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DEAR READERS,

the Excellence Initiative at the TU Dresden attracts worldwide attention: The English version of the TUD image film *“Incredibly exciting”* was successful at the [49th WorldFest](#) in Houston and has been honored by a Remi Award. It will be conferred during the festival from 8 to 17 April in Houston, Texas.

LECTURE SERIES WITH NOBEL LAUREATES

A first-class start to the new semester awaits us: from the middle of April, the School of Science will be extending an invitation to a [lecture series](#) featuring four Nobel laureates. First up is the Norwegian euroscientist Prof. Edvard Moser, whose topic *“The GPS of the Brain: Grid Cells and the Neural Map of the Space”* will be explored from 7 p.m. on 13 April in the Hörsaalzentrum (lecture hall complex).

“WORLD TASTERS”
SUPPLY COUNTRY BOXES

A culinary country box is now on offer from the TUD student start-up *“World tasters”*. One of the Innovation Sheds (photo: Holthaus) serves as their office. At the moment, it’s all about China. On the occasion of the Chinese New Year, for 35 euro, you can have specialities typical of the country. They have already sold 50 boxes during the first few weeks, with half of these being subscriptions. The next country they are planning is Ireland. [» read more](#)



RESEARCH SERVICE MANUAL

The 2nd Research Service Day took place on 22 February 2016. The new information brochure "TU Dresden's Research Service" was published in the context of the event. TU Dresden's Research Service supports scientists and academics during all phases of their externally funded projects, from initiation to commercial exploitation. The manual provides an overview of the range of support offered by the Research Service and assists with finding the appropriate services and the right contacts during every phase. You can download the [brochure](#) here, in German and in English.

FELLOW IN ACTION AS REGIONAL AMBASSADOR

Prof. Luisa Giacomini (photo: Lohse), [DRESDEN Fellow](#) from Turin, has for some months now also been regional ambassador for TU Dresden in Italy. In her view, "Germany is a dream country for all those in possession of huge, unused potential. Together with the Institute for Romance Languages and Literature and the Italy Centre at TU Dresden, I have been able to organize a translation workshop under the auspices of the European Commission and to compile the first components of a phraseology database. In Dresden, I have met very friendly, competent colleagues who accepted and included me right away. Conditions in the library, too, are optimal: you can work there till midnight every day, including at weekends."

Currently, there are four engineering scientists from Italy, Poland, Ukraine and the USA, as well as a computer scientist from Romania staying at TUD as DRESDEN FELLOWS.



VISITING RESEARCHER IS NOW TUD PROFESSOR



The first [Eleonore-Trefftz](#) visiting scholar has now been appointed professor at TU Dresden. Since winter semester 2015-16, Cornelia Wustmann (Photo: Wurgler) has been Professor of Counselling and Social Relations at the Faculty of Education.

YOUNG INVESTIGATOR WINS MAIER-LEIBNITZ AWARD

Computer scientist and [TUD Young Investigator](#) Dr. Markus Kröttsch is to be awarded the 2016 Heinz Maier-Leibnitz Prize. This most important award for junior researchers in Germany comes with prize money worth 20,000 euro and will be conferred in Berlin on 18 May by the Deutsche Forschungsgemeinschaft (German Research Foundation, DFG) and the Bundesministerium für Bildung und Forschung (Federal Ministry of Education and Research, BMBF). Dr.-Ing Christina Scheffler received her appointment as first woman TUD Young Investigator on 8 March 2016. Since 2014, she has been group leader of "Modification of Fibres" in the Department of Composite Materials at the Leibniz Institute of Polymer Research Dresden (IPF). Dr. Stephan Speier, likewise Young Investigator since February 2016, has been research group leader at the Center for Regenerative Therapies Dresden (CRTD) since 2009. Since 2010, he has also been researching at the Paul Langerhans Institute Dresden, which is part of the German Center for Diabetes Research, and where he has also been a group leader since last year.

SPRINT COURSES IN SUMMER SEMESTER

The SprInt Programme is offering its participants 21 intercultural seminars and five job-related English courses in the forthcoming summer semester. All in all, seven culture-general seminars lay the foundations for communicating in an international university context and present universal intercultural theories. In 14 culture-specific seminars, the emphasis is placed on a variety of cultures and their particular characteristics. Here, participants learn, for instance, about the role of politeness and harmony in Chinese culture and the importance of indirect communication in the anglo-saxon world. The job-related English courses during the upcoming semester are aimed, among others, at colleagues who work in the laboratories of our University or who are involved in advising and supervising international scientists and academics. » [read more](#)

NEW STAFF MEMBERS AT DRESDEN- CONCEPT

Two new members of staff at TU Dresden have joined the [DRESDEN-concept](#) team. Sonja Piotrowski has been responsible for communication since the beginning of the year.

Lena Herlitzius (photos: Lohse), in her capacity as advisor, has been working since March on the continued development of the regional science network.



CRTD: NEW MEDICAL PATENT

A research team under Prof. Elly Tanaka at the Center for Regenerative Therapies Dresden (CRTD) - TU Dresden Cluster of Excellence has developed a highly efficient method for producing functional retinal pigment epithelium cells, which have a crucial influence on vision. The procedure has already been patented in the EU, and since the beginning of February 2016, in the USA, too. At the same time, efforts are being made to employ these RPE cells in the search for drugs that can prevent the onset of blindness.

The groups led by Prof. Tanaka, Prof. Dr. Marius Ader and Dr. Mike O. Karl have already identified several active substances which boost the functional efficiency of RPE cells. These are now being validated in further trials. » [read more](#)

KEY MOLECULE FOR REGENERATION DISCOVERED

Prof. Elly Tanaka's research team has also made a breakthrough in explaining important regulatory processes in the regeneration of limbs in the axolotl. The publication of the results in "Nature", the world-renowned specialist journal for articles on findings and discoveries in biomedicine and the natural sciences, is further proof of the level of performance of Dresden as a research location and of the significance of the CRTD in the research field of regenerative biomedicine. » [read more](#)

UNISTEM DAY 2016 AT THE CRTD

The Europe-wide event [UniStem Day](#) was a great success at the CRTD, with three educational institutions from Dresden participating on 11 March 2016. The pupils were given glimpses into research and everyday practice in the laboratories at CRTD. Additionally, an international live link-up to two further UniStem locations (in Italy and Spain) once again revealed the dimensions of this action day (involving 27,000 pupils at 73 research institutions and universities in eight countries). The next UniStem Day is scheduled for 17 March 2017.

JOINT PLATFORM FOR CRTD, BIOTEC AND B CUBE

Since February, eleven core facilities of CRTD, BIOTEC and B CUBE have a [joint technology platform](#), also accessible via internet. This structural optimization comprises not only a better usability and improved information access, but also a standardized booking system. More than 130 research groups are profiting from this improvement.

The Joint Technology Platform is granted by the Deutsche Forschungsgemeinschaft (German Research Foundation, DFG), the Bundesministerium für Bildung und Forschung (Federal Ministry of Education and Research, BMBF), the Freistaat Sachsen (Free State of Saxony), the Europäische Fonds für Regionalentwicklung (European Fonds for Regional Development, EFRE) and the TU Dresden.

CFAED: FIRST BIOMOLECULAR PARELLEL COMPUTER

An article published in "Proceedings of the National Academy of Sciences" in February describes a new approach for a parallel computer which is based on a combination of nanotechnology and biomolecular motors, and which specialises in solving mathematical problems that a conventional computer would have trouble with. Examples of such problems include the optimisation of circuits, protein folding and route planning (illustration B Cube). The pioneering method was developed by researchers at cfaed working with Prof. Stefan Diez, and at the Max Planck Institute for Molecular Cell Biology and Genetics Dresden, in collaboration with international partners from Canada, England, Sweden, the USA and the Netherlands. » [read more](#)



NEW ENERGY-EFFICIENT GRAPHENE NANORIBBONS

The current edition of the specialist journal "Nature" contains a report about how researchers at the Swiss Federal Laboratories for Materials Science and Technology (Empa), at the Max Planck Institute of Polymer Research Mainz and at TU Dresden (Prof. Xinliang Feng, cfaed) have succeeded for the first time in producing graphene ribbons with perfect zig-zag edges from molecules. These have energetically favourable properties.

» [read more](#)

CFAED EXHIBITS AT CEBIT AND DATE

cfaed participated as an exhibitor at the electronics trade fair CeBIT in Hanover in the week between 14 and 18 March 2016. To start off proceedings at CeBIT, cfaed coordinator Prof. Gerhard Fettweis – together with the head of Vodafone Deutschland, Dr. Hannes Ametsreiter – presented a mobile network of the 5th generation (5G) with a speed of 15 gigabits/second in the Vodafone Pavilion. At a "Science Square", cfaed research group leader Dr. Martin Elstner had the opportunity to showcase his microfluidic droplet generator, a demonstrator for chemical computing with chembits.

Simultaneously, one of the most important European conferences on design, automation and testing, the DATE conference, was taking place in Dresden. At this event, cfaed was also represented with three research paths.

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