

Short course and workshop

“Emission (Luminescence) and Optical Absorption Spectroscopy: Basis and Applications in Earth Sciences”

Short course of the Mineralogical Societies of Austria and Germany.
Supported by the European Mineralogical Union and Horiba Jobin Yvon, München.

Wien, Austria, March 3-7, 2008

General information:

Venue: Institut für Mineralogie und Kristallographie, Universität Wien, Althanstr. 14, A-1090 Wien, Austria.

Check the host institute's www pages (<http://www.univie.ac.at/mineralogie/>) for a detailed description of the location.

Main organizer: Prof. Lutz Nasdala (lutz.nasdala@univie.ac.at)

Co-organizer: Ao. Prof. Manfred Wildner

Language: The entire course will be held in English.

Support of students: This course is accepted by the German Mineralogical Society (DMG) and the Austrian Mineralogical Society (ÖMG) as “Ph.D. students course”. Participating students and Ph.D. students who are DMG and/or ÖMG members will get a € 50.– travel grant. This is also the case for students and Ph.D. students who apply for DMG / ÖMG membership during the course. However, DMG /ÖMG members who live in Wien are not entitled to receive the travel grant.

Costs and registration: Course fee € 120.00; reduced fee € 60.00 for students, Ph.D. students, and young researchers (less than two years after completion of their Ph.D.). The fee will cover course materials, refreshments, and the short course dinner. To register, please transfer the course fee as indicated below, and inform us about the transfer via e-mail for pre-registration of your attendance.

Participants from Austria: Transfer fee to the Österreichische Mineralogische Gesellschaft, account 7807220, P.S.K. (BLZ 60000), Verwendungszweck: “Doktorandenkurs” and your name.

Participants from another European Union member country: Transfer fee to the Austrian Mineralogical Society (make sure you use the so-called EU standard transfer that is free of charge!), BIC: OPSKATWW, IBAN: AT316000000007807220, purpose “Ph.D. course” plus your name.

Participants from other countries: Do NOT attempt to do any bank transfer (this is too expensive for us); please contact us instead to arrange payment details. The fee may, for instance, be paid by credit card, or in cash when you are here. Note that this is NOT an option for participants from EU member countries (who must transfer the fee in advance).

Registration deadline: January 31, 2008. There is a limit of 40 participants, so early registration is suggested.

Travel: There are many options to get reasonably priced flight connections from most European airports to airports Wien-Schwechat or Bratislava. We suggest you make your reservations early. From both airports there are regular train (Wien-Schwechat, 30 minutes) and bus (Bratislava, 90 minutes) shuttle connections to the city centre of Wien. Wien can also be easily reached by ICE-trains. For further information on how to get to the course venue see

http://www.univie.ac.at/Mineralogie/MINSPEC/docs/AEworkshop_map.pdf

Accommodation: There are many hotels of all categories in Wien, some of them are close to the location where the workshop is held. Students may want to check the youth hostel, A-1070 Wien, Myrthengasse 7, Tel. +43-1-5236316-0, Fax +43-1-5235849, E-Mail hostel@chello.at, or the low-budget hotel ETAP St. Marx, A-1030 Wien, Franzosengraben 15, Tel. +43-1-7984555, for reasonably priced accommodation.

Brief description: This five-day short course will give an introduction to the two techniques of luminescence and optical absorption spectroscopy, which includes the theoretical basis, practical training in the use of spectrometers, data reduction, and interpretation of spectra. It is target towards diploma students and Ph.D. students who are interested in applying these spectroscopy techniques; however, the participation of PostDocs and other colleagues is welcome as well. Organizers aim at putting participants in the position to use the two techniques in their own research.

In addition, an overview of modern applications in the Earth sciences will be given through a number of talks presented by invited experts in the field and (to a limited extent) also by course participants in 15 minute short talks. In addition, participants are welcome to present own research results on posters. Participants will also be given the opportunity for limited hands-on analyses of own samples.

Main lectures include (preliminary list):

D. Weiß (Jena): What we can learn from fireflies – luminescence in nature and lab.

A.M. Zaitsev (Staten Island, N.Y.): Optical spectroscopy of diamond.

*M. Gaft (Raanana, Israel): Laser-induced time-resolved luminescence of minerals:
fundamentals and applications.*

*U. Hälenius (Stockholm): Applications of optical absorption spectroscopy to the
cation distribution in oxide minerals.*

T. Häger (Mainz): Absorption and emission spectroscopy in gemmology.

F. Birke (Horiba, München): Applications in fluorescence spectroscopy.