Dear colleagues, research partners and all those interested in our research,



Vice Rector for Research Lunghammer – TU Graz

Andrea Höglinger

a university thrives on collaboration in teaching and research. TU Graz and the University of Graz have been working closely together in the field of natural sciences for 20 years – both in joint study programmes and courses, as well as in jointly operated infrastructure and research projects. NAWI Graz is a unique success story and will continue to be so in the future, as the two universities will grow even closer together in the coming years, for example with the Graz Center of Physics.

The main theme of this issue of TU Graz research is biomedical engineering and biomedical research. Here, the focus is on people, health and the best medical care. Improving MRI examinations, brain-computer interfaces and optimised speech recognition are just a few of the research areas that researchers at TU Graz are working on in this field.

I am particularly pleased to be able to report in this issue on three ERC Grants awarded to TU Graz. One ERC Starting Grant each goes to Fariba Karimi and Maria Eichlseder. And Gerhard A. Holzapfel will be conducting research with an ERC Synergy Grant in the coming years.

All in all, we can look back on an extremely successful year of research at TU Graz. In the meantime, I wish you a relaxing New Year's break.

Best wishes, Andrea Höglinger



SUPERCONDUCTOR

A superconductor is a material that, under certain conditions, can transport electrical current with virtually no resistance. In today's superconductors – like the one shown in this picture – this happens at extremely low temperatures. To achieve this, the conductor is cooled with liquid hydrogen – which is currently only the case in high-tech applications in hospitals or research facilities. But the search is on for a superconductor that works at natural ambient temperature and pressure.

> I SPY SCIENCE "Was ist ein Supraleiter?"