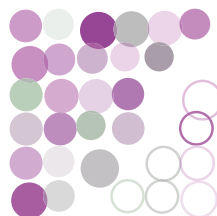


C | A | UKiel University
Christian-Albrechts-Universität zu Kiel**K I E L
N A N O
S U R F A C E &
I N T E R F A C E
S C I E N C E**

Kiel Nano, Surface and Interface Science (KiNSIS)

Established in 2013 as one of currently four priority research areas of Kiel University, KiNSIS is an interdisciplinary network facilitating research collaborations, enabling access to research infrastructure and supporting its members to enter into larger interdisciplinary projects. The members of KiNSIS aim for a comprehensive understanding of the fundamental principles of nanoscale systems, the investigation of their interactions with their environment and the transfer of knowledge into applications. In this way, KiNSIS contributes to solutions for global challenges in the fields of energy, medicine and information technology.

www.kinsis.uni-kiel.de/en



Primary Aims

- Creation of an interdisciplinary forum for scientific exchange
- Promotion of excellent research and collaborative research projects
- Promotion of technology transfer and scientific outreach activities
- Support of young scientists

Current Main Areas of Research

- Neurotronics
- Sensors
- Energy systems
- Nanomedicine
- Reactions at interfaces
- Quantum technology

Members

- About 100 professors, working group leaders and postdoctoral researchers
- from four different faculties of Kiel University (Mathematics and Natural Sciences, Engineering, Medicine, Agriculture and Nutritional Sciences) and many external partner institutions
- working across the disciplines of Physics, Chemistry, Engineering and Life Science

External Partner Institutions

- Deutsches Elektronen-Synchrotron (DESY)
- Research Center Borstel – Leibniz Lung Center (FZB)
- Fraunhofer Institute for Silicon Technology (ISIT)
- Helmholtz-Zentrum hereon GmbH, Geesthacht
- University Medical Center Schleswig-Holstein (UKSH)
- European X-Ray Free-Electron Laser Facility GmbH (European XFEL)
- Leibniz Institute for Science and Mathematics Education (IPN)
- Max Planck Institute for Evolutionary Biology, Plön
- North German Initiative Nanotechnology (NINa)

Research Infrastructure

- Center for Networked Sensor Systems (ZEVS)
- Center for Transmission Electron Microscopy (TEM-Center)
- Kiel Nano Lab, Competence Center Nanosystem Technology
- Laboratory for Reliable Battery-Assisted Energy Conversion (BAEW Lab)
- Molecular Imaging North Competence Center (MOIN CC)
- Ruprecht Haensel Laboratory (RHL, CAU-DESY joint lab)

Support for Young Scientists

- KiNSIS Young Academy for doctoral researchers
- Dissertation Awards
- Early Career Support Programme for postdoctoral researchers
 - Microprojects
 - National and international lab exchange
 - Early Career Award
- Individual career support (e.g. coaching)

Externally Funded Research Projects

- CRC 1461: Neurotronics – Bio-inspired Information Pathways
- CRC 1261: Magnetoelectric Sensors – From Composite Materials to Biomagnetic Diagnostics
- RTG 2154: Materials for Brain – Thin Film Functional Materials for Minimally Invasive Therapy of Brain Diseases
- BMBF Collaborative Research Projects on the investigation of condensed matter using synchrotron radiation and free-electron laser facilities
- ERC Starting Grant: NanoBeam – Quantum Coherent Control: Self-Interference of Electron Beams with Nanostructures
- EU Horizon 2020: COSMICS – Concepts and Tools in Molecular Spintronics

Technology Transfer

- The KiNSIS members pursue numerous industrial cooperations, which foster technology transfer and practical feedback from partners. The inventions of KiNSIS members frequently lead to innovations, which lead to patents and further strengthen the translational potential of KiNSIS. This resulted in the foundation of several start-up companies.

Outreach

- School lab "klick!:Labor" within the "Kieler Forschungswerkstatt"
- Workshops for teachers and school classes
- Experiments and digital exhibits for events and fairs, e.g. Hannover Messe, Kieler Woche
- Talks tailored to the broader public, e.g. "Ringvorlesungen", European Researchers' Night

