

August 29, 2019



Events

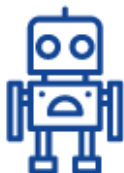
Materials Chain Early Career Researchers' Forum (EXTENDED DEADLINE)

have you missed the opportunity to register for the first Materials Chain Early Career Researchers' Forum on September 16, 2019 at the IBZ at the TU Dortmund?
No problem, we have extended the deadline.

Early Career
Researchers'
Forum



Dortmund - September 16, 2019



Materials
Chain
UA RUHR

The Forum is aimed specifically at scientists who are at an early stage of their careers, as we want to give the approximately 1,000 doctoral students, postdocs, working group leaders and junior professors from the research groups associated with the Materials Chain the opportunity to benefit from the Materials Chain Network. The aim is to stimulate the scientific exchange amongst

each other, to initiate joint projects and to give an overview of funding possibilities generally available for young scientists. The event is free of charge and open to all interested parties. If you are an early career researcher, please register [here](#), giving the title of your presentation. Please also forward this information to your employees/doctoral candidates so that they can register with a poster. If you are not available, it is also possible to send a substitute who will give an overview of your group's research.

[more](#)

Latest News

One Professor for Three Universities

Prof. Manfred Bayer from the TU Dortmund will receive a UA Ruhr professorship, i.e. a joint professorship of the University Alliance Ruhr: The physicist will work closely with scientists from the Ruhr University Bochum (RUB) and the University Duisburg-Essen (UDE).

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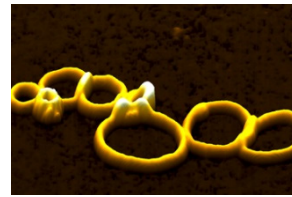


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Nanorings with Two Sides

The tiny rings that chemists at the Center for Nanointegration (CENIDE) at the UDE create in the laboratory are as small as a bacterium. Self-organized, individual polymer chains form the flexible structures that can even squeeze themselves through cell membranes. This would enable them to deliver active substances in a very targeted manner. The renowned scientific journal *ACS Nano* reports on this in its current issue.

[More](#)

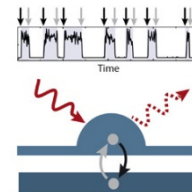


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Smallest Measurable Processes Recorded Individually

Colloquially, the term “quantum jump” is used to describe a tremendous development. In fact, it is the smallest change of state that can still be traced. Physicists from the Collaborative Research Center 1242 at the University of Duisburg-Essen (UDE) have now succeeded in measuring every single jump by optical means and drawing conclusions about the dynamics of the electrons inside a quantum dot. The journal *Physical Review Letters* reports on this in its 122nd issue.

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New/Coordinated Projects

Optimization of BTA Deep Methods

Prof. Dirk Biermann and Prof. Markus Stommel from the Faculty of Mechanical Engineering at TU Dortmund University, together with the Fraunhofer Institute for Non-Destructive Testing and practical partners, are researching the improvement of BTA deep drilling methods. The German Research Foundation (DFG) and the Fraunhofer-Gesellschaft are funding the project, which enables the transfer of scientific findings into applications, for three years.

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New Promotion College for the UA Ruhr

From January 2020 on the Mercator Research Center Ruhr (MERCUR) will fund a new doctoral college within the University Alliance Ruhr (UA Ruhr) with more than half a million euros. In medical physics, TU Dortmund University and the University of Duisburg-Essen (UDE) will create new opportunities for doctoral studies.

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Obituary

Excellent Researcher and Good Friend

He was appreciated as an expert as well as a textbook author, advisor and committed colleague: Prof. Dr. Carsten Schmuck passed away. The 51-year-old chemist has been teaching and researching at the University of Duisburg-Essen (UDE) since 2008. "In Carsten Schmuck we are losing not only an outstanding scientist, but also an esteemed advisor and friend. His death moves us all very much," said Prof. Dr. Maik Walpuski, Vice Dean of the Faculty of Chemistry.

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Awards (Congratulation!)

Teaching Prize for Three Chemists

Together, they are involved in the lecture series "Functional Supramolecular Materials", now Jun.-Prof. Dr. Michael Giese, Dr. Jochen Niemeyer and Jun.-Prof. Dr. Jens Voskuhl receive this year's UDE Teaching Award. The award was presented at the Dies Academicus 2019.

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Publication Highlights

Femtosecond x-ray diffraction reveals a liquid–liquid phase transition in phase-change materials

Zalden, P. and Quirin, F. and Schumacher, M. and Siegel, J. and Wei, S. and Koc, A. and Nicoul, M. and Trigo, M. and Andreasson, P. and Enquist, H. and Shu, M.J. and Pardini, T. and Chollet, M. and Zhu, D. and Lemke, H. and Ronneberger, I. and Larsson, J. and Lindenberg, A. and Fischer, H. and Hau-Riege, S. and Reis, D. and Mozzarello, R. and Wuttig, M. and Sokolowski-Tinten, K.

Science 364 1062-1067 (2019)

[more](#)

CVD growth of ultrapure diamond, generation of NV centers by ion implantation, and their spectroscopic characterization for quantum technological applications

Chakraborty, T. and Lehmann, F. and Zhang, J. and Borgsdorf, S. and Wöhr, N. and Remfort, R. and Buck, V. and Köhler, U. and Suter, D.

Physical Review Materials 3 (2019)

[more](#)

Electrochemical CO Reduction: A Property of the Electrochemical Interface

Bagger, A. and Arnarson, L. and Hansen, M.H. and Spohr, E. and Rossmeisl, J.

Journal of the American Chemical Society 141 1506-1514 (2019)

[more](#)

[See all publications](#)

Materials Chain | UA Ruhr
Universitätsstr. 150
44801 Bochum
Deutschland

+49 234 32 29919

mc@uaruhr.de

www.materials-chain.ruhr