

„Material Science in Industry: Technologies in Megatrends”

This interactive-style lecture provides an overview of the current state of the art and new developments in global megatrends. It addresses students and doctoral candidates approaching graduation as preparation for application, career or start-up.

Speaker: Dr. Christian Neumann, Heraeus Holding GmbH, Hanau

Date & Venue	Subject
2022-02-24, 16:15 – 18:00, Physics Lecture Hall II	How to fight climate change?
<p>Abstract: Getting carbon-neutral is the big goal for the 21st century to avoid climate collapse. We will take a look in existing and future technologies in the space of renewable energy & storage Solutions for different use cases from personal over domestic up to large-scale systems. We will discuss viability and associated costs.</p>	
Date & Venue	Subject
2022-03-03, 16:15 – 18:00, Chemistry Lecture Hall C 5b	How to deal with limited resources?
<p>Abstract: Efficient use of resources will be one of the most demanding tasks for the upcoming generation. We will discuss recycling strategies from well established metal processes but will also discuss existing and upcoming polymer recycling processes that establish upcycling instead of downcycling and take a look at recycling of complex waste streams.</p>	
Date & Venue	Subject
2022-03-17, 16:15 – 18:00, Chemistry Lecture Hall C 5a	How to stay healthy longer?
<p>Abstract: Personalized Medicine will be a disruptive switch in the methods that are used by clinicians in the next 20 years. We will look into existing methods to replace and repair bones with the help of additive manufacturing but will also take a glimpse into the future of complex printed organs and its current limitations. Existing standardized and new developments in personalized pharma for cancer medication will be another topic.</p>	
Date & Venue	Subject
2022-03-24, 16:15 – 18:00, Physics Lecture Hall II	Hot to stay connected safely?
<p>Abstract: Eavesdropping in digital network becomes more and more of a hazard not only to companies and governments but increasingly also for individuals. We will discuss existing communication systems and how future quantum-based layers can dramatically increase the communication safety already in the hardware layers of current and future communication networks.</p>	

All interested students, doctoral candidates and postdocs from the research groups within the ZfM are welcome.

Please note that this event series will be conducted under **3G Corona regulations**, and show your valid certificate (QR code, if possible) at the entrance.

The mode of implementation of this event may change at short notice depending on the pandemic situation (e.g. conduct as a video conference).