

February 27th and 28th 2018 University of Würzburg Germany



- Tuesday, February 27™ —

09:00 Registration

10:00 Start of the conference
P. Grambow, Nanoinitiative Bayern GmbH, Germany
Opening remarks and short
introduction of the Network NanoCarbon

Session 1: Industrialisation and commercialisation

P. Grambow, Nanoinitiative Bayern GmbH, Germany Chair: 10:10 I. Kolaric, Fraunhofer Institute for Manufacturing Engineering and Automation IPA, Germany The role of materials in an increasingly dematerialised economy 10:30 M. Lee, GyoRin Inc, Korea Commercialisation scheme for nanomaterial technology 10:50 G. Eberhard, DistriConsult GmbH, Germany The role of chemical distributors in new business development for specialty additives S. Bohm, Talga Technologies Limited, UK 11:10 Commercial development of graphene based coatings and composites 11:30 Poster session / lunch break

SESSION 2: APPLICATIONS FOR AUTOMOTIVE

Chair:	P. Boulanger, NAWA Technologies, France
12:30	A. Nasiri, Nanocyl S.A., Belgium Synergy of carbon nanotubes with silica and / or carbon black in rubber formulation, specific insight on tire application potential
12:50	C. Glanz, Fraunhofer Institute for Manufacturing Engineering and Automation IPA, Germany Printed functional layers for the use in connected car applications
13:10	J. Hofmann, Conti Temic microelectronic GmbH, Germany Innovative materials vs. automotive requirements - Up's and down's from application point of view
13:30	Poster session / coffee break

SESSION 3: ENERGY STORAGE

S. Bohm, Talga Technologies Limited, UK Chair: 14:15 E. Figgemeier, Helmholtz Institute Münster. Germany Carbon nanotubes in batteries benefits, hurdles and applications 14:35 F. Nedvidek, Business creation adjuvant, Canada Is there the right battery for every application? 14:55 P. Boulanger, NAWA Technologies, France Open innovation: Manufacturing and functionalisation of VACNTs as electrodes for supercaps 15:15 Poster session / coffee break

SESSION 4: SHORT PITCHES

Chair: S. Bertsch, Nanoinitiative Bayern GmbH, Germany

16:00 W. Maser, Instituto de Carboquímica (ICB-CSIC), Spain

M. Morais, Fraunhofer Institute for Chemical Technology ICT, Germany

K. Kunz, Leibniz Institute of Polymer Research Dresden e.V. (IPF), Germany

C. Fink, PerkinElmer, Germany

T. Schubert, Institute of Chemical Process Engineering and Plant Design, TH Köln, Germany

17:00 End of the first day

EVENING EVENT - CONFERENCE DINNER

18:45 Meeting point Am Alten Kranen
Kranenkai, Schiffstouristik Würzburg
(red and yellow ticketbooth)



19:00 Boat trip with conference dinner

22:00 Return to Würzburg

— Wednesday, February 28TH ——

08:30 Poster session / coffee

Session 5: Process technologies and upscaling

Chair: C. Hübner, Fraunhofer Institute for Chemical Technology ICT, Germany
 U. Köpke, EXAKT Advanced Technologies GmbH,

Germany

Synergetic effects during material development

with processing machines

09:20 V. Lison, Nanocyl S.A., Belgium

Optimisation of production of polypropylene / MWCNT composites

09:40 L. Boonen, Fraunhofer Institute for Manufacturing

Engineering and Automation IPA, Germany
Digitalisation in electrode manufacturing –
towards more efficiency in joined research and
small lot size production

10:00 Poster session / coffee break

SESSION 6: SHORT PITCHES

Chair: S. Roth, Sineurop Nanotech GmbH, Germany

10:45 F. Dorn, SURAGUS GmbH, Germany

G. v. Kerckhove, OCSiAl Europe,

Luxembourg

J. Blanco Villalba, Fraunhofer Institute for Chemical Technology ICT, Germany

D. Nemec, Fraunhofer Institute for Manufacturing Engineering and Automation IPA, Germany

Slot for a short pitch available - apply now!

11:45 Poster session / lunch break

SESSION 7: MEASUREMENT AND SAFETY

13:25

Chair:	H. Meyer, Nanoinitiative Bayern GmbH, Germany
12:45	J. Heindl, JEOL (Germany) GmbH, Germany Characterisation of carbon materials in the electron microscope
13:05	D. Broßell, Bundesanstalt für Arbeitsschutz und Arbeitsmedizin BAuA, Germany A new risk grouping concept for high aspect

Poster session / coffee break

ratio materials - the shaker dustiness test

SESSION 8: GRAPHENE BASED APPLICATIONS

Chair:	J. Helbig, Technische Hochschule Nürnberg Georg Simon Ohm, Germany
14:00	D. Carroll, Wake Forest University, USA Ultrathin, washable, and large-area graphene papers for personal thermal management
14:20	T. Schubert, loLiTec-lonic Liquids Technologies GmbH, Germany GRAFAT – Graphene for functionalisation of advanced textiles – flame retardancy
14:40	F. Torrisi, University of Cambridge, UK Graphene and two-dimensional material inks enabling printed and wearable electronics
15:00	B. Münzing, The Sixth Element, China Industrial usage of graphene in coatings: enhancing corrosion protection
15:20	Poster award
15:30	Short coffee break

STATUS MEETING

15:50 Regular meeting of the Network NanoCarbon **Open to the public**

17:00 End of the meeting / end of the conference



NanoCarbon Annual Conference. Photo: Nanoinitiative Bayern GmbH.

PROFILE OF THE CONFERENCE

For the 4th time the Network NanoCarbon invites to the Annual Conference in Würzburg, Germany. The conference offers an open forum to the interested community for exchanging results and ideas. It is the most important communication platform for innovative and commercial activities in the field of carbon nanomaterials within Germany and beyond. This year, speakers from 10 countries will present current applications and processing technologies for carbon nanomaterials. The event particularly addresses industry delegates seeking new trends and partners for cooperations. In the open Network NanoCarbon national and international partners work closely together to develop innovative nanocarbon products for the market.

CONFERENCE VENUE



University of Würzburg **Audimax** Sanderring 2 D-97070 Würzburg

Directions: https://wueaddress.uni-wuerzburg.de/building/1121

CONFERENCE FEES - EARLY BIRD PRICES

Two-day conference with evening event on February 27th: **Conference dinner with boat trip on the river Main.**

Industry delegates	380€
Members of Nanonetz Bayern e. V.	220€
Institutes / authorities	170€
Partners of the Network NanoCarbon	170€
Students	90€
Students without conference dinner	50€

(Notes: Prices are subject to VAT. The fees include conference documents, coffee breaks, lunch breaks, refreshments and the evening event. For registrations after 20.01.2018 a surcharge of 20 % will be due. In case of withdrawal from 13.02.2018 cancellation fees of 50 % of the respective prices are due. In case of withdrawal from 20.02.2018 full conference fees are due. Organiser: Nanoinitiative Bayern GmbH.)

REGISTRATION AND FURTHER INFORMATION

Registration is open until February 6th 2018. Please find all further information as well as the online registration form at: carbon2018.nano.bayern

POSTERS AND ACCOMPANYING EXHIBITION

In addition to the lecture program there will be a poster award. Posters can be submitted until **January 19**th **2018**. Please send your application to **info@nanocarbon.net**.

Manufacturers of materials and equipment have the opportunity to present their demonstrators and products in an accompanying **exhibition**. Please contact us for further information.

CONCEPTION AND ORGANISATION

Nanoinitiative Bayern GmbH / Cluster Nanotechnology

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