

workshop

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WITec
focus innovations

Introduction to Confocal Raman Microscopy 17. - 18. November 2005 Ulm, Germany

The workshop will give a detailed introduction to the operational principles and instrumental configurations relevant to confocal Raman microscopy. Speakers from universities and industry will cover several aspects of modern Raman imaging and its fields of applications. An extensive hands-on session gives the

participants the opportunity to apply this knowledge and to evaluate their individual samples. Scientists interested in how to chemically identify and image the compounds of a sample at the highest spatial resolution are invited to participate. Typical research fields for confocal Raman

imaging are pharmaceuticals and cosmetics, materials and polymer sciences, archaeology and geology, forensics, coatings, thin films and all fields where a clear identification of the distribution of chemical compounds is a necessity.

Program

Thursday, November 17, 2005

10.00 - 10.30	
10.30 - 11.15	Prof. Dr. Jürgen Popp
11.15 - 12.30	Dr. Olaf Hollricher
12.30 - 13.15	
13.15 - 14.00	Dr. Shen Luk
14.00 - 14.45	Dr. Joachim Koenen
14.45 - 15.15	
15.15 - 16.00	Prof. Dr. Ralph Spolenak
16.00 - 16.45	Dr. Angelika Rück
16.45 - 17.45	
17.45 - 18.00	
19.00	

Registration & Coffee

The Raman Effect and its Applications in Microscopy: Principles of the chemical Identification of Molecules

Confocal Raman Microscopy: Instrumentation, Configurations and Accessories

Lunch Snack

Confocal Raman Microscopy in the Pharmaceutical Industry

Raman Imaging of Phase separations and Polymers

Coffee Break

Measuring residual stresses in thin films

Investigation of Biomaterials with Confocal Raman Imaging

Equipment Demonstration

Transfer to Hotels

Dinner

Friday, November 18, 2005

09.00 - 09.45	Dr. Ute Schmidt
09.45 - 12.30	
12.30 - 13.30	
13.30 - 16.00	

Combining Confocal Raman & Atomic Force Microscopy: Instrumentation and Applications
Equipment Demonstration & Hands-On Session

Lunch Snack & Wrap Up

Equipment Demonstration & Hands-On Session continuing



Fig. 1: Confocal Raman Microscope
WITec CRM 200

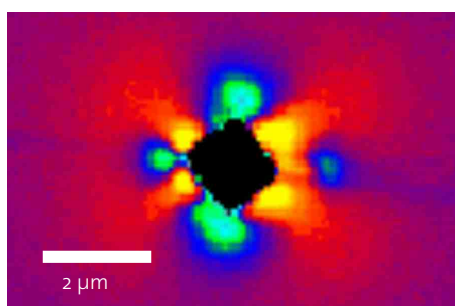


Fig. 2: Stress map around a Vickers indent on a silicon wafer. 10 000 spectra with an integration time of only 70ms per spectrum.

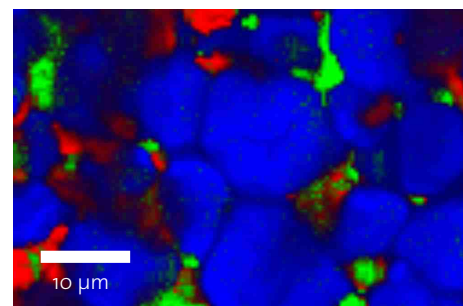


Fig. 3: Distribution of ASA (red+green) in a tablet.

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Speakers

Prof. Dr. Jürgen Popp

Prof. Popp is head of the Physical-Chemistry Institute at the University of Jena.

Prof. Dr. Ralph Spolenak

Prof. Spolenak is Chair of the Laboratory for Nanometallurgy at the ETH Zurich.

Dr. Shen Luk

Dr. Luk is technical director at Molecular Profiles Ltd., specializing in the application of advanced surface analytical technology.

Dr. Angelika Rück

Dr. Rück is project manager at the Institute for Lasertechnology in Ulm.

Dr. Olaf Hollricher

Dr. Hollricher is managing director at WITec and head of Research & Development.

Dr. Joachim Koenen

Dr. Koenen is managing director and co-founder of WITec.

Dr. Ute Schmidt

Dr. Schmidt is an Applications Scientist at WITec.

General Information / Workshop Fee

In order to register, please fill in the form below and mail or fax it to WITec (Fax: +49 (0) 700 94832 329). The number of participants is limited, so book early to save your place. The fee of 250.00 Euro for industrial and 190.00 Euro for academic participants includes training material,

meals and transportation to the hotels. Hotel arrangements must be made by the participants themselves. The workshop will take place at the WITec Headquarters in Ulm, Germany. An invoice for the participation fee will be issued upon

confirmation. The balance is due on 30. October 2005. Any cancellations prior to this date are free of charge. For cancellations after this date, we charge 30% of the initial fee. The language of the workshop is English.

Registration

I would like to register for the Workshop.

Institution:

E-mail:

Name and Title:

Address:

Phone:

Signature:

Fax:

Hotel Information

We recommend one of the following hotels:

Hotel Ibis, Neutorstrasse 12, D-89073 Ulm
Phone: +49 (0) 731 9647-0
Fax: +49 (0) 731 9647-123
http://www.accorhotels.com/accorhotels/fichehotel/gb/ibi/o800/fiche_hotel.shtml
Comfortable two star hotel in the city center near the train station. Rate: 59 Euro

Hotel Schiefes Haus, Schwörhausgasse 6
89073 Ulm, Phone +49 (0) 731 96793-0
Fax: +49 (0) 731 96793-33
<http://www.hotelschiefeshausulm.de>
Small but unique and beautiful hotel in the old town. Rate: 108 - 140 Euro

Hotel am Rathaus, Kronengasse 8-10
89073 Ulm, Tel: +49 (0)731 - 96849-0
Fax: +49 (0)731 - 96849-49
<http://www.rathausulm.de>
Nice hotel in the City Center near the old Town. Rates starting at 43 Euro

Maritim Hotel, Basteistr. 40, 89073 Ulm,
Phone: +49 (0)731 923-0
Fax: +49(0) 731 923-1000
<http://www.maritim.de/english/hotels/hotels/ulm.html>
Modern four star hotel at the river Danube, not far from the city center. Room rates starting at 131 Euro

For a hotel list and tourist information please visit: <http://www.tourismus.ulm.de>