



Vorlesungsankündigung

Organic Electronics

SoSe 2019

Prof. Dr. rer. nat. Thomas Riedl

Wahlvorlesung im Master-Studiengang

- Elektrotechnik (PO2009/2016) Vertiefungsrichtung „*Polymer Electronics and Novel Technologies*“ im Bereich „*Materials and Processes*“
- Elektrotechnik (PO2009/2016) Vertiefungsrichtung „*Automotive*“ im Bereich „*Assistance and Infotainment Systems*“
- Elektrotechnik (PO2002) im Wahlpflichtbereich „*Device Technology and Signal Processing*“ dem Modul „*Nanotechnology and Nanodevices*“
- Wirtschaftsingenieurwesen (PO 2017 / aktualisierte Version 2018, „*Energiemanagement*“ im Bereich „*Energietechnische Systeme und Komponenten*“, „*Informationstechnik*“ im Bereich „*Elektronik*“, „*Automotive*“ im Bereich „*Assistenzsysteme*“)
- Master of Education (PO2012) im Wahlpflichtmodul „Große berufliche Fachrichtung Elektronentechnik“

Not long ago, it was hard to imagine that there could be any use for polymers beyond plastic bags or electrical insulators etc. With the discovery of organic semiconductors this view has changed completely: The field of organic (opto-)electronics was born and has matured significantly in recent years. First products, like displays based on organic light emitting diodes (OLEDs) and organic solar cells have already entered the market. Organic semiconductors allow for an essentially novel class of electronics, that can be light weight, highly efficient, flexible, and even transparent.

This lecture will provide an introduction to the exciting field of organic semiconductors and devices. In practical courses, you will have the opportunity to fabricate and characterize organic devices (e.g. TFTs, solar cells, ...) in our lab.



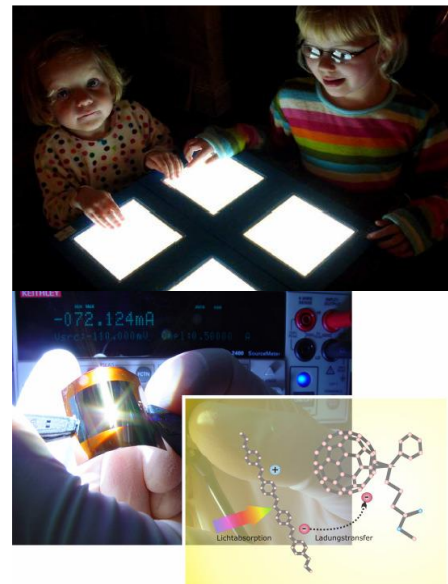
Scope

- Organic semiconductors
- Technological aspects
- Organic transistors
- Organic memory
- Large area electronics
- Organic energy
 - Photovoltaics
 - Energy storage
- Organic light emitting devices
 - OLEDs
 - Organic Lasers
- Market prospects for organic electronics

Moodle Key: OrgEI2020

Start: Friday, **24. April 2020**, 10:15 h

Where: online





Dear Students,

Please note, that due to the actual situation, the teaching will be pursued solely online until further notice. We will start up with recorded lectures, that will be provided as streams in moodle, combined with a periodical Q/A with Prof. Riedl, possibly via Zoom. The exercise will be held entirely live in form of a Zoom meeting, to enable direct queries and hopefully discussion.

Please understand that this is not only new for you, but also for us, and we will be trying to improve this method. It's very well possible that we conduct changes in procedure throughout the lecture, if we find points we can improve on.

All the best,