



Invitation and Program

2nd Workshop on Terahertz Technology

March 1st/2nd, 2006 / University of Kaiserslautern, Germany

jointly organised by Fraunhofer Institut für Physikalische Messtechnik IPM and VDI-Kompetenzfeld Optische Technologien

International Forum on Terahertz Spectroscopy and Imaging

Background and Motivation

Terahertz technology is ready for application. Terahertz frequencies (0.1 THz ... 10 THz) can provide information not available in other parts of the spectrum. Extensive research over the last years has identified many attractive applications and user friendly THz systems are already on the market

The 2nd workshop on THz technology will be a forum for international R&D trends for applications in the field of THz technology.

Scope

The workshop addresses users, developers and manufacturers of THz measurement systems. The workshop will focus on recent developments in THz measurement techniques and new areas of applications, including THz-spectroscopy for quality control, THz imaging for defect detection and security aspects.

Workshop Chairs

Prof. Dr. E. Wagner Prof. Dr. R. Beigang Fraunhofer Institut für Physikalische Messtechnik IPM, Freiburg and Kaiserslautern, Germany

Patronage

The Workshop will be held under the patronage of the German Federal Ministry for Education and Research (Bundesministerium für Forschung und Technologie, BMBF).

Program

Wednesday, March 1st, 2006

- 13:15- Laboratory Tour 1 14:00
- 14:00 Welcome and Opening Remarks

 E. Wagner, Fraunhofer Institut für Physikalische Messtechnik, Freiburg (Germany)
- 14:15 New Horizon of THz Wave Technology for Industrial Applications (tutorial)

 X.-C. Zhang, THz Center for Research, Rensselaer Polytechnic Institute, New York (USA)
- 15:15 THz Research and Applications in RIKEN (tutorial)K. Kawase, Dept. of Quantum Engineering, Nagoya University, Nagoya (Japan)
- 16:15 Coffee Break + Poster Session
- 16:45 Solid-state Sources and Components for THz Applications

 E. Linfield, Institute of Microwaves and Photonics, University of Leeds, Leeds (UK)
- 17:30 Compact fs Fiber Lasers: System Performance and Applications

 A. Leitenstorfer, Fachbereich Physik, Universität Konstanz, Konstanz (Germany)
- 18:15- Laboratory Tour 2 19:00
- 20:00 Evening Reception

Thursday, March 2nd, 2006

- 09:00 THz Technology for Industrial Inspection and Quality Control
 - R. Beigang, Fraunhofer Institut für Physikalische Messtechnik, Kaiserslautern, (Germany)
- 09:45 Continuous-wave THz Photonics: System Aspects and Applications
 H. Roskos, Johann Wolfgang Goethe

Universität, Frankfurt (Germany)

- 10:30 Coffee Break + Poster Session
- 11:00 The Potential of THz Spectroscopy in the Pharmaceutical Environment
 P. Taday, TeraView Limited, Cambridge (UK)
- 11:45 THz Technology in Homeland Security
 R. Woodward, HT Consultants Ltd., Oxford,
 (UK)
- 12:30 Lunch Break + Poster Session
- 13:30 Perspectives on THz Commercialization and Application Development at Picometrix
 - J. White, Picometrix, Ann Arbor (USA)
- 14:15 Passive Millimetre Wave Imaging what it can and cannot do

 R. Appleby, S&DU Optronics QinetiQ, Malvern (UK)
- 15:00 Defence Terahertz: Sources, Detectors, Imaging and Applications
 G. Pomrenke, Air Force Office of Scientific Research, Arlington (USA)
- 15:45 Closing remarks / End of Workshop
- 16:00 Coffee Break
- 16:30- Laboratory Tour 3 17:15

Poster Session

A poster session is planned in the workshop. If you want to contribute to the poster session, please fill the corresponding fields in the registration form. Poster contributions without corresponding registration will not be accepted. In addition please send an abstract of one page A4 in rtf- or pdf-format as email attachment to Mrs. Karin Rufaut, rufaut@vdi.de, not later than Feb. 14th, 2006. The abstract must contain title of poster, authors and affiliations and the text body of 400 words at most. Please prepare your poster in A0 format.

Lab Tours

As indicated in the program, there are three possibilities for a tour through the labs of the TeraTec Group of the Fraunhofer IPM. Please fill the corresponding fields in the registration form if you want to participate in the lab tour.

Organisers / Contact

Verein Deutscher Ingenieure e. V. VDI-Kompetenzfeld Optische Technologien Dr. Marcus Scholl / Mrs. Karin Rufaut P.O. Box 10 11 39, D-40002 Düsseldorf e-mail: scholl@vdi.de or u.gat@vdi.de

Phone: +49 (0) 211 62 14-3 73 Fax: +49 (0) 211 62 14-1 61

Fraunhofer Institut für Physikalische Messtechnik Projektgruppe TeraTec c/o Technische Universität Kaiserslautern Dr. Joachim Jonuscheit Erwin-Schrödinger-Straße, Gebäude 46

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General Information

Registration: Please complete and forward the enclosed registration form (one form for each participant) to VDI-Kompetenzfeld Optische Technologien, Mrs. Karin Rufaut, address cf. above. Late registration at the workshop site is also accepted.

Cost share per participant € 295.(includes: copies of abstracts, CD with presentations, refreshments/lunch in breaks as indicated in program, dinner at evening reception)

Confirmation: Upon receipt of the completed form the registration will be confirmed. All material will be available at the registration desk on-site.

Payment Details: All payments must be made in Euro (€) by the following methods:

Foreign participants: Payment by credit card: Holders of Master Card, Euro Card, Visa or American Express may use their credit cards to cover all costs.

Your card number and expiration date should be added on the registration form. For quick and accurate processing of your registration, we would also appreciate a copy of your credit card together with the registration form.

German participants: Payment by bank transfer: After receipt of the invoice the payment should be settled.

Cancellation: Please understand that refunding of cost share is possible only if participation is cancelled at least 10 days before the workshop. The cost share will be refunded minus a processing fee of \in 50.- plus 16% VAT. In case of later cancellation the full cost share is due.

Note that participation can be transferred to another person.

Workshop Site: The workshop will be held on the campus of the University of Kaiserslautern, Germany:

Fachbereich Chemie der TU Kaiserslautern Erwin-Schrödinger-Straße D-67663 Kaiserslautern Gebäude/Building 52, Raum/Room 207

Registration Desk: The registration desk at the conference site will be occupied by Mrs. Karin Rufaut, VDI-Kompetenzfeld Optische Technologien (cf. "Contact")

Phone during conference.: +49 (0) 171 6 95 12 27 Opening Times: 10:00-19:00 h on March 1st, 2006, 08:30-17:30 h on March 2nd, 2006

How to reach the workshop site: Please find descriptions and maps under the following links: English: http://www.uni-kl.de/wcms/13.html German: http://www.uni-kl.de/wcms/13.html

Accomodation: For the participants of the workshop a certain number of rooms are reserved in the following hotels under the key words "Terahertz", resp. "TeraTec". Please contact the hotels at your earliest convenience to book your accommodation. Prices are for one night incl. breakfast.

Dorint Novotel Kaiserslautern Tel.: (+49)631/20150 St.Quentin Ring 1 Fax: (+49)631/27640 67663 Kaiserslautern h5399@accor.com single room € 91.-www.novotel.com Hotel Lautertaler Hof Tel.: (+49)631/3726-0 Mühlstr. 31 Fax: (+49)631/730-33 67659 Kaiserslautern info@lautertalerhof.de single room € 57.-www.lautertalerhof.de Hotel Blechhammer Tel.: (+49)631/3725-0 Fax: (+49)631/3725-100 Am Hammerweiher 1 67659 Kaiserslautern office@blechhammer.de single room € 65.-www.blechhammer.de Tel.: (+49)631/4144-0 Hotel Barbarossahof Eselsfürth 10 Fax: (+49)631/4144-200 67657 Kaiserslautern hotel@barbarossahof.com single room € 65.-www.barbarossahof.com Hotel Altes Zollamt Tel.: (+49)631/31666 00 Buchenlochstr. 1 Fax: (+49)631/31666 66 67663 Kaiserslautern Hotel-Zollamt@t-online.de single room € 68-96.-www.zollamt-hotel-garni.de

Registration Form

Workshop: International Forum on Terahertz Spectroscopy and Imaging March 1/2, 2006 / University of Kaiserslautern, Germany 508620

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First name	Surname	Title
Company/Institute		
Department	Position	
Post Code / City	Street/Post Box	
Country	E-Mail	
Phone	Fax	
Name, company and city will appear in the list participants Please use one form per person.	st of participants. The list will be included in the	workshop material for all
Cost share : EUR 295.00 includes: copies of abstracts, CD with program, dinner at evening reception	h presentations, refreshments/lunch in I	breaks as indicated in
Payment by Credit Card for foreign particles ☐ Eurocard/Mastercard ☐ Visa ☐ Dine	a	
Card number	Amount Valid until	
Place, Date	SignatureX	
\square I plan to contribute to the poster	session with a poster entitled (please f	ill in title):
(An abstract for the poster must be s	sent to <u>rufaut@vdi.de</u> not later than Fet	o. 14, 2006)
	ated in the program: □ Lab Tour 1 □ Lab Tour 3	
Date	Signature	
	X	
Please return to:	by fax: +49 (0) 211 62	14-1 61
Verein Deutscher Ingenieure e.V. VDI-Kompetenzfeld Optische Technolo	ogien	

Verein Deutscher Ingenieure e.V. VDI-Kompetenzfeld Optische Technologier Mrs. Karin Rufaut P.O. Box 10 11 39 D-40002 Düsseldorf Germany