

## Short course and workshop

### **“Vibrational Spectroscopy (Infrared Absorption and Raman): Applications in Geosciences”**

Wien, March 5-9, 2007.

#### *Preliminary list of talks by invited speakers and short course participants:*

Monday, March 5, 17:45, Lecture hall HS2 (2A122): Public talk (talk series of the Austrian Mineralogical Society)

H. Skogby (Swedish Museum of Natural History, Stockholm, Sweden): Infrared spectroscopy: a sensitive tool for studies of trace amounts of hydrous components in minerals

Tuesday, March 6, 11:15-12:30, Lecture hall HS4 (2Z221): Session “Spectroscopy of inclusions”

11:15 R. J. Bakker (University of Leoben, Austria): Raman spectroscopy of fluid inclusions: gases, aqueous solutions, brines and trapped crystals

12:05 N. McLoughlin (University of Bergen, Norway): Raman spectroscopy of volcanic bioalteration textures

Tuesday, March 6, 15:15-17:30, Eberhard Clar-Saal (2B204): Session “Modern applications of Raman spectroscopy”

15:15 E. Libowitzky (University of Vienna, Austria): Structural constraints on Raman band parameters

15:50 R. Geiger (Horiba JY, Bensheim, Germany): Raman spectroscopy, today a 2D-methodology

16:40 P. Rösch (Friedrich-Schiller-University, Jena, Germany): Surface-enhanced and tip-enhanced Raman spectroscopy

Wednesday, March 7, 16:00-17:45, Lecture hall HS4 (2Z221): Session “Spectroscopy of carbon”

16:00 L. Nasdala (University of Vienna, Austria): Vibrational micro-spectroscopy of diamond and graphite

16:20 H. Kuzmany (University of Vienna, Austria): Raman spectroscopy of carbon phases

17:10 O. Beyssac (Laboratoire de Géologie, CNRS, Paris, France): Raman spectroscopy of natural carbon and some geological applications

Thursday, March 8, 15:00-17:00, Seminar room 2A225 or Eberhard Clar-Saal 2B204 (to be announced): Session “Spectroscopy of radiation-damaged minerals”

15:00 L. Nasdala (University of Vienna, Austria): Spectroscopy of radiation-damaged minerals

15:30 R. Titorenkova (Bulgarian Academy of Science, Sofia, Bulgaria): Effect of radiation damage and thermal recovery on the zircon microstructure

16:15 T. Vácz (University of Vienna, Austria): Raman and IR absorption spectroscopy: versatile tools in the study of self-irradiation effects

Friday, March 9, 9:30-11:45, Lecture hall HS2 (2A122): Session “Modern applications of infrared spectroscopy”

9:30 A. Beran (University of Vienna, Austria): Polarised IR spectroscopy: Information on the structural incorporation modes of hydrous defects

10:00 N. Bolfan-Casanova (Université Blaise-Pascal, Clermont-Ferrand, France): Infrared spectroscopic studies of volatiles in mantle phases

10:45 B. Lendl (Vienna University of Technology, Austria): Extracting useful information from evolving data sets using two-dimensional correlation spectroscopy (2DCoS) and Multivariate Curve Resolution (MCR-ALS)