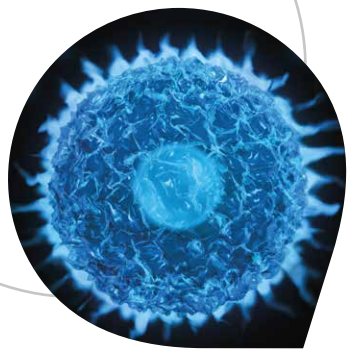
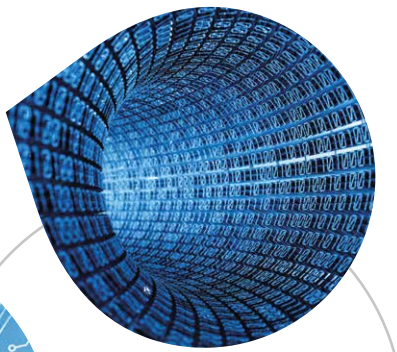



Fields of Expertise

TU Graz's research activities are grouped into five strategic, forward-looking Fields of Expertise. Researchers engage in interdisciplinary cooperation and benefit from different approaches and methods, shared resources and international exchange.

Advanced Materials Science

Editorial: Anna Maria Coclite, Christof Sommitsch, Gregor Trimmel >

Hydrogen Embrittlement (HE) of Ultra-High-Strength Steel Screws in Service: Still a Development Potential? >
Andreas Drexler, Hamdi Elsayed, Rudolf Vallant

Human & Biotechnology

Editorial: Gabriele Berg, Gernot Müller-Putz, Bernd Nidetzky >

Fast, Accurate and Built to Fit: Computational Protein Design to Address Challenges in Biotechnology >
Gustav Oberdorfer

Information, Communication & Computing

Editorial: Kay Uwe Römer >

The Future of Computing: Learning-Based, Energy-Efficient and Brain-Inspired >
Robert Legenstein

Mobility & Production

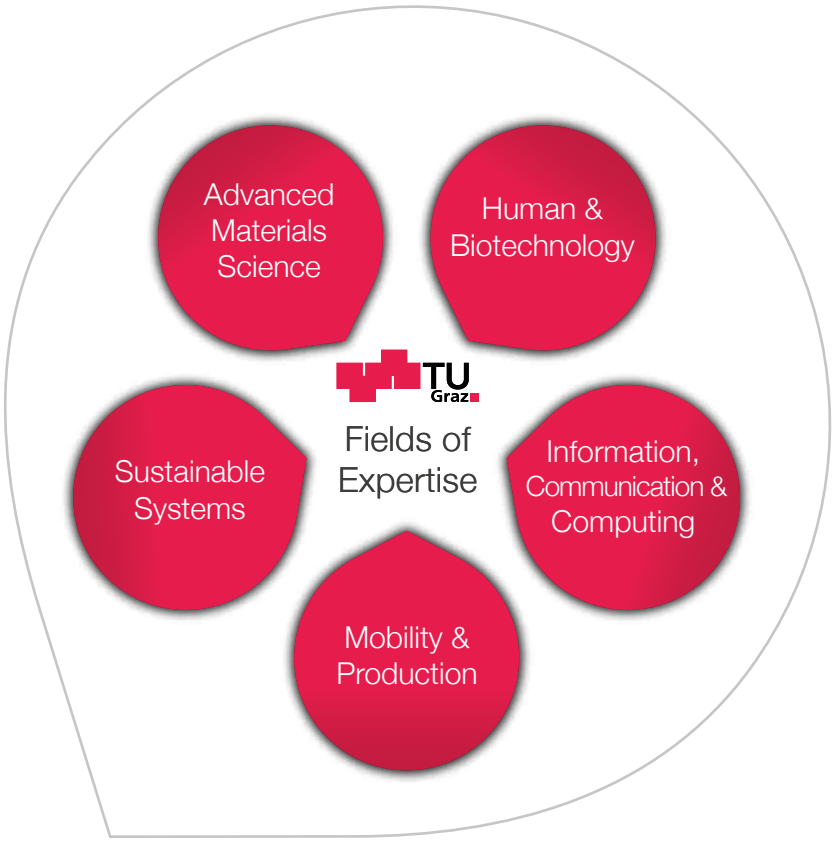
Editorial: Rudolf Pichler >

Research on Next Generation Fuel Cell and Hydrogen Technologies >
Sebastian Bock

Sustainable Systems

Editorial: Urs Leonhard Hirschberg >

Enhancing Production of Hydropower Plants and Eco-Friendly Electricity Generation >
Helmut Benigni



TU Graz has divided its research into five innovative areas: the Fields of Expertise. Researchers in the Fields of Expertise break new ground in basic research. They take part in interdisciplinary cooperation, gain support for outstanding projects and are based in the region as well as part of international networks. They also develop key technologies for industry and commerce, and perform research in the framework of company shareholdings and partnerships.

Source: TU Graz

ADVANCED MATERIALS SCIENCE
Researchers aim to understand the smallest components in the structure and function of new materials, and develop and assemble them in special processes.

HUMAN & BIOTECHNOLOGY
Researchers develop devices and methods for medical applications and therapies, and focus on using enzymes and living microorganisms such as bacteria, fungi and yeast in technical applications.

INFORMATION, COMMUNICATION & COMPUTING
Researchers face challenges prompted by the information age, for example data security and efficient use of the ever-increasing volume of data.

MOBILITY & PRODUCTION
Researchers investigate novel vehicle technologies, new drive systems and more economical product manufacturing processes.

SUSTAINABLE SYSTEMS
Scientists focus on the complex challenges presented by a growing population and increasingly scarce natural resources.