Fraunhofer IKTS

RECENDT
RESEARCH CENTER NON DESTRUCTIVE TESTING

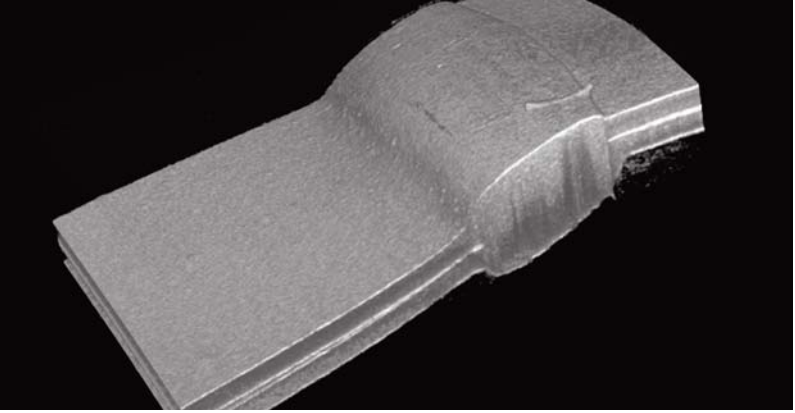
MARCH 25–26, 2015, DRESDEN, GERMANY

OPTICAL COHERENCE TOMOGRAPHY FOR NON-DESTRUCTIVE TESTING

PROGRAM

OCT4NDT
SYMPOSIUM

Supported by
The German Society for Non-Destructive Testing (DGZfP)



INVITATION

Optical Coherence Tomography (OCT) is a well-qualified tool for contactless structural imaging of various samples. Already well-established in the medical field, the application of OCT has been extended to diverse fields of non-destructive testing during the last years. In course of this progress, various devices for industrial measurements, process monitoring and research were developed.

With our invitation to the second international symposium on Optical Coherence Tomography for Non-Destructive Testing OCT4NDT we would like to settle a tradition for the OCT community.

The symposium is intended to serve as a platform enabling an exchange of information on market requirements, research interests and current results, skills and resources and facilitating the building of future partnerships. Engineers, designers and managers will lecture on their state-of-the-art developments and future prospects or display their products as exhibitor.

We are looking forward to meeting you in Dresden.

SECOND INTERNATIONAL SYMPOSIUM
OCT4NDT

FRAUNHOFER INSTITUTE CENTER DRESDEN

PROGRAM

WEDNESDAY, MARCH 25, 2015

9:00 Registration

OPENING

10:30 **Positioning OCT as an industrial quality assurance tool**
Dr. Christian Wunderlich (Fraunhofer IKTS-MD, Dresden, Germany)

SESSION 1: OCT TECHNOLOGY

Chair: Dr. Igor Meglinski (University of Otago, Dunedin, New Zealand)

10:50 **Optimal Doppler processing**
Prof. Edmund Koch (Technische Universität Dresden, Germany)

11:20 **High resolution Fourier domain optical coherence tomography at 2 micron wavelength regime for highly scattering material**
Haida Liang (Nottingham Trent University, United Kingdom)

11:40 **Time-frequency analysis for breaking the optical coherence tomography limits**
Marcin Strakowski (Gdańsk University of Technology, Poland)

12:00 Lunch in exhibition area

13:30 **Multimodal non-contact photoacoustic and OCT imaging**
Elisabeth Leiss-Holzinger (RECENDT Research Center for Non Destructive Testing GmbH, Linz, Austria)

13:50 **Master slave optical coherence tomography: a new tool for non-destructive testing and evaluation applications**
Adrian Bradu (University of Kent, Canterbury, United Kingdom)

14:10 **Optical coherent tomography system based on a self-calibrated swept source for applications requiring distances measurements over the centimeter**
Eneas N. Morel (Optoelectronics Laboratory, Facultad Regional Delta, Buenos Aires, Argentina)

14:30 **High resolution frequency domain optical coherence tomography in the Vis-NIR spectral range**
Prof. Edmund Koch (Technische Universität Dresden, Germany)

14:50 Coffee break in exhibition area

16:00 **FF-OCM for (bio)-material sciences**
Dr. Bettina Heise (Johannes Kepler University, Linz, Austria)

16:20 **Velocity measurements of polymer melts by means of Doppler optical coherence tomography and particle image velocimetry**
Andreas Buchsbaum (RECENDT Research Center for Non Destructive Testing GmbH, Linz, Austria)

16:40 **Estimation of marangony flow velocity with optical coherence tomography**
Alexander Bykov (University of Oulu, Finland)

17:00 **3D polymer weld seam characterization based on optical coherence tomography for laser transmission welding applications**
Philippe Ackermann (Fraunhofer IPT, Aachen, Germany)

19:00 Conference dinner in Dresden's historic city

22:00 End of first symposium day

THURSDAY, MARCH 26, 2015

SESSION 2: OCT APPLICATIONS

Chair: Dr. Thomas Härtling (Fraunhofer IKTS-MD, Dresden, Germany)

9:00 **Towards application of optical coherence tomography in pharmaceutical and food industries**
Dr. Igor Meglinski (University of Otago, Dunedin, New Zealand)

9:30 **In-line monitoring of the coating growth during the production of film-coated tablets**
Daniel Markl (Research Center Pharmaceutical Engineering GmbH, Graz, Austria)

9:50 **Paper density evaluation using optical coherence tomography**
S. V. Sindeev (Tambov State Technical University, Russia)

10:10 **OCT as a tool for tracing of art restoration treatments**
Prof. Piotr Targowski (Nicolaus Copernicus University, Torun, Poland)

10:30 Coffee break in exhibition area

12:00 **OCT for testing of planar ceramics**
Christian Wolf (Fraunhofer IKTS-MD, Dresden, Germany)

12:20 **Visualization of small-scale nucleate wall boiling using optical coherence tomography**
Lars Kirsten (Technische Universität Dresden, Germany)

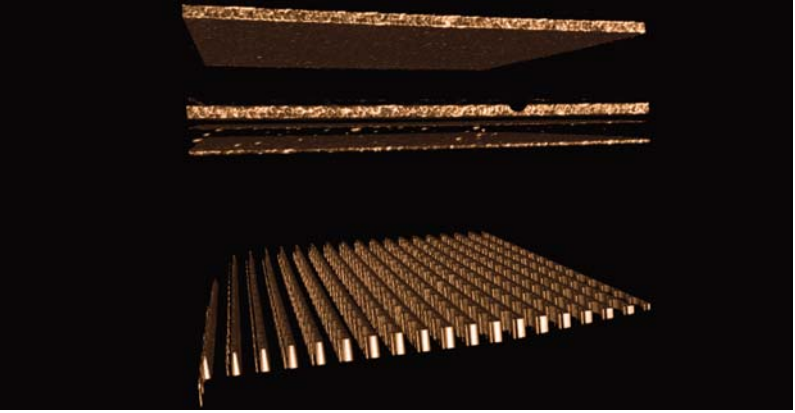
12:40 **Optical coherence tomography for the characterization of glass fiber composites**
Ping Liu (Delft University of Technology, The Netherlands)

13:00 **Characterization of absorptive thin film by optical coherence tomography covering full visible wavelength range**
Tuan-Shu Ho (National Taiwan University, Taipei, Taiwan)

13:20 **Closing remarks** by the organizers

13:30 Lunch in exhibition area

15:00 End of symposium



REGISTRATION FEES

Regular	Euro 300 (Euro 400 from Feb. 23, 2015)
Reduced*	Euro 150 (Euro 250 from Feb. 23, 2015)
Exhibitors	Euro 720

The registration fee includes coffee, two lunches, the conference dinner and the conference documents. Registration will be possible with the registration form on www.ikts.fraunhofer.de. Please use one form for each participant.

** Only students with valid student card qualify for the reduced fee.*

CONFERENCE VENUE

Fraunhofer Institute Center Dresden
Winterbergstrasse 28 | 01277 Dresden, Germany

HOTELS

Fraunhofer IKTS holds a block of rooms in different hotels. Room reservations should be made directly. If you make your reservation, please give the corresponding keyword in order to recieve the special hotel rate. Please visit our website for updated and more detailed information www.ikts.fraunhofer.de.

FRAUNHOFER IKTS

Fraunhofer Institute for Ceramic Technologies and Systems IKTS conducts applications-oriented research in the field of high-performance ceramics. The three branches of the institute, located in Dresden and Hermsdorf (Thuringia), jointly form the largest institution for ceramics research in Europe.

The Materials Diagnostics branch of Fraunhofer IKTS develops innovative methods and test systems to characterize material properties, to control the quality of products or to monitor manufacturing processes and plant components. Testing techniques based on acoustics, electromagnetics, optics, microscopy and radiation are used in many industries, like energy and environmental technology, metal industry, transportation or electronics.

CONTACT

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