Dear Readers,

An eventful year is coming to a close, and 2018 is set to be no less exciting. It will be a year of landmark decisions for TU Dresden: will we be able to score points with our proposals for Clusters of Excellence, ensuring we still remain contenders in the Excellence race?

On 6 December 2017, during a briefing held for all members of the university, Rector Prof. Hans Müller-Steinhagen provided information on the next steps in the preparation of the proposal with which TU Dresden intends to defend its Title of Excellence.

All TUD members and the staff of the DRESDEN-concept partners are cordially invited to attend the series of events comprising the “Zukunftslabore” (Future Labs), which will take place in the first half of 2018 to provide a platform for discussing central topics for TU Dresden’s overall strategy.

The first “Future Lab” will take place between 9.30 am and 1.30 pm on 24 January 2018, in the Festsaal (ballroom) on Dülferstraße. It will address structures and processes, and how these must be further developed in order to create sustainable conditions for research and teaching.

DRESDEN Fellowship Programme to Continue

Thanks to the DRESDEN Fellowship Programme, excellent researchers will continue to be invited to TU Dresden for a period of up to six months. Both established, internationally renowned, top-level researchers and outstanding junior scientists are welcome guests.

The programme will now have a special focus on welcoming excellent female researchers to TU Dresden. Recommendations for candidates can be submitted at any time by TU Dresden professors.

Kathrin Tittel is the new contact person for the programme.
**New Funds for Internationalisation**

With immediate effect, funds for the implementation of internationalisation activities until October 2019 can be applied for in three new funding formats (the following links are only accessible to members of TU Dresden):

The aim of the **Flexible Fund for Internationalisation** is to establish and expand international research collaborations and projects, while the **Strategic Fund for Internationalisation** is intended for joint projects with the international universities King’s College London and TU Delft, as well as the scientific regions of Wroclaw and Prague. The **special programme Shiraz University** provides mobility funding for researchers and professors.

Applications can be submitted at any time. Decisions are made monthly on applications submitted for the Flexible and the Strategic Funds. Applications for the first selection round can still be submitted until 17 December 2017. Please contact Andrea Büschel for matters relating to applications.

**“StartupCubes” Provide Creative Environment for Start-up Projects**

With the introduction of the **StartupCubes**, TU Dresden is now providing its start-up projects with the necessary space and the creative environment to develop innovative product ideas into successful business concepts.

The StartupCubes are managed by dresden|exists, the start-up service of TU Dresden.

Converted building site containers will be used for this purpose. So far – under the “Innovation Sheds” label – these have provided the necessary freedom for interdisciplinary research teams to fine-tune the innovations of the future.

The StartupCubes can be used by students, graduates and staff of TU Dresden who are working on a start-up project. An appointment to introduce your start-up idea at dresden|exists is required.

**“Open Topic Postdocs” Take Up Their Work**

In November and December 2017, 12 out of a total of 17 junior researchers took up their work at TU Dresden within the context of the “Open Topic Postdoc Positions” programme.

For the postdoc positions advertised, 469 applications from 72 countries were received. The 17 postdocs selected come from Argentina, Austria, Bangladesh, Bulgaria, Cameroon, Ethiopia, Germany, Slovenia, Spain and Vietnam. They will be given employment contracts at TU Dresden lasting for up to two years.

The junior researchers are expected to prepare an application for an independent, third-party funded research project and to submit it to renowned providers of third-party funding. The research topics comprise a broad range and cover all of TU Dresden’s Research Priority Areas.

**PhD Supervision Worthy of a Prize: 2017 GA Supervisor Award**

This year, the Graduate Academy (GA) tendered its Award for Excellence in Doctoral Supervision for the first time.

A total of 51 recommendations were received from doctoral candidates and postdocs at TU Dresden. Many supervisors were nominated multiple times. Winner of the prize is junior professor Ilona Croy (medicine), whose way of encouraging and challenging junior scientists is exemplary.

Such commitment is now being given not only academic appreciation but also financial recognition. The winner for excellent PhD supervision is awarded 5,000 euro.
Two New TUD Young Investigators

On 28 November 2017, Dr. Thorsten-Lars Schmidt (left) and Dr. Tobias A. F. König (right) received their certificates as new TUD Young Investigators from Rector Prof. Hans Müller-Steinhagen (centre). (Photo: Angela Böhm)

DRESDEN-concept Provides Students with Financial Support

Now, for the first time, the 24 partners of the DRESDEN-concept research alliance (DDc) are awarding Deutschlandstipendium scholarships to students of TU Dresden, which will promote excellent teaching in Dresden. A total of eight DRESDEN-concept Deutschlandstipendium scholarships are being awarded for two semesters to international students who are particularly committed and have a proven track record of success.

Those selected by the DRESDEN-concept partners are students of medicine, biotechnology, computer science, philosophy, physics, electrical engineering and engineering sciences. Each scholarship holder is supervised by a mentor from a DDc institute, ensuring they are provided with the opportunity to gain insights into the respective institute.

Follow-Up Meeting Regarding DDC Event “Innovations in Medical Technology”

The first follow-up meeting of the Scientific Area Network (SAN) “Innovations in Medical Technology” took place on 30 November 2017. DRESDEN-concept’s network series was launched on 23 October 2017.

With the support of the TU Dresden Team Interaction, the issue being raised was regarding the success of a collaboration with physicians within DRESDEN-concept. In order to find conclusive answers, further meetings within this SAN are to follow next year.

The Scientific Area Networks promote interdisciplinary, topic-related research among scientists of the 24 DRESDEN-concept partner institutes.

Million-Dollar Funding for Platform for the Prevention of Type 1 Diabetes

The Global Platform for the Prevention of Autoimmune Diabetes (GPPAD) has been granted 52 million US dollars in funding from the Helmsley Charitable Trust. The aim of the GPPAD network is to test innovative therapeutic approaches for preventing the development of type 1 diabetes.

“This huge investment brings together 30 years of genetic and immunological research with the findings of the scientists who are now part of GPPAD. The result is one of the largest initiatives in the early prevention of type 1 diabetes,” explains Prof. Ezio Bonifacio, Director of the Center for Regenerative Therapies Dresden (CRTD) and co-applicant for the GPPAD programme. The Free State of Saxony and TU Dresden can be proud of having created a basis for the programme with the highly successful Freder1k study in Saxony."

In addition to members from Munich and Dresden, the GPPAD network also includes Lund University (Sweden), the University of Oxford (United Kingdom), KU Leuven (Belgium), the University of Warsaw (Poland) and the Children’s and Youth Hospital “Auf der Bult” (Hanover) among its members. The funding will continue until 2025.

Federal President Frank-Walter Steinmeier Visits TU Dresden

On 14 November 2017, Federal President Frank-Walter Steinmeier visited TU Dresden as part of his two-day inaugural visit to Saxony. Together with his wife Elke Büdenbender, he was introduced to ongoing research projects at the Center for Regenerative Therapies Dresden (CRTD) and the Institute of Concrete Structures.
Steinmeier acquired insights into the latest research results in the area of regenerative therapies at the CRTD, specifically in the field of neurodegenerative eye diseases and diabetes.

Following this, the guests conversed with the winners of the 2016 Deutscher Zukunftspreis (German Future Prize) and were evidently fascinated by the potential of carbon concrete.

**CRTD Presents New Promotional Videos**

The CRTD has unveiled its new promotional videos. These were produced by Biermann-Jung Kommunikation & Film. The set of films consists of an overview film (with the focus on diabetes research), one on adult neurogenesis and another on retina research.

**Thinking the Future: cfaed Symposium “Advancing Electronics”**

On 19 March 2018, after the project’s first five years, the Center for Advancing Electronics Dresden (cfaed) will host a symposium on innovative technologies for the information processing of tomorrow.

The event will take place at the International Congress Center Dresden, and will promote scientific dialogue on the latest findings, a wide range of approaches and visionary plans in microelectronics research for the years ahead.

Multidisciplinary keynote speeches, panel discussions and a poster session will provide participants with the opportunity to become involved in a wide-ranging and varied debate on advancing electronics. In addition, the conference will allow for networking with potential collaboration partners.

Those interested can now register for the symposium.

**Humboldt Fellow Dr. Minghao Yu at cfaed since November**

The Chinese chemist Dr. Minghao Yu has been working as a visiting researcher at the Strategic Chair for Molecular Functional Materials (Prof. Xinliang Feng) of the Center for Advancing Electronics Dresden (cfaed) since 1 November 2017. His research stay is being funded by the Alexander von Humboldt Foundation in Bonn in the form of a Humboldt Research Fellowship for postdocs. The fellowship will run until 31 October 2019.

Dr. Yu is investigating issues related to super capacitors. These component parts have significantly higher capacity values than other capacitors and can close the gap between electrolytic capacitors and batteries. They are used in applications that require many fast charging/discharging cycles: in cars, buses, trains, cranes and lifts, where they are employed for regenerative braking, short-term energy storage or burst-mode power supply.