

## Helmholtz-OCPC-Program Jülich PostDoc project offers 2018

Nr.	Topic	PI at Jülich	Jülich's Institute	Existing cooperation partner	New cooperation partner	PostDoc	Stay in Juelich
1	Eigenvalue optimization	Dr. Andreas Kleefeld	JSC	<ul style="list-style-type: none"> <li>• ICMSEC-CAS, Beijing</li> <li>• Southeast University, Nanjing</li> </ul>	also open for new partners		2018 - 2020
2	Ultrashort laser-induced breakdown spectroscopy: a versatile tool to quantify material composition with high depth resolution	Dr. Sebastijan Brezinsek	IEK-4	<ul style="list-style-type: none"> <li>• Dalian University of Technology</li> </ul>			2018 - 2020
3	Quartz-micro balances in steady-state plasma devices - a tool to determine the material transport in long-pulse operation	Dr. Sebastijan Brezinsek	IEK-4	<ul style="list-style-type: none"> <li>• Academy of Science, Institute of Plasma Physics</li> </ul>	also open for new partners		2018 - 2020
4	Assessment of cirrus clouds in a changing climate: synthesis of modelling and observations	Dr. Lars Hoffmann, Dr. Sabine Grießbach	JSC	<ul style="list-style-type: none"> <li>• Institute of Atmospheric Physics, CAS, Beijing</li> <li>• University of Science and Technology, Hefei</li> <li>• Sun yat-Sen University, Guangzhou</li> </ul>	also open for new partners		2018 - 2020
5	SI Nanowire Transistor Biosensors Functionalized by Nanoparticles	Dr. Svetlana Vitusevich	ICS-8	<ul style="list-style-type: none"> <li>• SIMIT, Shanghai</li> </ul>	also open for new partners		202018 - 2020
6	On/inter-chip photonic coupling of spin qubits in gate-defined quantum dot	Dr. Hendrik Bluhm	PGI-11	<ul style="list-style-type: none"> <li>•</li> </ul>			2018 - 2020
7	Development of targeted mono-ADP-ribose - protein-specific macromolecule hydrolase inhibitors	Dr. Giulia Rossetti	INM-9	<ul style="list-style-type: none"> <li>• Fuzhou University</li> </ul>	also open for new partners		2018 - 2020
8	Electrochemical nanosensor systems for detection of reactive oxygen species in biological systems based on biomimetic reactivity of manganese, copper and palladium porphyrin complexes and their nanostructures	Dr. Yulia Mourzina	ICS-8	<ul style="list-style-type: none"> <li>•</li> </ul>	open for new partners		2018 - 2020
9	Ultrafast Spin and Electron Dynamics in Complex Magnets	Prof. Claus M. Schneider, Prof. Markus Büscher	PGI-6	<ul style="list-style-type: none"> <li>• Fudan University</li> </ul>	also open for new partners		2018 - 2020
10	Development of gas-/cluster targets for laser-induced HHG production	Prof. Claus M. Schneider, Prof. Markus Büscher	PGI-6	<ul style="list-style-type: none"> <li>• CAS Shanghai Institute of Optics and Fine Mechanics (SIOM)</li> </ul>	also open for new partners		2018 - 2020
11	Water vapor budget in the upper troposphere and lower stratosphere in a changing climate	Dr. Paul Konopka	IEK-7	<ul style="list-style-type: none"> <li>• Institute of Atmospheric Physics (IAP), Chinese Academy of Sciences (CAS) Beijing</li> </ul>			2018 - 2020

IEK-4	Institute of Energy and Climate Research - Plasma Physics
JSC	Jülich Supercomputing Centre
PGI-11	Peter Grünberg Institute - Institute Quantum Information
PGI-6	Peter Grünberg Institute - Electronic Properties
ICS-8	Institute of Complex Systems - Bioelectronics
INM-9	Institute of Neuroscience and Medicine - Computational Biomedicine
IEK-7	Institute of Energy and Climate Reserch - Stratosphere