

10 th Meeting - Dresden 2014				
International Conference on the Scientific and Clinical Applications of Magnetic Carriers				
TU DRESDEN, CHAIR OF MAGNETOFLUIDDYNAMICS, MEASURING AND AUTOMATION TECHNOLOGY				
DRESDEN 2014				
Tuesday, June 10, 2014				
Final program as of June 3, 2014				
11:00	Registration desk opens			
	Opening Session			
13:00	Stefan Odenbach	Opening of the conference / Welcome		
13:20	Urs Hafeli	Short review of the last 2 years of magnetic carriers research	Vancouver, Canada	Talk 0
	Session 1	Magnetic Separation		
14:00	Viola Vogel	Nanomechanics By Which Immune Cells Pick Up Their Prey	Zurich, Switzerland	Invited Talk 1
14:40	Mathias Reisbeck	Volumetric Measurements Of Cells In Whole Blood For Point-Of-Care Applications	Erlangen, Germany	Talk 1
15:00	Kazunori Hoshino	Single-Cell PCR Analysis Of Circulating Tumor Cells Captured By Immunomagnetic Microchip	Connecticut, USA	Talk 2
15:20	JitKang Lim	Rapid Magnetophoretic Separation Of Microalgae	Nibong Tebal, Malaysia	Talk 3
15:40	Coffee break			
	Session 2	Nanotechnology		
16:20	Longfei Ye	Monitoring Nanoparticle Self-Assembly Dynamics In Extreme Magnetic Field Gradients: A New Metrology For Colloidal Mag	Columbia, USA	Talk 4
16:40	Clara Marquina	Antibody Distribution On Bio-Functionalized Magnetic Nanoparticles Analyzed By Spatially-Resolved EELS	Zaragoza, Spain	Talk 5
17:00	Lamar Mair	Single Particle Tracking Reveals Biphasic Transport During Nanorod Magnetophoresis Through Extracellular Matrix	Baltimore, USA	Talk 6
17:20	Binh Pham	High Iron Content Magnetic Nanoparticles As Effective Delivery Vehicles Of Anti-Cancer Drugs Into A Solid Tumour Model	Sydney, Australia	Talk 7
17:40	Sudeshna Chandra	Dendrimer-Magnetic Nanoparticles As Multiple Stimuli Responsive And Enzymatic Drug Delivery Vehicle	Mumbai, India	Talk 8
18:00	Informal reception and welcome cocktail (Apero) - generously sponsored by TurboBeads and Chemicell			
Wednesday, June 11, 2014				
8:00	Registration desk opens			
8:30	Joachim Clement	Daily tutorial "Biology for the Physicist, Chemist and Engineer"	Jena, Germany	Tutorial 1
	Session 3	Biological Applications		
9:00	Ludwig Schulz	Interaction of ferromagnetic and superconducting permanent magnets - superconducting levitation	Dresden, Germany	Invited Talk 2
9:40	Randall Erb	Manufacturing Ordered Biocomposites With Weak Magnetic Fields	Boston, MA, USA	Talk 9
10:00	Katrin Zimmermann	Magnetic Nanoparticles Assisted Modulation Of The Vascular cGMP Pathway	Bonn, Germany	Talk 10
10:20	Kathy Saatchi	Magnetic Nanoparticles As A Delivery System For Adipose Tissue-Specific Rosiglitazone Targeting In Type 2 Diabetes	Vancouver, BC, Canada	Talk 11
10:40	Coffee break			
	Session 4	Biological Applications		
11:20	Ryan Middleton	Magnetic Antibody-Linked Nanomatchmakers For Therapeutic Cell Targeting	West Hollywood, CA, USA	Talk 12
11:40	Maxim Nikitin	Denaturation-Resistant Magnetic-Fluorescent Colloidal Superstructures Assembled Via The Proteinaceous Barnase Barstar	Moscow, Russia	Talk 13
12:00	Joost Pouw	Performance Of Three Different Clinical Magnetic Nanoparticle Tracers For Sentinel Lymph Node Detection	Enschede, Netherlands	Talk 14
12:20	Yijie Chen	Highly Effective Inhibition Of Lung Cancer Growth And Metastasis By Systemic Delivery Of siRNA Via Magnetic Mesoporous	Shanghai, China	Talk 15
12:40	Adam Monsalve	Manipulating Signaling Proteins Via Magnetic Particles For Remote Cell Control	Gainesville, FL, USA	Talk 16
13:00	Lunch			
	Session 5	Biological Applications		
14:00	Dieter Scharnweber	Engineering Cellular Microenvironments – Chemistry Meets Physics	Dresden, Germany	Invited Talk 3
14:40	Stephan Karl	A Novel Rotating-Crystal Magneto-Optic Technique For Malaria Diagnosis	Melbourne, Australia	Talk 17
15:00	Raoul Kopelman	Evaluating Metastatic Potential By The Cell Magneto-Rotation Method	Ann Arbor, MI, USA	Talk 18
15:20	Martin Koch	Interaction Of Dynamic Magnetic Fields With Magnetic Particles Immobilized At Lysosomes	Seeheim, Denmark	Talk 19
15:40	Coffee break			
	Session 6	Biosensors		
16:20	Amy Buck	Magnetic Separation Of Algae Expressing Enhanced Intracellular Ferritin Concentration	Cleveland, OH, USA	Talk 20
16:40	Caio Quini	Renal Function Evaluation By Alternating Current Biosusceptometry Of Magnetic Nanoparticles	Botucatu, Brazil	Talk 21
17:00	Marco Donolato	Molecular Diagnostics Based On Magnetic Nanobead Clustering Dynamics Monitored Using A Blu-Ray Optomagnetic Read	Kgs. Lyngby, Denmark	Talk 22
17:20	Petr Nikitin	New Method Of Investigation Of Affinity Properties Of Magnetic Nanoparticles With Recognition Receptors	Moscow, Russia	Talk 23
17:40	Giovanni Rizzi	On-Chip Magnetic Bead-Based DNA Melting Curve Analysis Using A Magnetoresistive Sensor	Kgs. Lyngby, Denmark	Talk 24
18:00	Poster session I with Bier and Bretzeln - generously sponsored by Diagnostic Biosensors			
Thursday, June 12, 2014				
8:00	Registration desk opens			
8:30	Joachim Clement	Daily tutorial "Biology for the Physicist, Chemist and Engineer"	Jena, Germany	Tutorial 2
	Session 7	Magnetic Imaging/MPI		
9:00	Christoph Alexiou	Application Of Magnetic Nanoparticles (Spion) In Medicine – The Seon-Concept	Erlangen, Germany	Invited Talk 4
9:40	Yanglong Hou	Multifunctional Magnetic Nanoparticles For Targeted Cancer Diagnosis And Therapy	Beijing, China	Talk 25
10:00	Frank Wiekhorst	Magnetic Particle Spectroscopy To Quantify Blood Half-Life Of Superparamagnetic Iron Oxide Nanoparticles In A Mouse Str	PTB, Berlin, Germany	Talk 26
10:20	Sylvie Begin	Dendronized Magnetic Core-Shell And Cubic Shaped Nanoparticles Designed For Targeting, Mri And Hyperthermia	Strasbourg, France	Talk 27
10:40	Coffee break			
	Session 8	Magnetic Imaging/MPI		
11:20	Martijn Visscher	Depth Limitations For In Vivo Magnetic Nanoparticle Detection With A Compact Handheld Device	Enschede, Netherlands	Talk 28
11:40	Daniel Baumgarten	Magnetorelaxometry Imaging Of Magnetic Nanoparticles With Inhomogeneous Fields Based On Plane-Wise Sensitivity	Ilmenau, Germany	Talk 29
12:00	Annika Kasten	Tracking Of Adipose Tissue-Derived Progenitor Cells Using Two Magnetic Nanoparticle Types	Rostock, Germany	Talk 30
12:20	Olivier Sandre	Nano-Thermometer With Thermo-Sensitive Polymer Grafted USPIOs Behaving As Positive Contrast Agents In Low-Field Mr	Bordeaux, France	Talk 31
12:40	Katharina Bayer	Magnetic Nanoparticles In Mural Tumors Detected And Quantified By Micro-Computertomography	Dresden, Germany	Talk 32
13:00	Lunch			
	Session 9			
14:00	Annette Schmidt	Responsive Core-Shell Nanoparticles For Medical Applications	Köln, Germany	Invited Talk 5
14:40	Poster session II			
16:00	Boat trip on the Elbe - generously sponsored by micromod ; dinner in the castle "Schloss Pillnitz"			

Friday, June 13, 2014				
8:00	Registration desk opens			
8:30	Joachim Clement	Daily Tutorial "Biology For The Physicist, Chemist And Engineer"	Jena, Germany	Tutorial 3
	Session 10	Grant Panel Discussion		
9:00	Alexander Pfeifer	DFG-Forschergruppe 917: Nanoparticle-Based Targeting Of Gene- And Cell-Based Therapies	Bonn, Germany	Talk 33
9:20	Stefan Odenbach	SPP1681: Feldgesteuerte Partikel-Matrix-Wechselwirkungen	Dresden, Germany	Talk 34
9:40	Heinrich Hofmann	NFP64: Chancen Und Risiken Von Nanomaterialien, Nationales Forschungsprogramm	Lausanne, Switzerland	Talk 35
10:00	Christer Johansson	EU-FP7: Nanomag	Göteborg, Sweden	Talk 36
10:20	Urs Hafeli	Panel Discussion About The Current Climate For Getting Grants In Our Field	Vancouver, Canada	
10:40	Coffee break			
	Session 11	Analytical Methods		
11:20	Adriele Prina-Mello	Quantification Of Superparamagnetic Nanoparticle Concentration Using Particle Electron Paramagnetic Resonance: An In V	Dublin, Ireland	Talk 37
11:40	Robin Ras	Magnetic Droplets For Exploring Dynamics And Dissipation On Superhydrophobic Surfaces	Espoo, Finland	Talk 38
12:00	Tim St Pierre	The Interaction Between Schistosome Eggs And Magnetic Microspheres	Crawley, Australia	Talk 39
12:20	Johannes Nowak	The Magnetoviscous Effect Of A Biocompatible Ferrofluid Diluted With Sheep Blood	Dresden, Germany	Talk 40
12:40	Stephen Sherman	The Relationship Between Mason Number And Bingham Number In Magnetorheological Fluids	College Park, USA	Talk 41
13:00	Robert Müller	Detection Of Magnetic Nanoparticles After Perfusion Of A Placenta	Jena, Germany	Talk 42
13:20	Lunch			
	Session 12	Magnetic Drug Delivery		
14:20	Jeffrey Anker	Detecting Mechanical and Chemical Changes Through Tissue Using Magnetically Modulated Optical Sensors	Clemson, USA	Talk 43
14:40	Kirsten Pondman	In Vivo Magnetic Drug Delivery Using FePd Nanowires	Enschede, Netherlands	Talk 44
15:00	Anjali Seth	Magnetic Beads To Enhance Drug Penetration Across Intestinal Membrane	Paris, France	Talk 45
15:20	Shimon Lecht	Non-Invasive In Vivo Magnetic Targeting Of Mouse Embryonic Stem Cells To The Lung	Philadelphia, USA	Talk 46
15:40	Coffee break			
	Session 13	Magnetic Drug Delivery		
16:20	Alessandro Russo	Treatment Of A Critical Long Bone Defect Using Magnetic Scaffolds Reloaded By Magnetic Nanoparticles-VEGF	Bologna, Italy	Talk 47
16:40	Jan Dieckhoff	Single-core magnetic markers in rotating magnetic field based homogeneous bioassays and the law of mass action	Vancouver, Canada	Talk 48
17:00	Christophe Monnier	Janus Magnetic Liposomes For Drug Delivery	Marly, Switzerland	Talk 49
17:45	City tour, reception at the Dresden transport museum - generously sponsored by Zepto Life Technology , Poster Prize announcement			
Saturday, June 14, 2014				
8:30	Registration desk opens			
	Session 14	Hyperthermia		
9:00	Julian Carrey	Magnetic Hyperthermia From The Physics Side: State Of The Art And Open Questions	Toulouse, France	Invited Talk 6
9:40	Cristina Blanco-Andujar	Reproducible Microwave Synthesis Of Multi-Core Iron Oxide Nanoparticles For Magnetic Hyperthermia And In Situ Tracking	London, UK	Talk 50
10:00	Robert Ludwig	Analysis Of Molecular Effects After Treatment Of Pancreatic Cancer Cells With (Magnetic Fluid) Hyperthermia	Jena, Germany	Talk 51
10:20	Sara Majetich	Terahertz Absorption In Iron Oxide Nanoparticles	Pittsburgh, USA	Talk 52
10:40	Satoshi Ota	Measurement Of Magnetic Rotation Of Magnetic Nanoparticles In Cultured Cells Under Alternating Field	Yokohama, Japan	Talk 53
11:00	Coffee break			
	Session 15	Nanoparticle Synthesis		
11:40	Ying Jing	Smart And Biocompatible Fe-Si Nanoparticles	Minneapolis, USA	Talk 54
12:00	Ben Ern�	Diverging Magnetic And Physical Size Distributions Of Superparamagnetic Nanoparticles	Utrecht, Netherlands	Talk 55
12:20	Jian-Chao Si	Solvothermal Synthesis Of Tunable Magnetite Nanorods And Its Transfer From Organic Phase To Water Phase	Xi'an, China	Talk 56
12:40	Fernando Herranz	Microwave-Assisted Chemoselective Functionalisation Of Iron Oxide Nanoparticles For Cardiovascular Imaging	Madrid, Spain	Talk 57
13:00	Closing Comments and Announcement of the NEXT MEETING: Urs Hafeli / Stefan Odenbach			
13:15	Meeting ends			