

12 Years of Intensive Work for Research at TU Graz

Over the past 12 years, TU Graz has introduced numerous internal funding measures to support research. This has enabled TU Graz to establish itself even more strongly as one of the leading research institutions. Vice Rector for Research Horst Bischof, who will preside over TU Graz as Rector from autumn 2023, is largely responsible for this.

Birgit Baustädter

At the core of all TU Graz research funding measures are two points: TU Graz promotes interdisciplinary, cross-faculty work that leads to completely new ideas in this broad field, and research funding is awarded competitively, where the best ideas should prevail in the competition.



The basis for this are the **FIELDS OF EXPERTISE** (FoE), which cover the entire breadth of research. These Fields of Expertise are what distinguishes TU Graz and its research work: Advanced Materials Science, Human & Biotechnology, Information, Communication & Computing, Mobility & Production and Sustainable Systems. TU Graz sees its core competence in these deliberately very broad research areas and encourages its researchers with a number of very successful support measures. In addition to targeted research funding, each FoE takes its own measures to link up its members. The TU Graz Science for Future Day in September and the TU Graz SciPix photo/video competition were established as overarching events.



INITIAL FUNDING PROGRAMME

A very low-threshold support measure, especially for younger colleagues, is the Initial Funding Programme (announced every six months) for the development of research projects. This seed or start-up funding provides financial support to project applicants during the application phase and helps to bridge this period financially. This instrument is having a great impact: in 18 calls to date, projects with a total volume of more than 31 million euros have been raised.



In order to attract young, promising research talent to TU Graz, the **FOE TENURE TRACK POSITIONS** have been created. TU Graz is constantly striving to attract, keep and promote the best minds in research and science. The FoE tenure track positions enable young talented academics to work towards their own professorships. The special thing about it is that the tenure track positions are advertised across the entire spectrum of research within an FoE – this opens up the pool of applicants considerably. Up to 81 applications were able to be generated in this way. One tenure track position was filled in each Field of Expertise:

Jurij Koruza (Advanced Materials Science), Kerstin Lenk (Human & Biotechnology), Yannic Maus (Information, Communication & Computing), Merit Bodner (Mobility & Production) und Marcella Ruschi Mendes Saade (Sustainable Systems).



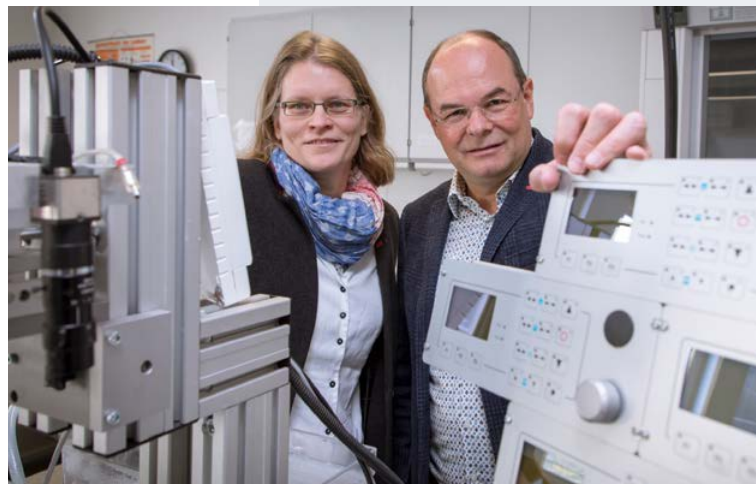
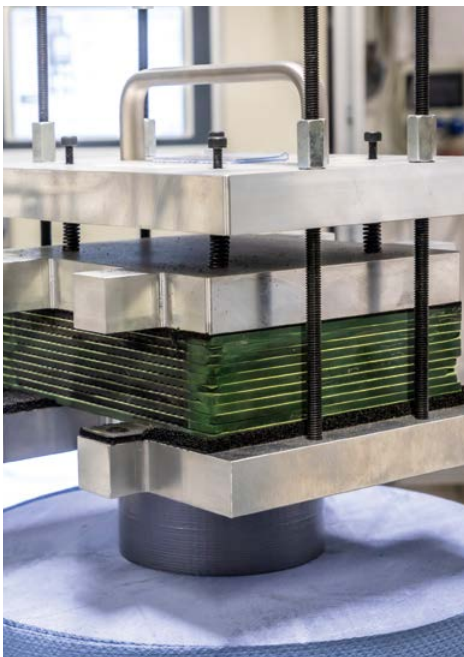
In addition to the best minds, a suitable research infrastructure is of course also crucial for the research success of a university. That is why the instrument of **MATCHING GRANTS** was developed. For several years, TU Graz has been promoting the acquisition of new research infrastructure that can preferably be used jointly by several institutes. The university subsidises up to 50 per cent of the new costs – up to a maximum contribution of 250,000 euros.



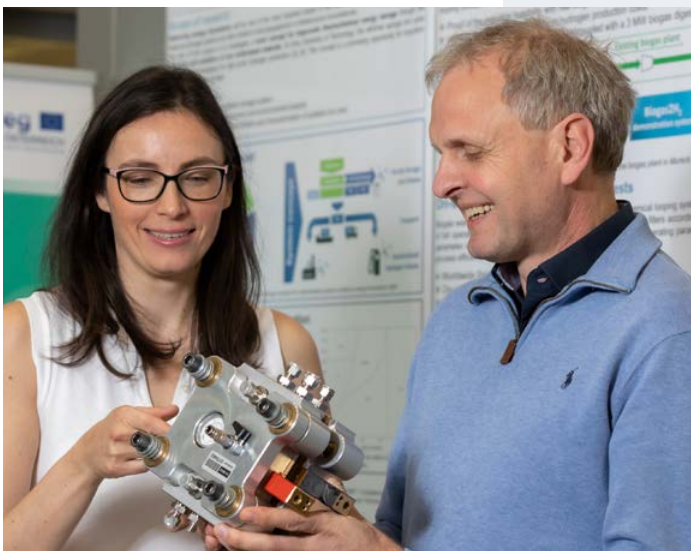
Another top research programme at TU Graz are the **LEAD PROJECTS**. Interdisciplinary cutting-edge research is what distinguishes projects with lead project funding at TU Graz. The University awards highly endowed special funding for research projects that are particularly dedicated to basic research in outstanding areas of cutting-edge research.

The Dependable Internet of Things project heralded the era of lead projects at TU Graz. The project ran for two times three years and received a total of 4 million euros in funding. It was successfully completed in 2022. In total, this resulted in 217 publications, six patents and 46 follow-up projects with a TU Graz volume of 34 million euros. 13 awards were given to researchers from the project in addition.

Two further lead projects are currently running: Mechanics, Modelling and Simulation of Aortic Dissection and Porous Materials @ Work for Sustainability. A new bidding round is currently underway.



Lunghammer – TU Graz, top left: Oliver Wolf



The most recent development in research at TU Graz are the **RESEARCH CENTERS**. Working together on the topics of the future, this vision is at the heart of the research done in the Research Centers at TU Graz. The flexibly structured centres are dedicated to a wide variety of themes across faculties and disciplines, such as the future of hydrogen, machine learning, sustainable construction, energy systems of the future, smart production and rail as the transport route of the future. Partner companies from business and industry are invited to participate, as are competence centres for scientific cooperation. At the heart of a Research Center is an ambitious joint research agenda, as well as an international scientific advisory board. In the meantime, six Research Centers have been established. ■