

## 2<sup>nd</sup> Ilmenau Symposium on Medical Application of Magnetic Nanoparticles and Ferrofluids (ISMAP)



28.02.2018

Technische Universität Ilmenau, Kirchhoff Building, Gustav-Kirchhoff-Straße 1, Hörsaal 1

10:00	<b>Opening</b>	J. Haueisen & S. Dutz / TU Ilmenau
10:10 - 10:45	D. Fischer <i>FSU Jena</i>	<b>KEYNOTE LECTURE</b> The life cycle of Iron Oxide Nanoparticles: A preclinical test strategy
10:45 - 12:00	<b>Session "Engineering", Chair: F. Wiekhorst / PTB Berlin</b>	
10:45	F. Ludwig <i>TU Braunschweig</i>	Characterization of magnetic nanoparticles for biomedical applications
11:00	V. Gonella <i>UMIT Hall</i>	First numerical models for blood flow-mediated (magnetic)nanoparticles transport into tumour tissue
11:15	D. Berkov <i>GNRL Jena</i>	Drug transport towards the eye retina using magnetic particles: exploring perspectives via computer simulations
11:30	L. Günther <i>TU Ilmenau</i>	Characterization of the field-dependent properties of magneto-sensitive elastomers for sensor and actuator applications
11:45	I. Slabu <i>RWTH Aachen</i>	Medical application of hybridmaterials with incorporated magnetic nanoparticles
12:00 - 13:00	<b>Lunch</b>	
13:00 - 14:00	<b>Session "Nanomedicine", Chair: J. Clement / Universitätsklinikum Jena</b>	
13:00	M. Pöttler <i>SEON Erlangen</i>	Magnetic tissue engineering of the vocal fold: generation of 3D cell constructs using superparamagnetic iron oxide nanoparticles
13:15	P. Warncke <i>FSU Jena</i>	Crack the egg: An alternative test system for the characterization of magnetic nanoparticles
13:30	A. Weidner <i>TU Ilmenau</i>	Interaction of protein coated MNP with biological systems
13:45	J. Demut <i>UK Jena</i>	Cellular inflammation response after exposure to SPIONs
14:00 - 15:00	<b>Coffee break</b>	
15:00 - 16:00	<b>Session "Imaging", Chair: D. Baumgarten / UMIT Hall in Tirol</b>	
15:00	M. Liebl <i>PTB Berlin</i>	Feasibility and capability of MRX-imaging for monitoring of magnetic nanoparticle based cancer therapies in humans
15:15	S. Ley <i>TU Ilmenau</i>	Contrast enhanced UWB microwave breast cancer imaging by magnetic nanoparticles
15:30	P. Vogel <i>Universität Würzburg</i>	Pre-clinical applications with Traveling Wave Magnetic Particle Imaging
15:45	U. Steinhoff <i>PTB Berlin</i>	Standardization of magnetic nanoparticles for biomedical applications
16:00	<b>Closing</b>	S. Dutz / TU Ilmenau