

Workshop

Mineralogical Raman spectroscopy and Raman microprobe analysis

organized by

**Institut für Geowissenschaften – Mineralogie
Johannes Gutenberg-Universität Mainz**

in co-operation with

Jobin Yvon GmbH, Bensheim

Institut für Edelsteinforschung, Idar-Oberstein

The workshop will be held in the Natural Sciences Building of Johannes Gutenberg-Universität Mainz (Becherweg 21, Mainz, Germany) from **March 10 to March 14, 2003**. It is predominantly addressed to undergraduate and graduate students, even though postdocs and interested analysts from the industry, gemstone labs and museums are welcome as well.

The workshop will try to do the splits between a short course that enables participants to use a Raman system for their own research, and a scientific workshop that gives an overview on the versatile use of the Raman technique in various disciplines. Seminars will impart basic knowledge on the physical background of Raman spectroscopy and technical details including confocal microprobe analyses and image formation techniques. Examples for current applications and progress are given in plenary lectures. The lab work will include basic introduction to the use of a Raman spectrometer (software, system alignment and calibration, data reduction) and practical analyses. Participants are welcome to bring own samples for analysis. Two confocal Raman microprobes will be available during the workshop.

Plenary lectures:

Prof. W. Hofmeister (Institut für Edelsteinforschung, Idar Oberstein & Mainz): Raman spectroscopic analysis of gemstones and the spectra database of the Institute of Gemstone Research.

Dr. R. Kaindl (Universität Graz): Raman microprobe analysis applied to the study of fluid inclusions.

Dr. W. Langer, Dr. B. Plage (Bundeskriminalamt Wiesbaden): Forensic application of Raman analysis.

Dr. L. Nasdala (Universität Mainz): Raman microprobe identification and characterization of minerals: applications in crystallography, petrology, biomineralogy, geochemistry and materials science.

Dr. I. Reese (Jobin Yvon, Bensheim): Image formation through Raman imaging and Raman mapping.

Prof. D. C. Smith (Muséum National d'Histoire Naturelle, Paris): Mobile Raman microscopy applied to geomaterials, biomaterials and pigments in art history and archaeology.

Dr. M. Ziemann (Universität Potsdam): Raman spectroscopy under high pressure und high temperature: experiments in the diamond anvil cell.

The fee for the workshop is € 175.00. For undergraduate and graduate students and young postdocs (PhD less than two years ago), the fee is reduced to € 50.00. This workshop is supported as "Doktorandenkurs" by the Deutsche Mineralogische Gesellschaft (DMG). Students who are DMG members and do not live in Mainz will get a € 50.00 grant from DMG. In order to further support the participation of students, the organizers offer free accommodation for students. Due to the limited lab space, there will be a maximum of 15 participants. Participants are asked to register before December 15, 2002.

For registration and further information please contact:

PD Dr. L. Nasdala

Institut für Geowissenschaften – Mineralogie, Johannes Gutenberg-Universität Mainz

Becherweg 21, D-55099 Mainz

Tel. +49-6131-3924781; FAX +49-6131-3923070; e-mail nasdala@mail.uni-mainz.de