

WSC1: Raman spectroscopy and imaging: Applications in the Earth sciences (short course)

Date: August 20-21 (pre-conference)

Venue: Institute of Mineralogy and Crystallography, University of Vienna (Austria)

Sponsors:

Horiba Jobin Yvon GmbH, Bensheim, Germany
Austrian Mineralogical Society (ÖMG)

Contact person: Lutz Nasdala (University of Vienna, lutz.nasdala@univie.ac.at)

Convenors: Lutz Nasdala (University of Vienna), Eugen Libowitzky (University of Vienna), Bernd Bleisteiner (Horiba Jobin Yvon, Bensheim)

Invited speakers:

Polona Ropret (Institute for the Protection of Cultural Heritage of Slovenia, Ljubljana, Slovenia): “Raman spectroscopy in the scientific investigation of works of art”

Reinhard Kaindl (University of Innsbruck, Austria): “Application of Raman spectroscopy to fluid and melt inclusions”

Tamás Váczi (Bay Zoltán Foundation for Applied Research, Miskolc, Hungary): “Raman spectroscopy applied to the study of radiation damage in minerals”

Length (days): 2

Brief summary: The two-day short course will give an introduction to Raman spectroscopy. This will include the theoretical basics, practical training in the use of state-of-the-art spectrometers, introduction to data reduction and interpretation, and an overview of applications in various fields of the Earth sciences. Obtaining both high-resolution point analyses and Raman-based images will be discussed and demonstrated. A number of current-day applications in the Earth sciences will be presented in more detail through invited talks by experts in the field.

The short course aims at putting participants in the position to apply Raman spectroscopy in their own research. For the laboratory training, participants are encouraged to bring own samples for analysis. Also, participants may want to bring their own mineral spectra that they were not able to identify. The course instructors will have two comprehensive, up-to-date mineral spectra libraries available for identification purposes.

No. of sessions: 4 (Friday and Saturday morning and afternoon), Total amount of ca. 14 hours, including

- three seminars
- two laboratory sessions (parallel sessions 120 min. each; maximum of six attendees per group; four groups)
- three scientific talks

No. of participants: max. 24

Price per participant: EUR 60.00 (includes refreshments, and the short course dinner on Friday evening)

Further information: For details (preliminary schedule, how to find the short course venue, accommodation in Vienna, etc.) please see <http://www.univie.ac.at/Mineralogie/WSC1.htm>.