

Wednesday, April 7, 2021

## Introducing the “Materials for Brain” Research Training Group 2154

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Spokesperson of the RTG

The motivation for the Research Training Group “Materials for Brain” is research on possible treatments of patients with chronic brain diseases. Currently this treatment is still mainly based on systemic drug administration, but sufficiently large drug concentrations in the brain are often accompanied by side effects affecting other organs in the body. Neural implants, which allow localized and individualized therapy, are an alternative solution if they can satisfy the following requirements: they must be compact, biocompatible, resilient and highly flexible. Defined, nano-scale, therapeutically active coatings as well as suitability of the implants for diagnostics with magnetic resonance imaging (MRI) are only some aspects and demands of possible novel therapies. In order to reach these goals, micro-structured, functional materials based on thin film technology are investigated to elucidate the possibilities of innovative local treatment of epilepsy, brain tumors and vascular diseases. Material-controlled drug release and implant interactions with cells are initially studied *in vitro* and now *in vivo* be studied using cell cultures. Such research demands a high level of interdisciplinary and international collaborative research, besides an introduction into the research the talk will introduce measures and aspects of the doctoral student trainings as well.

### Access to the Zoom-Meeting:

<https://uni-kiel.zoom.us/j/89783278309?pwd=WXhnUllFOWFmL2hkOEpl5NUt6RXh6Zz09>

Meeting-ID: 897 8327 8309

Kenncode: 988298

Schnelleinwahl mobil

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Download the iCalendar files (.ics) and import the monthly appointment into your calendar system:

<https://uni-kiel.zoom.us/meeting/tZ0qf-qqqTMpGt2DE1NWQk2D8r->

[Em3fRWHDc/ics?icsToken=98tyKuGhqTMpGNODsxmORpx5B4qgb-rwtlxejbcPuDq0LRdiaVHSbvAPF78sFurn](https://uni-kiel.zoom.us/j/89783278309?pwd=WXhnUllFOWFmL2hkOEpl5NUt6RXh6Zz09)

*The KiNSIS Colloquium will take place as an online meeting  
on the first Wednesday of each month at 12 noon.*

*If you would like to present a topic that might be interesting  
for other KiNSIS members,*

*please contact Julia Jedtberg ([jfr@tf.uni-kiel.de](mailto:jfr@tf.uni-kiel.de))*