Villach, Austria

Terahertz

spectroscopy tomography imaging time domain continuous wave

www.thz-conference.com

Conference Location

The conference takes place in the heart of Carinthia. The surrounding invites you to explore the natural beauty of the mountains and lakes, historic towns and castles as well as cultural and culinary traditions. The location is also a perfect starting point for excursions to Italy (Venice, Trieste) and Slovenia (Ljubljana).



Holiday Inn/Villach

Tel: + 43 4242 22522 0 Europaplatz 1-2 9500 Villach Email: info@hi-villach.at Web: www.hi-villach.at

Participants are asked to book their accommodation directly at the hotel. A limited number of rooms have been reserved for conference participants at the Holiday Inn Villach available at reduced rates.



Registration Fee

The registration fee includes admission to the technical program, refreshments during coffee breaks, lunch and networking dinner.

• € 300.-Early bird registration on or before July 31st 2011

• € 340,-

Registration

on or before Sept. 30^{th} 2011

• € 400,-Late / On-site registration

→ Please use the online registration form on www.thz-conference.com/registration. Thank you!

For further information about the conference venue, traveling directions and registration please visit the conference website.

Call for Papers

Prospective authors are encouraged to submit extended abstracts related to the conference topics. Author guidelines and supplemental information are available at the conference website www.thz-conference.com. All submissions will be reviewed by the program committee. Full papers of the accepted abstract submissions will be published in the conference proceedings.

Important dates:

Submission deadline: Notification of acceptance: Camera-ready paper:

September 19th 2011 September 30th 2011 October 21th 2011

Abstracts should be related to the following topics:

- Terahertz generation and detection
- Terahertz spectroscopy
- Terahertz imaging and imaging detectors
- Lasers and electronics for Terahertz setups
- Industrial Terahertz applications

Program Committee

- Karl Unterrainer, Vienna University of Technology, Austria
- Ernst Kessler, Institute of Photonic Technology Jena, Germany
- Andrei G. Stepanov, Institute for Spectroscopy RAS, Russia
- Luigi Bonacina, Université de Genève, Switzerland Raimund Leitner, Carinthian Tech Research AG, Austria



Information

Conference Organisation:

CTR Carinthian Tech Research AG Evelyne Ritsch Europastraße 4/1 9524 Villach, Austria

+ 43 4242 56300 - 400 E-mail: info@thz-conference.com Web: www.thz-conference.com

Conference Chair: Raimund Leitner CTR Carinthian Tech Research www.ctr.at

Austria

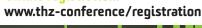


We are looking forward to welcome you in Carinthia.

















Scope

The conference aims at providing a platform for exchanging recent advances, results, problems and ideas between science and industry within the THz technology while acting as inspiration for innovative applications. The conference program comprises introductory talks on THz spectroscopy, tomography, imaging and emission microscopy as well as pilot implementations and potential industrial applications.



Pharmaceuticals

Technology

Terahertz combines the advantages and challenges of both optics and HF electronics. Its unique properties between the infrared and microwaves enable for instance:

- spectroscopy for investigating molecules and molecular bonds
- tomography to analyse material layers and layer thickness
- imaging for industrial inspection of inhomogeneous samples
- characterisation of semiconductors and photovoltaic materials

Altogether, Terahertz provides non-destructive 3-dimensional spectroscopic information without health risks – in contrast to x-ray.

Applications

THz has been shown to be useful for a wide range of applications, such as inspection of finished products or materials, quality control, biomedical imaging and diagnostics, counterfeit detection, characterisation of semiconductors and photovoltaic materials. Terahertz offers capabilities that in many cases cannot be matched by competing technologies, thus making new sensing applications possible.



Photovoltaics

Program

Thursday, November 24th, 2011

08:30	Registration
09:00	Introduction
09:15	THz photonics for non-destructive testing Juraj Darmo, Vienna University of Technology, Austria
09:40	Generation of up to 50 uJ THz pulses by optical rectification Luigi Bonacina, Université de Genève, Switzerland
10:05	Coffee break
10:40	Session I contributed papers
12:00	Lunch
14:00	Antenna-coupled air-bridge structures for uncooled THz detection Andreas Ihring , Institute of Pho- tonic Technology Jena, Germany
14:25	Session II contributed papers
15:00	Coffee break
15:30	Session III contributed papers
17:30	Multi-Sensory Event

Networking Dinner

Friday, November 25th, 2011

09:00	Counterfeit detection using THz radiation Thomas Arnold, CTR AG, Austria
09:25	Full-electronic Terahertz systems for industrial quality control Holger Quast, SynView GmbH, Germany
09:50	State-of-the-art in photomixer- based systems for cw-THz spectroscopy Anselm Deninger, Toptica Photonics AG, Germany
10:15	Coffee break
10:45	Session IV contributed papers
12:30	Lunch
14:00	Closing of Conference



Polymer Industry

Ceramics Industry

Photovoltaics
Semiconductors

Food Processing
Pharmaceuticals

Cancer Detection
Diagnostic Endoscopy

Biomedical Imaging

Laboratory Diagnostics

Coating Analysis

Feed Inspection

19:00

. Agricultural Yield Management