

9th International Conference on the Scientific and Clinical Applications of Magnetic Carriers - Minneapolis, U.S.A.



**Tuesday, May 22, 2012**

*Program as of 16/5/2012*

12:00	Registration desk opens in the Van Vleck auditorium until the end of the BioMax satellite symposium
13:30	<b>BioMax satellite symposium</b> "Novel diagnostic bio-assays based on magnetic particles" - Part 1 and 2 - <b>free to all participants!</b>
15:10	<b>Coffee break</b>
15:30	<b>BioMax satellite symposium</b> "Novel diagnostic bio-assays based on magnetic particles" - Part 3 and 4 - <b>free to all participants!</b>
17:30	End of BioMax satellite symposium
18:30	Registration desk opens in the Dolly Fiterman Riverview Gallery until the end of the reception / welcome cocktail
18:30	<b>Informal reception and welcome cocktail (Apero) in the Dolly Fiterman Riverview Gallery</b> - <i>generously sponsored by <b>TurboBeads</b> and <b>Chemicell</b></i>
22:00	End of reception

Wednesday, May 23, 2012				
7:30	Registration desk opens / Posters with <b>odd numbers can be put up</b> today during the lunch break (pins will be provided)			
<b>Opening Session</b>				
9:00	Hafeli/Schuett/Zborowski/Ping	Opening of the conference / Welcome		
9:10	Hafeli, Urs	Short review of the last 2 years of magnetic carriers research	Vancouver, Canada	Talk 0
9:30	<b>Sooryakumar, Ratnasingham</b>	<b>Mobile Magnetic Tweezers: From Research Tool to Engineering Applications and Biomedical Diagnostics</b>	Columbus, USA	Invited talk 1
10:15	Coffee break sponsored by <b>Strem Chemicals</b>			
<b>Session 1: Nanotechnology</b>				
10:45	Ivkov, Robert	Assessing murine hepatic and splenic injury from inadvertent heating of systemically delivered non-targeted magnetic nanoparticles	Baltimore, USA	Talk 1
11:00	Jing, Ying	Design and Demonstration of Biocompatible Fe-Si Nanoparticles for Cancer Therapy	Minneapolis, USA	Talk 2
11:15	Lu, Yi-Ching	Tea Catechins Enhance Nanoparticle Uptake by Glioma Cells	Tao-Yuan, Taiwan	Talk 3
11:30	Mitroova, Zuzana	Magnetoferritin in aqueous suspensions: effect of loading factor	Kosice, Slovakia	Talk 4
11:45	Winter, Jessica	Magnetic Nanoconveyer Belts for Cell and Molecular Separation	Columbus, USA	Talk 5
12:00	Sandre, Olivier	Droplet microfluidics to prepare magnetic polymer vesicles and to confine the heat in hyperthermia	Bordeaux, France	Talk 6
12:15	Lunch at McNamara Center / Poster session / Exhibitors			
<b>Session 2: Biosensors</b>				
13:45	Dias, Tomás	Assessment of cell-free DNA integrity using a Magnetoresistive Chip-based platform for cancer diagnostic purposes	Lisbon, Portugal	Talk 7
14:00	Hein, Matt	Magnetic Nanocilia Sensors and Actuators	Minneapolis, USA	Talk 8
14:15	Lee, Hakho	Magnetic nanoparticle and NMR-based sensor for medical diagnosis	Boston, USA	Talk 9
14:30	Østerberg, Frederik	On-chip measurements of Brownian relaxation vs. concentration of 40 nm magnetic beads	Lyngby, Denmark	Talk 10
14:45	Love, David	Hetero-coated magnetic microcarriers for point of care diagnostics	Cambridge, UK	Talk 11
15:00	van Ijzendoorn, Leo	Frequency-selective rotation of magnetic nanoparticles for rapid and sensitive solution based detection of biomolecules	Eindhoven, Netherlands	Talk 12
15:15	Wang, Shan	A New Tool for Cancer Biomarker Detection: Multiple Samples and Multiple Parameters on a Single Magnetic Biochip	Stanford, USA	Talk 13
15:30	Coffee break			
<b>Session 3: Analytical Techniques</b>				
16:00	<b>St. Pierre, Tim</b>	<b>Development of FerriScan: A Personal Story from the Lab Bench to Marketing a Product</b>	Perth, Australia	Invited Talk 2
16:45	Odenbach, Stefan	Rheology of biocompatible ferrofluids	Dresden, Germany	Talk 14
17:00	Thünemann, Andreas	Fast and Reliable in situ Analysis of Dispersions of Magnetic Nanoparticles	Berlin, Germany	Talk 15
17:15	Usselman, Robert	Modeling Nanoparticle Properties By Electron Magnetic Resonance	Boulder, USA	Talk 16
17:30	Anker, Jeffrey	Magnetic Luminescent Core-Shell Particles for Drug Delivery and Imaging	Clemson, USA	Talk 17
17:45	Poster session ( <b>odd numbers</b> ) with beer and pretzels - PLEASE RATE POSTERS - sponsored by <b>Diagnostic Biosensors</b>			
19:45	Banquet and social evening in the McNamara Center, included in registration fee - sponsored by <b>micromod</b> - please remove posters by end of banquet			
22:00				

Thursday, May 24, 2012				
8:00	Registration desk opens / Posters with <b>even</b> numbers can be put up today during the lunch break (pins will be provided)			
8:30	Hawkins, Peter	Tutorial I - Magnetic Particles in Immunoassays	Bristol, UK	Tutorial 1
<b>Session 4: Magnetic Nanoparticle Synthesis</b>				
9:00	Andrew, Jennifer	Bi-phasic Magnetic Materials: Towards Multifunctional Contrast Agents	Gainesville, USA	Talk 18
9:15	Becker, Sören	Using nanotechnology for the formation of multimodal marker for in vivo $\beta$ -cell labeling	Hamburg, Germany	Talk 19
9:30	Jain, Nirmesh	Penetration of Solid Tumors by Sterically Stabilized Magnetic Nanoparticles	Sydney, Australia	Talk 20
9:45	Huber, Dale	Synthesis of Iron Oxide Nanoparticles by the in situ Generation of Iron Oleate	Albuquerque, USA	Talk 21
10:00	Lak, Aidin	Large single-core iron oxide nanoparticles: a tracer for magnetorelaxometry immunoassays	Braunschweig, Germany	Talk 22
10:15	<b>Coffee break</b>			
10:45	Marquina, Clara	MgO-coated magnetite nanoparticles for detection and treatment of <i>Fusarium</i> spp. fungi	Zaragoza, Spain	Talk 23
11:00	Niehaus, Jan	Adjusting the MRI contrast by formation of defined SPIO clusters	Hamburg, Germany	Talk 24
11:15	Peng, Mingli	A novel approach of transferring oleic acid capped iron oxide nanoparticles to water phase	Xi'an, China	Talk 25
11:30	Roig, Anna	Magnetically Labeled Endothelial Progenitor Cells for Cellular Therapy in Brain Ischemia Treatment	Bellaterra, Spain	Talk 26
11:45	Thanh, Nguyen T.	One-pot synthesis of hybrid magnetic and fluorescent core-shell structure of FePt@CdSe Nanoparticles	London, UK	Talk 27
12:00	Guo, Haibo	Morphological Mapping of Iron Oxide Nanoparticles Using Thermodynamic Modeling	Melbourne, Australia	Invited talk 3
12:45	Lunch in the TCF Bank football stadium, DQ Clubroom / Exhibitors			
<b>Session 5: Magnetic Hyperthermia</b>				
14:30	Rinaldi, Carlos / Ivkov, Robert	Debate: Do We Really Know How Magnetic Hyperthermia Works? Moderated by Kannan Krishnan	Baltimore/Mayaguez, USA	Invited talk 4
15:15	Borca-Tasciuc, Diana-Andra	Potential sources of errors in measuring and evaluating the specific absorption rate of magnetic nanoparticles in alternating magnetic field	Troy, USA	Talk 28
15:30	Creixell, Mar	EGFR-Targeted Magnetic Nanoparticles Kill Cancer Cells Under the Application of a Magnetic Field Without a Perceptible Rise in Temperature	Mayagüez, USA	Talk 29
15:45	Dennis, Cindi	Effect of Internal Magnetic Structure of Iron Oxide Magnetic Nanoparticles on the Field Dependence of the SLP for Hyperthermia	Gaithersburg, USA	Talk 30
16:00	Dutz, Silvio	Magnetic hyperthermia - Immobilisation state of magnetic multicore nanoparticles injected into living tumors	Vancouver, Canada	Talk 31
16:15	Goya, Gerardo	Is the magnetic hyperthermia mechanism a universal one? The case of dendritic cells.	Zaragoza, Spain	Talk 32
16:30	Hadjipanayis, Constantinos	Thermotherapy of Experimental Glioblastoma with Laponite-Embedded Magnetic Iron-Oxide Nanoparticles	Atlanta, USA	Talk 33
16:45	Bernau, Vianney	Injectable Nanocomposite for local Hyperthermia	Lausanne, Switzerland	Talk 34
17:00	Southern, Paul	Inter-Particle Interactions in the Static and Dynamic Magnetic Properties of Ferucarbotran Colloids	London, UK	Talk 35
17:15	<b>Group photograph</b>			
17:30	Poster session ( <b>even numbers</b> ) with beer and pretzels - PLEASE RATE POSTERS - sponsored by <i>StemCell Technologies</i> / Exhibitors			
20:00	Free evening - use it to meet old friends, discuss new collaborations, and enjoy Minneapolis on your own! - <b>please remove posters by end of the evening!</b>			

Friday, May 25, 2012				
8:00	Registration desk opens / No poster sessions today!			
8:30	Hawkins, Peter	Tutorial II - Magnetic Particles in Immunoassays	Bristol, UK	Tutorial 2
Session 6: Magnetic Imaging / MPI				
9:00	Bales, Brian	GEH121333: A New Iron Oxide Nanoparticle for Magnetic Resonance Imaging in Inflammation and Oncology	Niskayuna, USA	Talk 36
9:15	Begin-Colin, Sylvie	Why a dendritic approach to biocompatible iron oxide nanoparticles for bioimaging ?	Strasbourg, France	Talk 37
9:30	Kim, Jongsik	High Speed Magnetomotive Optical Coherence Tomography	Urbana, USA	Talk 38
9:45	Liebl, Maik	In-Vivo Quantification of Magnetic Nanoparticle Distributions after Magnetic Drug Targeting in a Rabbit Carcinoma Model using Magnetorelaxometry	Berlin, Germany	Talk 39
10:00	Coffee break			
10:30	Saville, Steven	The Influence of Linear Magnetic Chain Formation on Transverse Relaxation Rates in Magnetic Resonance Imaging	Clemson, USA	Talk 40
10:45	Rahn, Helene	Quantitative Tomographic Examination of Magnetic Nanoparticles	Dresden, Germany	Talk 41
11:00	Riffle, Judy	Magnetic Block Ionomer Clusters (MBIClusters) with Ultrahigh Transverse NMR Relaxivities for Dual Imaging and Therapeutic Agents	Blacksburg, USA	Talk 42
11:15	Trekker, Jesse	Optimizing Superparamagnetic Nanoparticles towards Contrast Enhanced MRI for sensitive in vivo cell detection	Leuven, Belgium	Talk 43
11:30	Krishnan, Kannan	Developing Tracers for Enhanced Resolution and Sensitivity in MPI	Seattle, USA	Invited talk 5
12:15	Lunch at McNamara Center / Exhibitors			
12:30	POSTER PRIZE - Presented by Cordula Gruettner during the lunch			
Session 7: Magnetic Separation				
13:30	Herrmann, Inge	Cleaning Blood: Applications of Ultra-strong Metal Nanomagnets in Nanomedicine	Zurich, Switzerland	Talk 44
13:45	Benelmekki, Maria	Magnetophoretic transport of non-magnetic latex colloidal particles across a magnetic fluid volume under a uniform magnetic field gradient	Braga, Portugal	Talk 45
14:00	Dapprich, Johannes	Identification of New Sequence Variants by Targeted Enrichment and Next-Generation Sequencing	Lawrenceville, USA	Talk 46
14:15	Dutz, Silvio	A Microfluidic Chip for Size Dependent Fractionation of Magnetic Microspheres	Vancouver, Canada	Talk 47
14:30	Ijiri, Yumi	Novel method for magnetic field and size based purification of magnetic nanoparticles	Oberlin, USA	Talk 48
14:45	Ooi, Chin Chun	Effect of Magnetic Field and Magnetic Field Gradient on Effectiveness of the Magnetic Sifter for Cell Purification	Stanford, USA	Talk 49
15:00	Plouffe, Brian	Magnetic Particle-Based Microfluidic Circulating Tumor Cell Separation for Oncological Therapeutic Monitoring	Boston, USA	Talk 50
15:15	Samia, Anna Cristina	pH-Controlled Adsorption of Cd ions on Carboxyl-Terminated Superparamagnetic Iron Oxide Nanoparticles	Cleveland, USA	Talk 51
15:30	Sharma, Anirudh	Magnetic barcode nanowires for osteosarcoma cell control, detection and separation	Minneapolis, USA	Talk 52
15:45	Yang, Liangrong	A novel separation technique: gas-assisted superparamagnetic extraction for scale-up of protein isolation (bovine serum albumin BSA)	Beijing, China	Talk 53
16:00	Coffee break			
Session 8: Magnetic Gene Deliver / Interesting Magnet Systems				
16:30	Schuerle, Simone	An Electromagnetic Manipulation System for Pre-clinical Testing of Targeted Drug Delivery	Zurich, Switzerland	Talk 54
16:45	Mykhaylyk, Olga	Silica-Iron Oxide Magnetic Nanoparticles for Viral Gene Delivery	Munich Germany	Talk 55
17:00	Zimmermann, Katrin	Optimization of magnetic nanoparticles assisted lentiviral gene transfer and cell positioning	Bonn, Germany	Talk 56
17:15	Shapiro, Benjamin	Treating Tinnitus by Magnetic Pushing of Therapy: Rat Experiments	College Park, USA	Talk 57
17:30	Dumas-Bouchiat, Frederic	Magnetic tool for in-vivo magnetic capture: Applications in blood filtering and proteomic diagnostics	Grenoble, France	Talk 58
17:45	Nacev, Alek	Improving the Treatment of Hypoxic Breast Cancer Liver Metastases by using Dynamic Magnetic Shift	College Park, USA	Talk 59
18:00	Traditional boat cruise on the Mississippi - Buses leave in front of the University Hotel ; dress appropriately, it gets windy on the boat!			

Saturday, May 26, 2012				
8:00	<b>Registration desk opens</b>			
8:30	<b>Hawkins, Peter</b>	<b>Tutorial III - Magnetic Particles in Immunoassays</b>	<b>Bristol, UK</b>	<b>Tutorial 3</b>
<b>Session 9: Magnetic Drug Delivery</b>				
9:00	Bahadur, Dhirendra	Hyperthermia and other stimulants for drug release: in vitro and in vivo investigations through nano particulates and hybrids	Mumbai, India	Talk 60
9:15	Brazel, Christopher	Magnetite Nanoparticle-Loaded Poly(caprolactone-b-ethylene glycol) Micelles as Magnetic-Heating Activated Carriers for Anticancer Drugs	Tuscaloosa, USA	Talk 61
9:30	Gabbasov, Raul	Biodegradation of Magnetic Nanoparticles in Mouse Liver from Combined Analysis of Mössbauer and Magnetization Data	Moscow, Russia	Talk 62
9:45	Kempe, Maria	Magnetic Nanoparticles for Implant-Assisted Magnetic Drug Targeting in Cardiovascular Medicine	Lund, Sweden	Talk 63
10:00	Klostergaard, Jim	Anti-Tumor Activity of Drug-Loaded Magnetically Responsive Nanoparticles	Houston, USA	Talk 64
10:15	<b>Coffee break</b>			
11:00	Prina-Mello, Adrielle	Multiparametric toxicity evaluation of SPIONs as identification for multifunctional nanoparticles for theranostic applications	Dublin, UK	Talk 65
11:15	Tietze, Rainer	Mitoxantrone delivery via Magnetic Drug Targeting for tumor therapy-Characterisations and biological outcome	Erlangen, Germany	Talk 66
11:30	<b>Gregory-Evans, Kevin</b>	<b>Focused Magnetic Stem Cell Targeting to the Retina Using Magnetic Nanoparticles</b>	<b>Vancouver, Canada</b>	<b>Invited talk 6</b>
12:15	<b>Lunch boxes at Van Vleck Auditorium</b>			
<b>Session 10 : Biological Applications</b>				
13:15	Riegler, Johannes	Magnetic delivery of mesenchymal stem cells after arterial injury	London, UK	Talk 67
13:30	Tefft, Brandon	Magnetizable Duplex Steel Stents Enable Endothelial Cell Capture	Rochester, USA	Talk 68
13:45	Bonnaud, Cecile	Magnetic Janus Liposomes: Design of magnetic thermosensitive biomembranes for MRI and drug delivery	Marly, Switzerland	Talk 69
14:00	Marten, Gernot	Modular Construction of Tailor-Made Bioactive Hybrid Nanoparticles	Vancouver, Canada	Talk 70
14:15	Gazova, Zuzana	BSA-modified magnetic fluids as therapeutic agents targeting insulin-associating amyloidosis	Kosice, Slovakia	Talk 71
14:30	Guan, Yueping	Peroxidase-like activity of magnetic nanoparticles and their applications in immunoassay	Beijing, China	Talk 72
14:45	Gutierrez, Lucia	Renal iron load in sickle cell disease determined by magnetic resonance imaging measurements	Perth, Australia	Talk 73
15:00	Hight Walker, Angela	Bismuth-doped Cobalt Ferrite Nanoparticles for MRI and CT Contrast Enhancement	Gaithersburg, USA	Talk 74
15:15	Horak, Daniel	Anti-EpCAM-Immobilized Albumin-Coated Monodisperse Magnetic Poly(Glycidyl Methacrylate) Microspheres for Detection of Circulating Tumor Cells	Prague, Czech Rep.	Talk 75
15:30	Lee, Hakho	Novel core-shell magnetic nanoparticles as highly efficient contrasting agents for magnetic resonance detection	Boston, USA	Talk 76
15:45	<b>Closing Comments and Announcement of the NEXT MEETING: Urs Hafeli / Stefan Odenbach</b>			
16:00	<b>Meeting ends</b>			