

Registration

Registration for this workshop is essential as places are limited. To book a place on the workshop, send your name and email address to:

Prof. Grzegorz Malina
AGH University of Science and Technology, Faculty of Geology, Geophysics and Environmental Protection, Department of Hydrogeology and Engineering Geology, Al. Mickiewicza 30, 30-059 Krakow, tel.: 48 12 6175038, e-mail: gmalina@agh.edu.pl

or

Sandra Johana Grajales Mesa, MSc, e-mail: johanagrajales@hotmail.com
and
Ewa Kret, MSc, e-mail: ewa.kret@gmail.com

You must register for this workshop by Wednesday 1st May 2013 to reserve your place. Registrations after this time will not be accepted.

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