ARRIVAL

Arrival by local transport
To get to the exhibition centre take tram no. U78 MERKUR SPIEL-ARENA / Messe Nord. There are two major transport hubs where you are likely to change: Hauptbahnhof (central station) and Heinrich-Heine-Allee. Nearly all destinations in and around Düsseldorf can be reached from these stations.

Arrival by car
Address for car navigation system:
D-40474 Düsseldorf, Am Staad (Stockumer Höfe)
GPS coordinates: 51.269011, 6.727094

General Information:
https://www.eseexpo.com/en/Contact_Arrival/Arrival

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Coverphoto: FUV cleaning of a graphene foam, Baltes / Caption: © 2019 Fraunhofer ICTnue

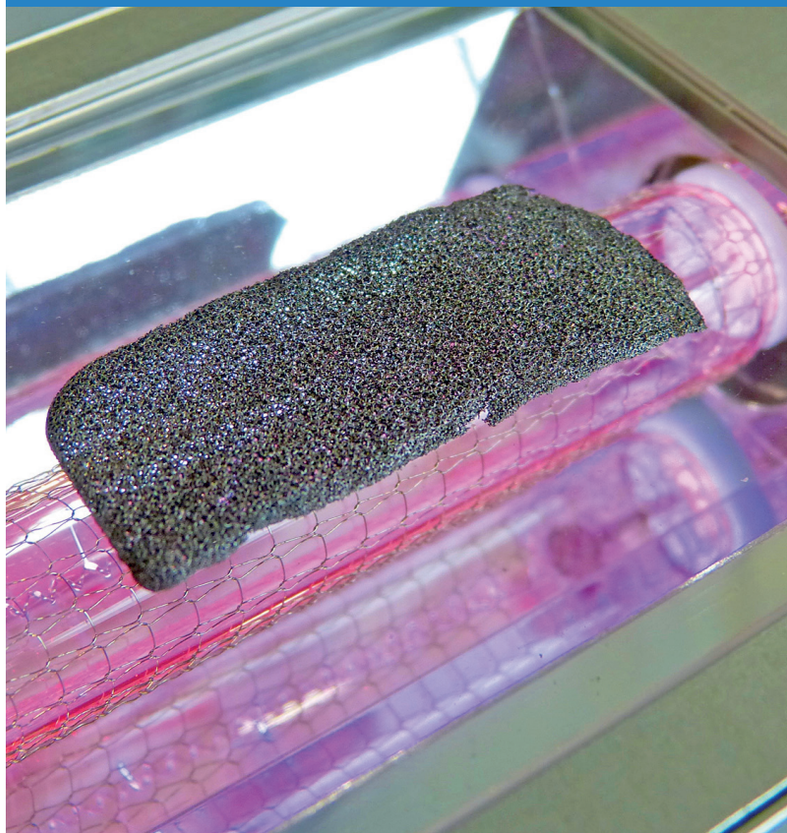
Fraunhofer ICT

VARTA · TEL AVIV UNIVERSITY אוניברסיטת תל אביב · PO-CELLTECH

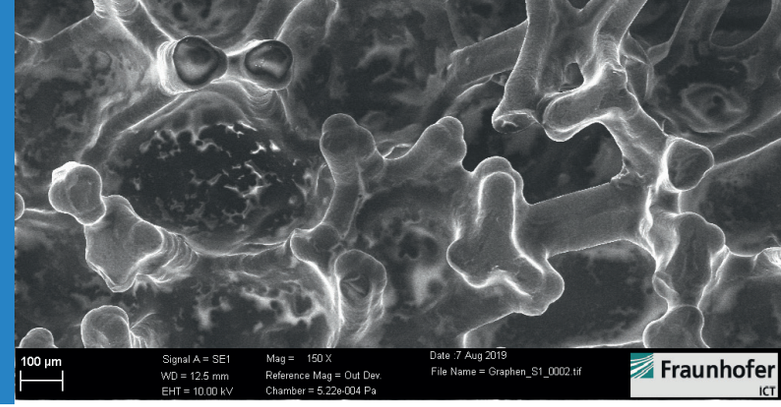
MARCH 10, 2020 | EUROPEAN ENERGY STORE

Graphene for Energy Storage in Supercapacitors

Development of 3D-nanostructured graphene based materials for energy storage applications



PROGRAMME



New developments in the field of storage technologies promise a wide range of applications in intralogistics, production, mobility and consumer products. For example, batteries with high energy densities and supercapacitors with high power densities are increasingly used for recuperation and load peak optimization in drive technology. Supercapacitors in particular are used when fast charging capability is a priority. A very large potential is attributed to novel electrode materials such as (doped) graphene.

Graphene, a two-dimensional network of carbon atoms, has many fascinating properties, such as good chemical and thermal stability, excellent electrical conductivity and a large specific surface area. Asymmetric capacitors based on graphene and aqueous electrolyte systems have therefore recently proved to be a particularly promising technology.

Experts from science and industry will report and discuss current development trends, new manufacturing processes and application scenarios and their significance for electric storage systems of the future.

TUESDAY, 10TH MARCH 2020

14:00 **Opening Remarks**

14:05 **3D Graphene Heterostructures for Energy Applications**
Dr. Ariel Ismach, Tel-Aviv University

14:35 **Graphenebased electrochemical capacitors in the stress field between fundamental research and industry**
Dr. Norman Baltes, Fraunhofer ICT

15:05 **Coffee break**

15:15 **PO-Celltech's Recent Advancement on Alkaline Energy Storage and Conversion Solutions**
Dr. Ervin Tal-Gutelmacher, PO-Celltech Ltd.

15:45 **Electrochemical Characterisation of 3-D Graphen materials**
Dr. Ihor Chumak, VARTA Microbattery

16:15 **Final Remarks and Discussion**

16:30 **End**

SPEAKERS

Dr. Norman Baltes
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VENUE

Am Staad (Stockumer Höfe)
40474 Düsseldorf, Germany
Room 811, Hall 8b

Photo: Fraunhofer ICT/Norman Baltes.