



3rd Circular

3rd International Workshop
on Geoelectrical Monitoring

GELMON 2015

VIENNA, 24 - 26 November 2015

Call for Papers

Supported by:



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The Workshop

Geoelectrical monitoring has significantly developed over the recent years as an emerging branch in applied geophysics. As the big success of the 1st and 2nd Workshop on Geoelectrical Monitoring, held 2011 and 2013 in Vienna, proved, geoelectrical monitoring is one of the most innovative emerging branches in the area of applied geophysics within recent years. It is now applied to solve problems in key areas of public and political interest, such as natural hazard mitigation, agriculture optimization, CO₂ storage and groundwater exploration. To foster scientific discussion and to support cooperations among the scientific groups, the Geological Survey of Austria (GSA) invites to the

"Third International Workshop on Geoelectrical Monitoring",

which will be held in Vienna from 24th – 26th November 2015. The scope of this workshop is not only focused on the presentation of state-of-the-art results but significant time will also be reserved for the discussion of special topics of data acquisition, processing, inversion and interpretation. Presentations on all related aspects of geoelectrical monitoring are encouraged, covering theoretical developments, measurements and instrumentation, and case studies. Specialists in the field of geoelectrics and related scientific disciplines are invited to submit abstracts for *oral or poster presentation* specifically focused on the topic of geoelectrical monitoring. Additionally, special sessions are planned, including one invited keynote lecture and several short presentations on focused topics. We encourage all participants to contribute with a presentation to the following topics:

- Infrastructure monitoring
- SP/IP monitoring

- Handling of large 4D data sets
- Quality assessment of monitoring data

The program committee will review the submitted abstracts and compile the final workshop program.

It is planned to publish the abstracts of the conference in the "*Berichte der Geologischen Bundesanstalt*" series after the meeting.

Furthermore, we want to invite speakers to contribute to a special issue on 'Geoelectrical Monitoring' in the 'Journal of Applied Geophysics' after the workshop.

On November 23rd a **Special Course on Integrated Modeling of Flow, Transport and Geoelectrics with COMSOL Multiphysics** will be held (min. number of participants: 10, max. number of participants: 15). For details on the special course, see next page.

Registration and Deadlines

Please register by e-mail and state your intent to participate/present in the workshop or book the special course.

Interested authors should submit short abstracts (max. 1 page, 12 pt.) until September 30th, 2015. Please submit also title, authors and type of presentation (oral, poster). Due to administrative reasons, the workshop will be limited to 100 participants.

Deadlines:

Submission of short abstract (max. 1 page, 12 pt.):
September 30th, 2015

Confirmation of acceptance of abstracts:
October 15th, 2015

Registration for Special Course (€ 600):
October 15th, 2015

Early Registration for Workshop (€200):
October 15th, 2015

Registration by bank transfer after Oct. 15th (€ 230):

November 15th, 2015

On-site registration (€ 250):

November 24th-26th, 2015

The registration as well as the submission of abstracts should be done by email to: stefanie.gruber@geologie.ac.at (reference "GELMON 2015").

However participation is only guaranteed by timely payment of the registration fee by bank transfer to:

BIC: BAWAATWW – IBAN: AT781400004610769697
Purpose: "GELMON 2015 registration workshop / special course"
Owner: "Geologische Bundesanstalt Teilrecht"

For companies and institutes there will be the opportunity to present their products and research in the form of a company booth (€ 400), which will be on display during the conference in a special room adjacent to the main conference room. For further information please contact stefanie.gruber@geologie.ac.at

Depending on the availability of free places in the workshop a certain amount of reduced fare participation tickets will be available for active students younger 26 (€100, send application to above email).

Scientific Program Committee:

SUPPER Robert (Geological Survey of Austria)

KIM Jung-Ho (Korea Institute of Geoscience and Mineral Resources)

CHAMBERS Jonathan E. (British Geological Survey)

TSOURLOS Panagiotis (Aristotle University of Thessaloniki)

DAHLIN Torleif (Lund University)

The Venue and Time Schedule

The workshop will be held in the Presentation Hall of the Ministry of Science, Research and Economy (BMFWF), Freyung 3, 1010 Vienna. The workshop will start on Nov. 24th, 10:00 a.m. and close on Nov. 26th, 4:00 p.m.

The special course will be held at the main building of the Geological Survey of Austria, Grosses Besprechungszimmer, 3rd floor, Neulinggasse 38, 1030 Vienna on Nov. 23rd, 9:00 a.m. to 04:00 p.m. Participants have to bring their own laptop.

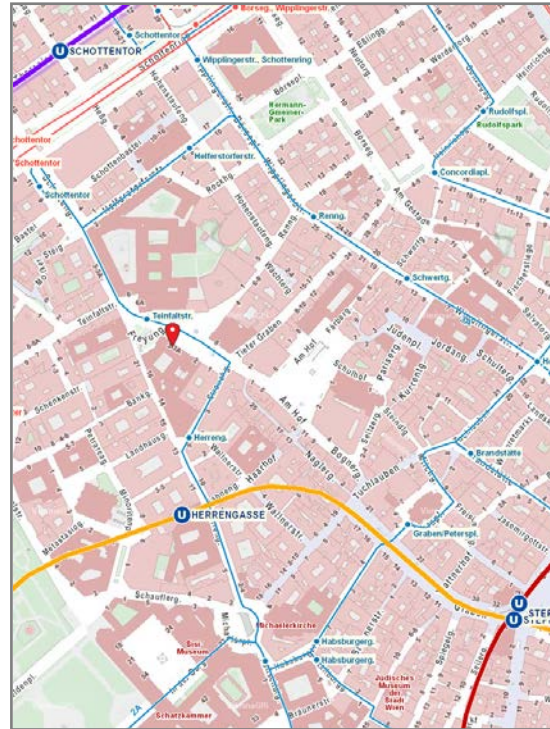
Content of Special Course:

A typical application of geoelectrical monitoring is the detection of hydrological or transport processes within the subsurface exploiting the dependency of electrical conductivity of porous media on the saturation with fluids or their mineralization. Today, modeling and inversion of geoelectrical monitoring is still mainly focused on the electrical problem. However, much new insight could be gained for the design of experiments if both the detection method and the processes to be observed were addressed together.

How would it be, if you could model ground water or unsaturated flow, transient transport problems e.g. for pollutants or salt tracers simultaneously with the geoelectrical response to those processes within one integrated simulation platform?

The one-day training course introduces COMSOL Multiphysics in its ability to perform such coupled process simulations. Participants will learn how to set up flow, transport and geoelectrical models and couple them effectively in stationary and transient studies. Parametric sweeps are used to investigate the dependency of the model result on physical parameters or electrode configurations. Finally, the concepts of the COMSOL Server and Application Builder are introduced that allow the user to build and distribute custom-made simulation solutions.

Venue of GELMON 2015 – WORKSHOP



Venue of the SPECIAL COURSE

