

A Longer Life for Organic Solar Cells

Photovoltaic cells made of organic materials are light and flexible, which is why they are considered very promising. An international research network led by TU Graz is now aiming to increase the stability of the materials.

Solar cells made of silicon have been around for 70 years. Organic solar cells, on the other hand, are quite new, but open up new possibilities for emission-free electricity production. These solar cells made of organic compounds achieve efficiencies of up to 19 percent, yet they are extremely thin, light and flexible. Applied to transparent film, they can be used in a wide variety of geometric shapes and colours in areas for which silicon-based solar cells are unsuitable. One problem so far, however, has been their short lifespan: organic solar cells deteriorate quite quickly, which is why they are still of little commercial importance. This is now to change: Under the leadership of Graz University of Technology (TU Graz), the OPVStability network brings together international partners from science and industry who will be conducting research over the next four years to increase the durability of organic solar cells. The European Commission is funding the project with around 2.7 million euros. ■

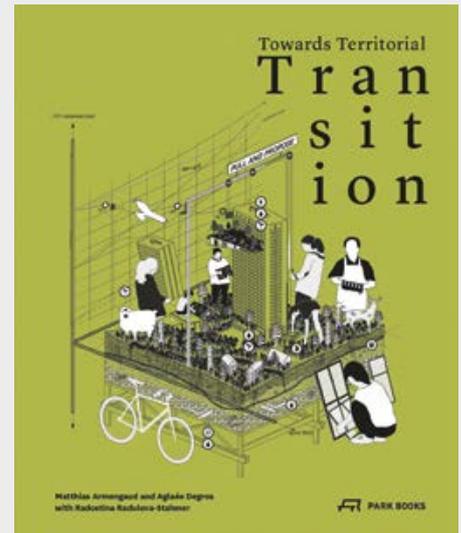
Lunghammer – TU Graz

The Most Successful Inventors of the Universities in Graz

A total of 169 inventions and 71 patents were registered by researchers at TU Graz, Med Uni Graz and Uni Graz in the past two years. They were honoured for this in November.

227 scientists from the universities in Graz registered a total of 169 inventions and 71 patents in the past two years. For this reason, the three Graz universities – TU Graz, the University of Graz and the Medical University of Graz – honour their most successful inventors every two years. The focus is on the transfer of theoretical research to an innovative product and a patentable invention that can find groundbreaking application in practice.

This year, TU Graz researcher Alexander Bergmann (Institute of Electrical Measurement and Sensor Systems) was awarded a special honour. He received the Nikola Tesla Medal of TU Graz for being the most successful inventor of TU Graz with a total of 12 patents in two years. Before Alexander Bergmann, Anton Glieder (Institute of Molecular Biotechnology), Dieter Schmalstieg (Institute of Computer Graphics and Vision) and Gernot Kubin (Institute of Signal Processing and Speech Communication) had already been honoured with the medal. ■



New publications: Towards Territorial Transition and Medical Devices and In Vitro Diagnostics

Medical Devices and In Vitro Diagnostics is a new standard work for biomedical engineers. Towards Territorial Transition deals with decarbonization and ecological change from an architectural perspective.

Towards Territorial Transition contains contributions by Aglaée Degros (Institute of Urban Design, Graz University of Technology), Matthias Armengaud, Anita Berrizbeitia, Panos Mantziaras and Anna Positano, among others. It looks at the interactions between ecological, resource-related systems and landscapes and explores the potential to counter the dramatic threats posed by climate change and a possible resulting social crisis. It is published by Park Books. ISBN 978-3-03860-305-4

Medical Devices and In Vitro Diagnostics: Requirements in Europe is written by Christian Baumgarnter, Johann Harer and Jörg Schröttner and is aimed at companies, professionals, students and graduates in medical technology. It contains a comprehensive overview of all relevant regulatory information and requirements relating to medical devices and in-vitro diagnostics in Europe. The book is published by Springer Nature. ISBN 978-3-031-22090-6 ■