



Inno.CNT 2011 Annual Conference



25th - 27th January 2011
Schloss Ettlingen (near Karlsruhe)

Venue

Schloss Ettlingen
Klostergasse 8
76275 Ettlingen

Conference management

Fraunhofer-Institut für Chemische Technologie ICT
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Exhibition management

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Conference language

German or English

Language for posters and slides

English

Conference fee

Public sessions: 25th-26th January 2011: 210 €

Registration

Please register using the enclosed registration form by
30/11/2010

Accommodation

Please contact:
HORE Hotel Reservation
Weingartener Str. 70
76229 Karlsruhe
Phone +49 721 482356
Fax +49 721 482614
HoreHotelReservation@t-online.de
or reserve online:
www.H-H-Reservation.de/Inno.CNT2011.html

Poster session

Poster format: A0
Language: English
Registration until 30/11/2010
Contact: karola.kneule@ict.fraunhofer.de

Photo competition

Contributions can be submitted by e-mail to
karola.kneule@ict.fraunhofer.de
Deadline: 30/11/2010

Exhibition

Please contact: roswitha.tuz@ict.fraunhofer.de



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Tuesday, 25 January 2011

- 14:00 Set-up of exhibition and posters; registration of participants
14:30 Tour of the castle
- Meeting for junior researchers** (only for pre-registered participants)
- 14:00 Introduction to Inno.CNT project
Péter Krüger, Bayer MaterialScience AG
- 14:15 Introduction to CONTACT project
Christof Hübner, Fraunhofer ICT
- 14:30 Discussions in small thematic groups
- 15:15 Cross-thematic networking
- Conference start**
- 16:00 Fostering research and innovation for successful commercialization of nanotechnologies
Christos Tokamanis, European Commission, Belgium
- 16:20 Carbon nanotube – history, technology, applications and challenges
Morinobu Endo, Shinshu University, Japan
- 17:15 Coffee break
- International initiatives**
- 17:45 The German Inno.CNT
Péter Krüger, Bayer MaterialScience AG
- 18:05 The GENESIS program in France
Daniel Bernard (tbc), ARKEMA, France
- 18:25 The French research group »graphene and nanotubes«: sciences and application
Annick Loiseau, Laboratoire d'Etudes des Microstructures, Unite Mixte Onera-CNRS, O.N.E.R.A., France
- 18:45 Nanotechnology in Israel and the Nanotubes Empowerment Solutions consortium
Rafi Koriat, Israel
- 19:05 Carbon nanotubes activities in Japan
Yasuo Iida, New Energy and Industrial Technology Development Organization (NEDO), Japan
- 19:25 A glimpse of carbon nanotube commercialization in Asia
Lerwen Liu, NanoGlobe Ptd. Ltd., Singapore
- 19:45 Break
- 20:00 Opening of the conference with poster session, photo competition, evening meal, music and tour of the castle
- 22:30 End of the first day

Wednesday, 26 January 2011

- 9:00 Opening of conference
Peter Elsner, Fraunhofer ICT
- 9:05 Welcoming address of German Federal Ministry for Education and Research (BMBF)
- 9:10 Welcoming speech from EU
Christos Tokamanis, European Commission, Belgium
- 9:15 Materials from carbon nanotubes: science and technology transfer
Alan Windle, University of Cambridge, UK
- 9:50 Carbon nanotubes in lithium ion battery applications
Morinobu Endo, Shinshu University, Japan
- 10:30 Coffee break
- 11:15 Carbon nanotubes: Applications, opportunities, risks, and implementation strategies
Ivica Kolaric, Fraunhofer IPA
- 11:45 New potentials in catalysis with carbon nanotubes
Robert Schlögl, Fritz-Haber-Institut der Max-Planck-Gesellschaft
- 12:15 Lunch break

Wednesday, 26 January 2011

	Session 1: Leichtbau Lightweight construction	Session 2: Mobilität Mobility	Session 3: Energie und Umwelt Energy and Environment
13:30	<p>CNTs in Faserverbunden für Wind, Luft und Medizin <i>CNTs in fiber composites for wind power, aviation and medicine*</i> Christine Arlt, Deutsches Zentrum für Luft- und Raumfahrt</p>	<p>Entwicklung von Organoblechen zur online-Lackierung <i>Development of organic sheets for online painting*</i> Klaus Hildebrandt, Institut für Verbundwerkstoffe, Universität Kaiserslautern</p>	<p>CNTs zur Leistungssteigerung in Brennstoffzellen und Elektrolyse <i>CNTs to improve performance in fuel cells and electrolysis*</i> Egbert Figgemeier, Bayer Technology Services GmbH</p>
13:50	<p>Carbon Nanotube Polymerschäume – Möglichkeiten und neue Wege in der Material- und Prozesstechnik <i>Carbon nanotube polymer foams - possibilities and new avenues in materials and process technology*</i> Thomas Doll, Ruch GmbH</p>	<p>Signifikante Steigerung der Gesamtleistungsfähigkeit von polymeren Faserverbundwerkstoffen für die Raumfahrt durch Carbon Nanotubes <i>Significant increase in the overall performance of polymer fiber composite materials for aerospace applications with carbon nanotubes*</i> Hans Georg Wulz, Astrium GmbH</p>	<p>Innovationen in PEM-Brennstoffzellen durch CNTs <i>Innovations in PEM fuel cells with CNTs*</i> Thorsten Derieth, Zentrum für Brennstoffzellentechnik, Universität Duisburg</p>
14:10	<p>Elastomers enhanced by CNTs – highlights in rubber Ansgar Komp, Freudenberg-Forschungsdienste KG</p>	<p>Injektionstechnik – Vom Prozess zur CNT dotierten Sattelstütze und zum Rotorblattsegment <i>Injection technique - from a process to a CNT-doped seat post and a rotor blade segment*</i> Gunnar Rieber, Institut für Verbundwerkstoffe, Universität Kaiserslautern</p>	<p>Conductive CNT inks for photovoltaics and printed electronics Daniel Rudhardt, Bayer MaterialScience AG</p>
14:30	<p>Sicherheitsaspekte beim Einsatz von CNTs in Betonen <i>Safety considerations in the use of CNTs in concrete*</i> Dr. Carsten Geisenhanslüke, Dyckerhoff AG</p>	<p>Carbon nanotubes for high-performance lithium-ion batteries Alberto Varzi, Zentrum für Sonnenenergie und Wasserstoff-Forschung</p>	<p>Membran zur Wasserentsalzung und zur Gasseparation <i>Membrane for water desalination and gas separation*</i> Peter Schwan, Bayer Technology Services GmbH</p>
14:50	<p>Poster session and coffee break</p>		

Wednesday, 26 January 2011

	Session 4: Modellierung Modelling	Session 5: Herstellung und Charakterisierung Synthesis and characterization	Session 6: Dispergierung Dispersion
16:30	Multiskalenmodellierung des Wachstums von Kohlenstoffnanoröhren <i>Multiscale modelling of the growth of carbon nanotubes*</i> Michael Moseler, Fraunhofer IWM	Tailored carbon-based nanotubes Nicole Grobert, University of Oxford, GB	Anwendung der Dreiwalzwerktechnologie im Bereich der Thermoplaste <i>Application of three-roll mill technology in the field of thermoplastics*</i> Petra Pötschke, Leibniz-Institut für Polymerforschung Dresden
16:50	Eigenschaftsvorhersage von Carbon Nanotube-Polymer-Kompositen in der Schmelzverarbeitung: Modellbildung, Simulation und Verifizierung <i>Property prediction of carbon nanotube-polymer composites in the melt processing: modelling, simulation and verification*</i> Ingo Alig, Deutsches Kunststoff-Institut	Entwicklung von Herstellmethoden für CNT und CNF <i>Development of production methods for CNTs and CNFs*</i> Oliver Schlüter, Bayer Technology Services GmbH	Dispersion of functionalized CNTs in metal matrix composites Blanka Lenczowski, EADS Deutschland GmbH
17:10	The role of (multiscale) modelling in effective nanocomposites development Ferrie van Hattum, University of Minho, Portugal	Charakterisierung von Seitenwandfunktionalisierten Kohlenstoffnanoröhren <i>Characterization of side-wall functionalized carbon nanotubes*</i> Christian Zenkel, Future Carbon GmbH	Materialentwicklungen zur Verbesserung der Wärmeleitfähigkeit in extrudierten Kunststoffbauteilen <i>Material developments to improve thermal conductivity in extruded plastic components*</i> Heiko Below, Gerodur MPM Kunststoffverarbeitung GmbH & Co KG
17:30	Virtuelles Materialdesign: Simulation und Modellierung der Wärmeleitfähigkeit gefüllter Kunststoffe <i>Virtual material design: Simulation and modelling of the thermal conductivity of filled plastics*</i> Christoph Heinle, Friedrich-Alexander-Universität Erlangen-Nürnberg	Aufnahme und Elimination von CNT bei aquatischen Organismen <i>Uptake and elimination of carbon nanotubes in aquatic organisms*</i> Andreas Schäffer, RWTH Aachen	Eco-economic CNT manufacture – a techno-domino? Klaus Mauthner, C-Polymers GmbH, Austria

*English translation of German title. Presentation will be held in German or English. Slides will be in English.



Wednesday, 26 January 2011

- 18:00 CNTs, graphenes and future alternatives - application-oriented carbon nanostructure research at the MIT Peter Weinmann, Department of Material Science and Engineering, MIT, U.S.
- 18:45 Break
- 19:30 *Baden dinner and awards ceremony for the photo competition*
- 23:00 End