

II MAPEX CALENDAR 2018

17 May	MAPEX Methods Workshop II – Computational Materials Science
1 June 12:30	Café Unique – MAPEX Lunch Meeting for Early Career Researchers
18 – 19 June	MAPEX Symposium 2018
3 September 12:30	Café Unique – MAPEX Lunch Meeting for Early Career Researchers
1 October 12:30	Café Unique – MAPEX Lunch Meeting for Early Career Researchers
25 October	7th MAPEX Early Career Researcher Workshop – science meets industry

More events, seminars, and talks related to MAPEX topics:
www.uni-bremen.de/mapex

II IMPRINT/CONTACT DETAILS

MAPEX Center for Materials and Processes, University of Bremen,
Bibliothekstraße 1, 28359 Bremen

Editorial team:

Susan Köppen (BCCMS, FB4), Hanna Lührs (MAPEX), Michael Maas (FB4)

Further information and subscription to the pdf newsletter: mapex@uni-bremen.de

Link to the online version of the newsletter: www.uni-bremen.de/mapex/whats-new/newsletter

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NEWSletter



II HIGHLIGHTS

ERC Advanced Grant for Lutz Mädler



MAPEX member Lutz Mädler is one of the 269 top researchers in Europe awarded with this year's ERC Advanced Grant. With the budget of 2.5 Million Euro Lutz Mädler and his team will work on "Inverted Reactive Spray Processes for Sulphide/Nitride High Surface Area Electrode Coatings (ReSuNiCo)" within the next five years. Only established research leaders with a recognised track record of research achievements can apply for ERC

Advanced Grants in order to realise their most creative ideas. After Ekkard Brinksmeier (2010), Lutz Mädler is the second holder of an ERC Advanced Grant in the MAPEX community. This confirms both the outstanding individual research performance as well as the excellent quality of materials science in Bremen in general.



Second funding phase for Research Training Group MIMENIMA

Great news just before Christmas: From 2018 to 2022 the teams around chairman Kurosch Rezwan and the 13 project leaders will continue their work within the DFG Research Training Group MIMENIMA. In their last meeting of 2017 the DFG grants committee has allocated 5 million Euro for the education and support of young researchers in Bremen. Within MIMENIMA two postdocs and 15 PhD candidates are working on novel porous ceramic structures and surfaces with tailored properties for applications in energy supply, environmental and chemical processing, as well as space technology.

Monthly Lunch Meeting for Early Career Researchers

A good opportunity to get in touch with peers from different faculties and institutes is during the monthly lunch meeting of the MAPEX Early Career Investigators.

* NEW jour fixe: every first working day of the month

* NEW location: Café Unique (MAPEX sign on the table)

* SAME time: 12:30

All interested scientists and students are invited to meet the MAPEX ECIs and stay up to date with the latest MAPEX developments.

You don't have to be a MAPEX member to join the meeting. There is no official programme; everyone pays his/her own food and drinks. For upcoming dates see the MAPEX calendar.

Master's programme 'Process-oriented Materials Research' (ProMat)

Excellent STEM students with the goal of pursuing an academic career and already having a clear vision of their future research field are the target group of the new research-oriented master's course 'Process-oriented Materials Research' (ProMat), that will start in October 2018. For more details see supplementary – Education 01 of this newsletter.

MAPEX funding and support

Currently the following funding opportunities are offered by MAPEX:

- Research stays abroad for PhD candidates (incoming and outgoing),

- scientific workshops,
- impulses for interdisciplinary project,
- support for child care during MAPEX events.

All details and collection dates for proposals are available online: www.uni-bremen.de/mapex > Research > Funding

MAPEX Methods Workshop II – Computational Materials Science

Get to know (how to use) the „simulation toolbox“ at the University of Bremen. MAPEX will host its second Methods Workshop on 17 May 2018. The idea is to provide the audience, composed both of experimental and computational researchers in the field, with a showcase of the “simulation toolbox” available within the University of Bremen and the MAPEX community. We would like to show the different kinds of expertise in computational materials science (from nano- to macroscale and from solid state to soft matter) that are present at our university, with the final aim of fostering new ideas and collaborations.

MAPEX Symposium – Process Monitoring

Process Monitoring will be in the focus of this year's MAPEX Symposium, taking place on 18 and 19 June in the *Haus der Wissenschaft*. The agenda will comprise keynote talks held by invited speakers from MAPEX as well as external experts. Furthermore, short presentations and posters by early-career researchers from the MAPEX community will round out the two-days programme.

|| 6TH MAPEX EARLY CAREER RESEARCHER WORKSHOP

Building bridges across the borders defined by the faculties and institutes



More than 40 young scientists from four faculties of the university met during the sixth edition of the MAPEX Early Career Researcher Workshop on 25 April 2018. The flashlight and keynote presentations provided a good basis for a lively interdisciplinary exchange between postdocs, PhD candidates, and master students during the poster sessions. Colleagues from the research services unit and the Bremen Early Career Researcher Development (BYRD) answered numerous questions regarding funding schemes for postdocs as well as the support of early-career researchers at the University of Bremen. With his plenary lecture on “Semiconductor nanostructures – smart probes for biological systems” Martin Eickhoff closed the official programme of the workshop. After a day full of scientific insights, some participants enjoyed a visit of the „Hafenrummel“, testing their luck and skill on a course of fairground attractions of the 1950ies.

|| MAPEX NEIGHBOUR VISIT

Get to know what the scientists next door are really doing...

The MAPEX Early Career Investigators regularly invite interested students and employees to join them for a short visit (60 minutes) to one of the MAPEX groups/institutes. Past events at the three divisions of the IWT as well as at the IMSAS showed

that there was great interest to discover the laboratories next door, gain insights into the daily work of other MAPEX scientists, and pave the way for new cooperation.

Beyond the limits of measurability ... is the daily work of Dirk Stöbener, team leader of the optical metrology group at the **Bremen Institute for Metrology, Automation and Quality Science (BIMAQ)**. In September 2017, he introduced us into the world of measurement system engineering. The BIMAQ scientists continuously strive to extend the limits of optical, geometrical, gearing and speckle-metrology in several research areas. The dimensions of the investigated objects/features range from the nanometre scale up to several meters.

In January 2018, we organized a visit to the **Fraunhofer Institute for Manufacturing Technology and Advanced Materials (IFAM)**. Guided by Dirk Lehmhus, we gained insights into the departments of **Powder Technology** and **Casting Technology**, learning about traditional and modern forming processes for metals. **Polymer Chemistry for Fiber Reinforced Plastics** is in the focus of the research group lead by Katharina Koschek, who presented a multitude of possibilities for the construction of strong yet flexible materials for lightweight structures.

