

PROGRAM

# NanoCarbon Annual Conference 2019

Presentations - Short Pitches - Posters - Exhibits

Cluster  
Nanotechnology

February 26 and 27, 2019  
University of Würzburg  
Germany

NETWORK  
NANOCARBON

TUESDAY, FEBRUARY 26

- 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

- Chair:** I. Kolaric, Fraunhofer Institute for Manufacturing Engineering and Automation IPA, Germany
- 10:10 L. Dobrenizki, Schaeffler Technologies AG & Co. KG, Germany  
**Tailored nanostructured coatings as key enabler for the mobility for tomorrow**
- 10:30 M. Otto, Conyar BV, The Netherlands  
**Conyar™ = CONductive YARn made of CNTs**
- 10:50 A. Sangar, NAWATEchnologies, France  
**Vertically aligned carbon nanotubes from roll-to-roll deposition process**
- 11:10 W. Bergholz, ISC International Standards Consulting GmbH & Co. KG, Germany  
**What can graphene learn from the silicon industrialisation**
- 11:30 **Poster session / lunch break**



## SESSION 2: SHORT PITCHES – CORE TECHNOLOGIES

- Chair:** P. Pötschke, Leibniz Institute of Polymer Research Dresden e.V. (IPF), Germany
- 12:30 S. Hampel, Leibniz Institute for Solid State and Materials Research Dresden (IFW), Germany
- M. Paiva, University of Minho, Portugal
- B. Kiendl, University of Würzburg, Germany
- M. Morais, Fraunhofer Institute for Chemical Technology ICT, Germany
- D. Carroll, Wake Forest University, USA
- 13:30 **Poster session / coffee break**

## SESSION 3: UPSCALING AND STANDARDISATION

- Chair:** H. Hoffschulz, Covestro Deutschland AG, Germany
- 14:15 J. Covas, University of Minho, Portugal  
**Fused deposition modelling of electrically conductive polyetheretherketone filaments**
- 14:35 C. Glanz, Fraunhofer Institute for Manufacturing Engineering and Automation IPA, Germany  
**Structure monitoring of pipes based on printed sensors**
- 14:55 E. Böhme, JTBD.de, Germany  
**Starting innovations with the customer's job in mind**
- 15:15 **Poster session / coffee break**

## SESSION 4: LEGACY OF INNO.CNT

- Chair:** H. Meyer, Nanoinitiative Bayern GmbH, Germany
- 15:45 P. Krüger, Covestro Deutschland AG, Germany  
**Inno.CNT in retrospect**
- 16:00 W. Schütz, FutureCarbon, Germany  
**Electrically conductive coatings based on carbon materials for heating applications**
- 16:15 C. Hübner, Fraunhofer Institute for Chemical Technology ICT, Germany  
**Electrically conductive thermoplastic composites in additive manufacturing**
- 16:30 E. Greiff, BÜFA Composite Systems GmbH & Co. KG, Germany  
**Electrically conductive composite materials – from Inno.CNT to industrial application**
- 16:45 U. Köpke, EXAKT Advanced Technologies GmbH, Germany  
**From the Inno.CNT to a disruptive three roll mill generation**
- 17:00 **End of the first day**

## EVENING EVENT – BOAT TRIP WITH 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 27

08:30 Poster session / coffee

### SESSION 5: ENERGY STORAGE AND CONVERSION

**Chair:** P. Boulanger, NAWATechnologies, France

09:00 A. Nasiri, Nanocyl S.A., Belgium  
**Comparison between carbon allotropes as conductive additives in lithium ion batteries**

09:20 B. Krause; Leibniz Institute of Polymer Research Dresden e.V. (IPF), Germany  
**Highly filled graphite/thermoplastic composites for fuel cells and heat exchangers**

09:40 M. Lohe, Sixonia Tech GmbH, Germany  
**Taylor-made E-Graphenes – The right graphene for (m)any application**

10:00 Poster session / coffee break

### SESSION 6: SHORT PITCHES

**Chair:** P. Pötschke, Leibniz Institute of Polymer Research Dresden e.V. (IPF), Germany

10:30 G. Soavi, Cambridge Graphene Centre, UK

C. Karl, University of Hanover, Germany

R. Neuhaus, Institute for Industrial Manufacturing and Management, University of Stuttgart, Germany

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

L. Gerlich, Fraunhofer Institute for Photonic Microsystems IPMS, Germany

11:30 Poster session / lunch break

### SESSION 7: SAFETY AND ANALYTICS

**Chair:** C. Hübner, Fraunhofer Institute for Chemical Technology ICT, Germany

12:30 B. Münzing, The Sixth Element, China  
**REACH and Graphene**

12:50 B. Simonow, Bundesanstalt für Arbeitsschutz und Arbeitsmedizin BAuA, Germany  
**Fibres in the air - strategies to assess the inhalative exposure of high aspect ratio materials**

13:10 D. Lerche, LUM GmbH, Germany  
**Carbon allotrope particle surface changes due to applied dispersing energy**

13:30 C. Geers, Nanolockin GmbH, Switzerland  
**Detection and analysis of carbon nanomaterials via stimuli-induced heating**

13:50 Poster session / coffee break

### SESSION 8: PRODUCTS – HIGH PERFORMANCE COMPOSITES

**Chair:** J. Helbig, Technische Hochschule Nürnberg Georg Simon Ohm, Germany

14:30 H. Rennhofer, BOKU - University of Natural Resources and Life Sciences, Austria  
**High performance CFRPs by simple dispersion of chemically modified carbon nanotubes**

14:50 G. Wehnert, Technische Hochschule Nürnberg Georg Simon Ohm, Germany  
**Low-cost high-performance polymers for aviation applications**

15:10 **Poster award**

15:25 **Short coffee break**

### STATUS MEETING

15:45 Regular meeting of the Network NanoCarbon  
**Open to the public**



NanoCarbon Annual Conference. Photos: Nanoinitiative Bayern GmbH.

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

### PROFILE OF THE CONFERENCE

For the 5th time the Network NanoCarbon\* invites to the Annual Conference in Würzburg, Germany. The event offers an open forum to the nanocarbon 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 different countries will present current applications and the industrialisation of nanocarbons. The Annual Conference 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 26:

**Conference dinner with boat trip on the river Main.**

Industry delegates	395 €
Members of the Nanonetz Bayern e.V.	235 €
Institutes / authorities	235 €
Members of the Network NanoCarbon	190 €
Students	95 €
Students (without conference dinner)	55 €

(Notes: Prices are subject to VAT. The fees include conference documents, coffee breaks, lunch breaks, refreshments and the evening event. For registrations after 20.01.2019 a surcharge will be due. In case of withdrawal from 12.02.2019 cancellation fees of 50 % of the respective prices are due. In case of withdrawal from 19.02.2019 full conference fees are due. Organiser: Nanoinitiative Bayern GmbH.)

### REGISTRATION AND FURTHER INFORMATION

Registration is open until February 5, 2019. Please find all further information as well as the online registration form at: <http://carbon2019.nano.bayern>

### POSTERS AND ACCOMPANYING EXHIBITION

In addition to the lecture program there will be a poster award. Posters can be submitted until **February 5, 2019**, both online and by sending them to [info@nanocarbon.net](mailto:info@nanocarbon.net).

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

### ORGANISATION

Nanoinitiative Bayern GmbH / Cluster Nanotechnology

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