

Event locations



Feldschlösschen-Stammhaus
Dresden

Institut of Materials Science,
TU Dresden

Faculty of Science, UJEP



Call of Abstracts

PhD students who would like to present their research work are requested to send a summary (~1000 words) of their research work by **15 May 2022**.

Please send the file to
trans3net@mailbox.tu-dresden.de.

Organization



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Further information: <https://prf.ujep.cz/en/1st-phd-conference>

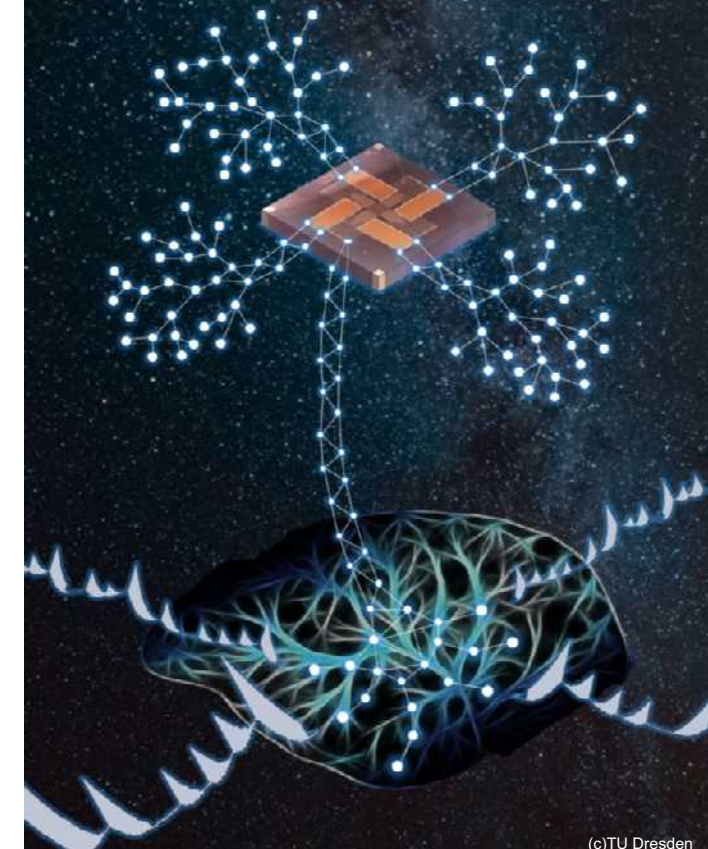
Contact

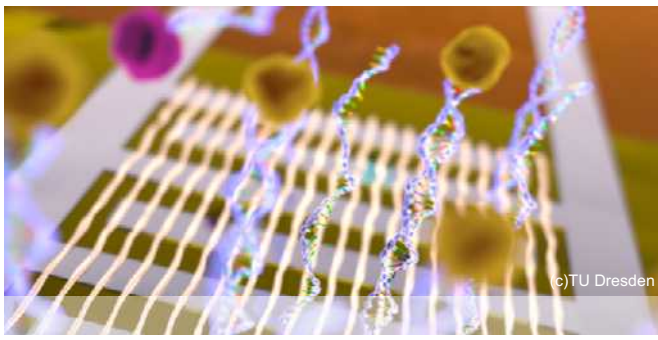


trans3net@mailbox.tu-dresden.de

PhD-Conference: Biologization, Nano- technology, Simulation

27 June - 1 July 2022
Dresden, Ústí nad Labem





Aim

We are pleased to announce our first PhD-Conference 2022. This doctoral conference aims to promote exchange on an international level. It offers the opportunity to lay the foundation for future joint research projects and to network with professional colleagues.

The PhD conference focuses on the systematic use and integration of biological resources as well as processes, procedures and principles in various technical fields of application. Research areas such as biologically inspired synthesis, multifunctionality through combination of material properties, novel properties of materials are considered.

**Please register for the event
and submit a summary of your
PhD thesis!**



Topics

Biologization

- Functionalization of the interface to artificial biomaterials,
- Dental systems,
- Deposition of calcium phosphates and silicates,
- Fixation and anchorage methods of functional molecules,
- Study of micro environments for resulting biological reactions,
- Methodological developments of measurement equipment
- Environmental monitoring

Nanotechnology

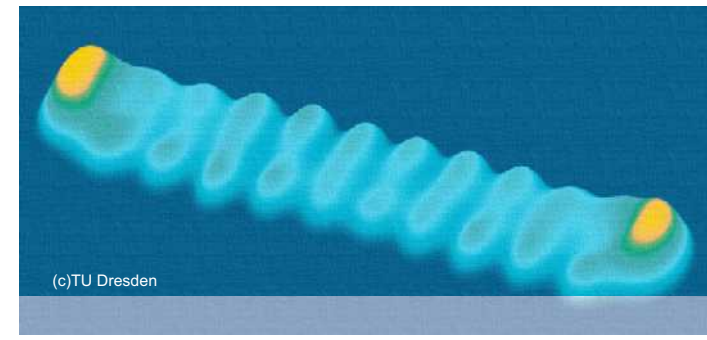
- Tissue engineering and biodegradation of implant materials and implant systems,
- Nanostructuring of Implant surfaces,
- Discovery of novel nanostructured materials
- Development and integration of biosensor systems,
- Analysis of Implant Systems,
- Development of cell culture methods,
- Environmental nanotechnology

Methods for Characterisation

- OCT - Optical Coherence tomography
- μ CT – X-ray microtomography
- AFM/AFAM – Atomic Force and Atomic Force Acoustic Microscopy
- FFD Fractal Fluorescence Decay

Simulation

- Scale-bridging materials modeling from atom to system
- Ab initio simulations
- Molecular Dynamics approaches
- Continuum modeling and simulation
- Data-driven materials discovery
- High-throughput materials simulations



Programme

The focus of this event is on the presentation of the doctoral students' research work. The programme also offers space for detailed information about the current work of the participating institutes and university chairs. In addition to the exciting scientific exchange, there will also be an opportunity to get to know various experimental and test fields as well as laboratories. The establishment of personal contacts will also be an important part of the event.

The event will take place over 3 days in Dresden and 2 days in Ostrov/Usti nad Labem. Participation is free of charge and also a part of the travel costs and the costs for accommodation will be covered.

