

NanoCarbon Annual Conference 2021

Presentations • Short Pitches • Networking



Program

March 02 and 03, 2021
Online event

Cluster
Nanotechnology

NETWORK
NANOCARBON



— TUESDAY, MARCH 2 —

- 08:30 Online login open
- 09:00 P. Grambow, Nanoinitiative Bayern GmbH, Germany
Opening remarks and short introduction of the Network NanoCarbon

SESSION 1: ENERGY STORAGE I

- 09:15 P. Boulanger, NAWATEchnologies, France
Challenges for future energy storage technologies and the benefit of nanotechnologies
- 09:40 D. Nemeč, Fraunhofer Institute for Manufacturing Engineering and Automation IPA, Germany
Digital data collection and inline quality control by machine learning during the continuous manufacturing process of electrode pastes for Li-ion batteries
- 09:55 D. Eitel, Technische Hochschule Nürnberg Georg Simon Ohm, Germany
Correlation of carbon content and electrical conductivity of nanomaterials for PEM fuel cells
- 10:10 O. B. Fernandez, OCSiAI S.a.r.l., Luxembourg
The use of nanocarbons in energy storage systems
- 10:25 Discussion / networking / coffee break

SESSION 2: SHORT PITCHES

- 11:00 B. Krause, Leibniz Institute of Polymer Research Dresden e.V. (IPF), Germany
Innovative polymer-based composite systems for high-efficient energy scavenging and storage
- 11:05 T. Hickmann, Eisenhuth GmbH & Co. KG, Germany
Metal coating of electrically conductive polymer composite films
- 11:10 L. Ferrara, Politecnico di Milano, Italy
Upgrading the concept of UHPC to ultra high durability concrete through nanoparticles addition
- 11:15 F. Heinrich, Technische Hochschule Wildau, Germany
Network „Graphen“ - topics, challenges and requests
- 11:20 Joint Q&A round for short pitches

- 11:30 S. Hermann, Fraunhofer Institut for Electronic Nanosystems ENAS, Germany
On-chip technology for integrated CNT electronics
- 11:35 A. Hajo, Technical University Darmstadt, Germany
HealthCare-NEMS: Carbon based nano-electro-mechanical systems for biomedical sensing
- 11:40 S. Herberth, Fraunhofer Institute for Microelectronic Circuits and Systems IMS, Germany
Carbon nanotubes as powerful platform for optical biosensing
- 11:45 A. Fidalgo, PUC-Rio, Brazil
Anticorrosive performance of carbon nanostructure reinforced polymer
- 11:50 Joint Q&A round for short pitches
- 12:00 Networking / lunch break

SESSION 3: COMPOUNDS AND COMPOSITES, PROCESSING

- 13:00 F. Hammecker, Nanocyl S.A., Belgium
3D Printing of CNT-based electrically conductive nanocomposites by fused deposition molding
- 13:15 B. Zanghelli, University of Natural Resources and Life Sciences, Austria
Different routes of carbon nanotubes dispersions
- 13:30 V. K. Wisniewski, Hamburg University of Technology, Germany
The challenges of an industrial up-scaling of CNP-masterbatches – from particle model to in-line monitoring of a three roll mill dispersion process
- 13:45 M. Liebscher, Technical University Dresden, Germany
Synthesis and dispersion of P- and N-Type MWCNTs for thermoelectric cementitious nanocomposites
- 14:00 Discussion / networking / coffee break

SESSION 4: SMART LIVING

- 14:30 R. Neuhaus, Institute of Industrial Manufacturing and Management, University Stuttgart, Germany
CNT-actuators for adaptive building skins - Update on potentials and limitations
- 14:45 R. Molteni, Allod GmbH, Germany
Flexible materials with PTC effect

- 15:00 M. Heise, Forschungsinstitut für Leder und Kunststoffbahnen (FILK), Germany
CNT containing polymers as a game changer for flexible active lightning textiles
- 15:15 B. Münzing, The Sixth Element (Changzhou) Material Technology Co., Ltd., China
Heat dissipation with graphene
- 15:30 Discussion / networking / open end

WEDNESDAY, MARCH 3

- 09:15 Online login open

SESSION 5: WORK SAFETY/RECYCLING/END OF LIFE STRATEGIES

- 09:30 M. Ata, Zeon Corp., Japan
Biotic and biomimetic degradation of CNTs for voluntary lifecycle management
- 09:55 D. Söthje, Technische Hochschule Aschaffenburg & Technische Hochschule Nürnberg Georg Simon Ohm, Germany
Recycling of carbon fiber reinforced epoxy resins
- 10:10 D. Broßell & D. Kehren, Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, Germany
Human risk banding of high aspect ratio materials demonstrated for carbon fibre variants
- 10:35 L. Neumeister, Berufsgenossenschaft Energie, Textil, Elektro, Medienerzeugnisse, Germany
TRGS 527 Activities with nanomaterials
- 10:50 Discussion / networking / coffee break

SESSION 6: ENERGY STORAGE II

- 11:30 I. Kolaric, Fraunhofer Institute for Manufacturing Engineering and Automation IPA, Germany
Historical overview on CNTs and graphene
- 11:55 P. Pötschke, Leibniz Institute of Polymer Research Dresden e.V. (IPF), Germany
Development of PVDF-based conducting polymer films for bipolar batteries
- 12:10 S. Pohlmann, Skeleton Technologies Group, Estonia
Enhancing nanocarbons for energy storage: Enabling high energy density ultracapacitors

- 12:25 J. Schneider, Technical University Darmstadt, Germany
Carbon nanohorns, a promising material for storage of electrical energy and more

- 12:40 Networking / lunch break

SESSION 7: NEW APPLICATIONS

- 13:45 T. Barkan, The Graphene Council, USA
Advances in the commercial application of graphene
- 14:00 T. Schubert & R. Hammerstein, TH Köln, Germany
CO₂ separation by means of mixed matrix materials based on nano-carbon materials
- 14:15 T. Weidauer, Technical University of Applied Sciences Regensburg, Germany
Electrocatalytical reduction of CO₂ to ethanol
- 14:30 R. Dümpelmann, Inolytix AG, Switzerland
Surface properties of graphenes, carbon blacks and carbon fibers by IGC
- 14:45 L. Lugo, Universidade de Vigo, Spain & M. Buschmann, Institut für Luft- und Kältetechnik Dresden, Germany
Graphene nanofluids through different heat pipes
- 15:00 Discussion / networking / open end

POSTERS AND VIRTUAL EXHIBITION

In addition to talks, short pitches and discussions, you can contribute to the event with your poster or by presenting your company in the virtual exhibition. You will have the opportunity to upload slides, documents or a short video.

Please get in contact or check our website for ongoing information on the exhibition and how to submit a contribution: carbon2021.nano.bayern

PROFILE OF THE CONFERENCE

The Network NanoCarbon has realised the Annual Conference since 2015 and it has become an international communication platform for the nanocarbon community. Here, research experts and industry stakeholders come together to exchange results and ideas.

The event showcases innovative and commercial activities in the field of carbon nanomaterials (e.g. CNTs, graphenes and nanohorns).

With a strong focus on practical applications, the Annual Conference particularly addresses industry delegates seeking new trends and partners for cooperations.

Now, for the first time, the **NanoCarbon Annual Conference goes online**. Our main goal is to translate the open atmosphere this event is known for from a personal experience to the virtual world. In addition to top presentations from industry and research leaders, there will be plenty of networking and matchmaking opportunities. Meet the experts and join the discussion!

ACCESS TO THE CONFERENCE

The event will be organised with a suitable conference software platform. You will receive your login information in the days before the meeting via email and can join the event using your own device.

CONFERENCE FEES

Two-day conference with integrated matchmaking and breakout sessions for your networking opportunities:

Industry delegates	395 €
Institutes / authorities	235 €
Members of the Cluster Nanotechnology's networks	235 €
Member of the Network NanoCarbon	190 €
Students	55 €

(Notes: Prices are subject to VAT. The fees include conference documents, digital abstract book, released slides. In case of withdrawal after February 21, 2021, cancellation fees of 50 % of the respective prices are due. Organiser: Nanoinitiative Bayern GmbH.)

REGISTRATION

To participate, you need to register beforehand. **Registration is open until February 25, 2021**. Please find further information as well as the registration form at: carbon2021.nano.bayern

ORGANISATION / CONTACT

Nanoinitiative Bayern GmbH / Network NanoCarbon

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