

## 8th International Conference on the Scientific and Clinical Applications of Magnetic Carriers - Rostock, Germany

Tuesday, May 25, 2010				
17:00	Registration desk opens until the end of the reception / welcome cocktail			
17:00	Posters can be put up (pins will be provided)			
18:30	<b>Informal reception and welcome cocktail (Apero) in the Kurhaus Warnemünde - generously sponsored by Chemicell</b>			
Wednesday, May 26, 2010				
7:30	<b>Registration desk opens / Posters can be put up</b> (pins will be provided)			
	<b>Opening Session</b>			
9:00	Schuett, Wolfgang	Opening of the conference / Welcome	Rostock, Germany	
9:15	Hafeli, Urs	Short review of the last 2 years of magnetic carriers research	Vancouver, Canada	Talk 0
9:35	Giaever, Ivar	From Quantum Physics to Biotechnology: Reflections and Advice from a Nobel Prize Carrier	Oslo, Norway	Invited talk 1
10:10	<b>Coffee break / posters / exhibitors</b>			
	<b>Session 1: Magnetic Drug Delivery I - Chair: Christian Plank (Germany)</b>			
10:45	Alexiou, Christoph	Cancer Therapy with Drug Loaded Magnetic Nanoparticles-Magnetic Drug Targeting	Erlangen, Germany	Talk 1
11:00	Azevedo, Ricardo	Toxicity, biodistribution and magnetic attraction of a magnetic fluid containing maghemite nanoparticle surface-coated with a double-layer lauric - in vitro and in vivo tests	Brasilia, Brazil	Talk 2
11:15	Nacev, Alek	Predicting the behavior of magnetic particles in-vivo: simulations vs experiments	College Park, U.S.A.	Talk 3
11:30	Darton, Nicholas	Manipulation and tracking of superparamagnetic nanoparticles using MRI	Cambridge, U.K.	Talk 4
11:45	Georgelin, Thomas	Coupling bleomycin to multifunctionalized magnetic nanoparticles, toward an efficient cancer treatment	Paris, France	Talk 5
12:00	Gitter, Kurt	Quantitative targeting-maps as result of experimental investigations on a branched tube model in magnetic drug targeting	Dresden, Germany	Talk 6
12:15	<b>Lunch</b>			
	<b>Session 2: Gene Delivery - Chair: Gustav Steinhoff (Germany)</b>			
13:40	Steinhoff, Gustav	Enhanced Thoracic Gene Delivery by Magnetic Nanobead-Mediated Vector	Rostock, Germany	Invited talk 2
14:20	Ma, Yongjie	Enhancement of the efficiency of non-viral gene delivery by magnetofectins formed via electrostatic self-assembly to COS-7 cell lines in vitro	Shanghai, China	Talk 7
14:35	Mykhaylyk, Olga	Optimizing virus-magnetic nanoparticle complexes for gene transfer in cell lines and stem cells	Munich, Germany	Talk 8
14:50	Trueck, Christina	Targeting of lentiviral vectors and positioning of transduced cells by magnetic nanoparticles and magnetic field	Bonn, Germany	Talk 9
	<b>Session 3: Magnetic Drug Delivery II - Chair: Dhirendra Bahadur (India)</b>			
15:10	Gutierrez, Lucia	Detection of magnetic nanoparticles in a tumour after cytokine delivery in the presence of a magnetic field	Madrid, Spain	Talk 10
15:25	Isa, Lucio	Nitrocatechol-dispersant stabilized superparamagnetic iron oxide nanoparticle assembly into magnetically actuated membranes	Zurich, Switzerland	Talk 11
15:40	<b>Coffee break / posters / exhibitors</b>			
16:25	Klostergaard, Jim	Magnetically-Responsive Nanoparticles for Vectored Delivery of Cancer Therapeutics	Houston, U.S.A.	Talk 12
16:40	Levasseur, Steve	Systemically Delivered Magnetic Nanoparticles for Targeted Ocular Molecular Imaging and Drug Delivery	Vancouver, Canada	Talk 13
16:55	Liu, Shao-Kai	Interaction of Low-Frequency Ultrasound and Magnetic Force on Magnetite Nanoparticle Carrying Tissue Plasminogen Activator	Tao Yuan, Taiwan	Talk 14
17:10	Louquet, Stéphanie	Engineering the surface of magnetic nanoparticles by adsorption of double hydrophilic block copolymers	Pessac, France	Talk 15
17:25	MacDonald, Cristin	Effects of magnetite loading and time-varied magnetic field on MNP transport in soft medium and cellular uptake	Philadelphia, U.S.A.	Talk 16
17:40	Newman, Brant	Magnetic Endothelialization of Vascular Stents Facilitates Healing and Improves Patency	Rochester, U.S.A.	Talk 17
17:55	Pirmoradi, Fatemeh	A Magnetically Controlled Drug Delivery Device	Vancouver, Canada	Talk 18
18:10	Russo, Alessandro	Magnetic Scaffold for Advanced Osteochondral Tissue Engineering	Bologna, Italy	Talk 19
18:25	Wu, Tony	Intra-Arterial Application of Magnetic Nanoparticles for Targeted Thrombolytic Therapy: A Rat Embolic Stroke Model	Tao Yuan, Taiwan	Talk 20
18:40	<b>Poster session (odd numbers) with beer and pretzels - PLEASE RATE POSTERS - sponsored by Magnisense and Stemcell Technologies</b>			
20:10	<b>Banquet and social evening, included in registration fee</b>			

Thursday, May 27, 2010				
7:30	<b>Registration desk opens</b>			
8:30	Krishnan, Kannan	Tutorial I on Magnetic Things We All Should Know	Seattle, U.S.A.	Tutorial 1
<b>Session 4: Microsphere Synthesis - Chair: Kathy Saatchi (Canada)</b>				
9:00	Ettenauer, Marion	Preparation of Magnetic Cellulose Microparticles as Markers in Extracorporeal Blood Purification	Krems, Austria	Talk 21
9:15	Furlan, Marco	Magnetic Gelation: A new Method to Produce Anisotropic Porous Polymeric Materials	Zurich, Switzerland	Talk 22
9:30	Kuznetsov, Anatoly	Magnetically guided microscopic electric batteries: manufacturing and biological applications.	Moscow, Russia	Talk 23
9:45	Xu, Hong	Development of immunomagnetic beads for rapid detection of Escherichia coli O157:H7 by immunomagnetic enrichment and real-time PCR	Shanghai, China	Talk 24
10:00	<b>Group photograph</b>			
10:15	<b>Coffee break / poster session / exhibitors</b>			
<b>Session 5: Nanoparticle Synthesis and Analysis - Chair: Kannan Krishnan (U.S.A.)</b>				
10:45	Amstad, Esther	Adding Different Functionalities to Ultra-stable Superparamagnetic Iron Oxide Nanoparticles through Controlled Surface Modification	Zurich, Switzerland	Talk 25
11:00	Wawrzik, Thilo	Multi-Variant Magnetic Particle Spectroscopy for Magnetic Nanoparticle Characterization	Braunschweig, Germany	Talk 26
11:15	Dutz, Silvio	Physical Properties of Water Based Large Single Domain Particle Dispersions of Magnetite	Jena, Germany	Talk 27
11:30	Guerler, Celin	Magnetically Induced Hot Spots Promote a Locoregional Chemical Reaction	Düsseldorf, Germany	Talk 28
11:45	Jain, Nirmesh	Anchored Steric Stabilisation of Superparamagnetic Nanoparticles for Biomedical Applications	Sydney, Australia	Talk 29
12:00	Wang, Shan X.	Magneto-Nano Chips for Biomedical Diagnostics	Stanford, U.S.A.	Invited talk 3
12:40	<b>Lunch</b>			
<b>Session 6: Nanoparticle Synthesis and Analysis - Chair: Thompson Mefford (U.S.A.)</b>				
14:00	Lellouche, Jean-Paul	Hydrophilic Maghemite ( $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> ) Nanoparticles - Aggregation Control Using an Ultrasound-Assisted Doping Process of Particle Surface	Ramat Gan, Israel	Talk 30
14:15	Mahmoudi, Morteza	Synthesis of Rod-Shaped Superparamagnetic Iron Oxide Nanoparticles with Polyvinyl Alcohol	Tehran, Iran	Talk 31
14:30	Mistlberger, Guenter	Magnetically controlled, multifunctional nano devices	Graz, Austria	Talk 32
14:45	Nikitin, Maxim	Self-assembly of multifunctional nanoparticles via barnase and barstar	Moscow, Russia	Talk 33
15:00	Pellegrino, Teresa	Magnetic based nanobeads as multifunctional platforms for biomedical applications	Lecce, Italy	Talk 34
15:15	Truonc Phuoc, Lai	Magnetic nanosystems for the sentinel nodes detection	Strasbourg, France	Talk 35
15:30	Turcu, Rodica	Synthesis and characterization of biocompatible magnetically controllable nanostructures using different polymers or block copolymers	Cluj-Napoca, Romania	Talk 36
15:45	Yang, Liangrong	Fabrication of Temperature- and pH- Responsive Magnetic Nanoparticles and Their Reversible Agglomeration in Aqueous Milieu	Beijing, China	Talk 37
16:00	Yoo, Myung-Ik	Synthesis of Individually Water-Soluble, Biocompatible, and Angiogenesis-Targeting Superparamagnetic Iron Oxide Nanoparticles	Seoul, Korea	Talk 38
16:15	Zierold, Robert	Synthesis of Biocompatible Magnetic Test-Tube-Shaped Nanoparticles by Atomic Layer Deposition	Hamburg, Germany	Talk 39
16:30	<b>Coffee break / poster session / exhibitors</b>			
<b>Session 7: Analytical Methods - Chair: Sara Majetich (U.S.A.)</b>				
17:00	Dennis, Cindi	Interactions in Magnetic Nanoparticle Systems: How to Identify Them and Their Consequences	Gaithersburg, U.S.A.	Talk 40
17:15	Lim, JitKang	Magnetophoretic motion control of individual Brownian nanoparticles	Penang, Malaysia	Talk 41
17:30	Liu, Wenzhong	Magnetic Nanoparticle Temperature Estimation Using AC Susceptibility	Wuhan, China	Talk 42
17:45	Salaklang, Jatuporn	Fixed bed magnetic reactor for surface derivatization of Superparamagnetic Iron Oxide Nanoparticles	Fribourg, Switzerland	Talk 43
18:00	Schaller, Vincent	Determination of nanocrystal size distribution in magnetic multi-core particles including interactions and magnetic anisotropy	Göteborg, Sweden	Talk 44
18:15	Tarn, Mark	Continuous magnetic microparticle-based sandwich immunoassays in a multilaminar flow microreactor	Hull, U.K.	Talk 45
18:30	Teste, Bruno	Magnetic core shell nanoparticles based homogeneous immunoassay	Paris, France	Talk 46
18:45	<b>Poster session (even numbers) with beer and pretzels - PLEASE RATE POSTERS - sponsored by Diagnostic Biosensors LLC and Life Technologies Corp.</b>			
20:15	<b>Free evening - use it to meet old friends, discuss new collaborations, and enjoy Warnemünde on your own!</b>			

Friday, May 28, 2010				
7:30	<b>Registration desk opens</b>			
8:30	Krishnan, Kannan	<b>Tutorial II on Magnetic Things We All Should Know</b>	Seattle, U.S.A.	Tutorial 2
<b>Session 8: Magnetic Hyperthermia I - Chair: Carlos Rinaldi (Puerto Rico)</b>				
9:00	Berndl, Bettina	Antibody Targeted Magnetic Nanoparticle Hyperthermia for Cancer Therapy	London, U.K.	Talk 47
9:15	Gogoi, Manashjit	Thermosensitive magnetoliposomes containing biphasic mixture of metal oxide composite nanoparticles for combined cancer drug delivery and hyperthermia	Mumbai, India	Talk 48
9:30	Ivkov, Robert	Development of magnetic nanoparticles and devices for thermal therapy of cancer: A radiosensitization study in mice bearing human prostate cancer xenografts	Baltimore, U.S.A.	Talk 49
9:45	Kashevsky, Bronislav	Substantiation and in-vivo approbation of the low-frequency ferromagnetic hyperthermia	Minsk, Belarus	Talk 50
10:00	<b>Coffee break / poster session / exhibitors</b>			
<b>Session 9: Magnetic Hyperthermia II - Chair: Quentin Pankhurst (U.K.)</b>				
10:30	Martinez-Boubeta, Carlos	Self-assembled multifunctional Fe/mgo nanospheres for MRI and hyperthermia	Barcelona, Spain	Talk 51
10:45	Pradhan, Pallab	Multifunctional magnetic liposomes for magnetic drug targeting and hyperthermia applications	Mumbai, India	Talk 52
11:00	Rau, Beate	Thermotherapy of oesophageal cancer with superparamagnetic iron oxide nanoparticles	Berlin, Germany	Talk 53
11:15	Southern, Paul	Real-time In Vitro Analysis of Magnetic Hyperthermia using Optical and Fluorescent Microscopy	London, U.K.	Talk 54
11:30	Plank, Christian	<b>Magnetofection – magnetically enhanced nucleic acid delivery, from research tool towards clinical application</b>	Munich, Germany	Invited talk 4
12:10	<b>Lunch</b>			
13:25	<b>POSTER PRIZE - Presented by Cordula Gruettner</b>			
<b>Session 10: Magnetic Imaging / MRI - Chair: Tim St. Pierre (Australia)</b>				
13:30	Jing, Ying	Dual Functional Au coated Fe70Co30 High-Magnetic-Moment Nanoparticles for MR imaging and Therapy	Minnesota, U.S.A.	Talk 55
13:45	Lee, Yi-Cheng	MnO Nanocrystals as in vivo Time-Dependent T1 MRI Contrast Agents	Seattle, U.S.A.	Talk 56
14:00	Misri, Ripen	Molecular Imaging Bioprobes (MRI/SPECT) for Mesothelin Expressing Cancers	Vancouver, Canada	Talk 57
14:15	Nikitin, Petr	Non-invasive in vivo mapping and long-term monitoring of magnetic nanoparticles in different organs of an animal	Moscow, Russia	Talk 58
14:30	Rahn, Helene	Calibration phantom for quantitative tomography analysis of biodistribution of magnetic drug carriers	Dresden, Germany	Talk 59
14:45	Rühmer, Dennis	Magnetic relaxation imaging using a fluxgate based scanner	Braunschweig, Germany	Talk 60
15:00	Soenen, Stefaan	Intracellular iron oxide nanoparticle coating stability determines nanoparticle usability and cell functionality	Leuven, Belgium	Talk 61
15:15	Tokarev, Alexander	Magnetic Nanoneedles for Optofluidic Applications	Clemson, U.S.A.	Talk 62
15:30	Trekker, Jesse	Effect of the core size of monodisperse superparamagnetic nanoparticles on their relaxometric enhancing properties for MRI	Leuven, Belgium	Talk 63
15:45	Zabow, Gary	Cylindrical Magnetic Nanoshells for Multispectral MRI	Bethesda, U.S.A.	Talk 64
16:00	<b>Coffee break / poster session / exhibitors</b>			
<b>Session 11: Magnetic Separation - Chair: Maciej Zborowski (U.S.A.)</b>				
16:30	AlHetlani, Entesar	On-chip generation and manipulation of magnetic w/o and o/w droplets	Hull, U.K.	Talk 65
16:45	Andreu, Jordi	Equilibrium and nonequilibrium aggregation of superparamagnetic colloids	Bellaterra, Spain	Talk 66
17:00	Balasubramanian, P.	Circulating tumor cell detection by magnetic depletion of normal blood cells	Columbus, U.S.A.	Talk 67
17:15	Earhart, Christopher	Improved Designs of a Microfabricated Magnetic Sifter for Biomolecule and Cell Purification	Stanford, U.S.A.	Talk 68
17:30	Fischer, Thomas	Colloidal transport and separation on magnetic garnet films	Bayreuth, Germany	Talk 69
17:45	Hoshino, Kazunori	Microfluidic Chip-Based Immunomagnetic Detection of Circulating Tumor Cell	Austin, U.S.A.	Talk 70
18:00	Schwarz, Sebastian	Nanoparticle Size and Surface Charge Determine Formation of Protein Corona, Cellular Uptake and Magnetic Resonance Imaging Properties	Aachen, Germany	Talk 71
18:30	<b>Traditional boat cruise / visit of downtown Rostock - sponsored by micromod</b>			

Saturday, May 29, 2010				
7:30	<b>Registration desk opens</b>			
8:30	Krishnan, Kannan	Tutorial III on Magnetic Things We All Should Know	Seattle, U.S.A.	Tutorial 3
<b>Session 12: Biological Applications I - Chair: Shan Wang (U.S.A.)</b>				
9:00	Antosova, Andrea	Magnetic fluids have ability to decrease amyloid aggregation associated with amyloid-related diseases	Kosice, Slovakia	Talk 72
9:15	Ho, Vincent	Magnetic cell labelling and manipulation in 2D and 3D cell cultures	Cambridge, U.K.	Talk 73
9:30	Bakandritsos, Aristides	Development of Functional Magnetic Targeted Carriers for Cationic Drugs	Patras, Greece	Talk 74
9:45	Laurencin, Mathieu	Human Erythrocytes Covered with Magnetic Core-Shell Nanoparticles as Multifunctional Drug Carriers	Paris, France	Talk 75
10:00	Palfreyman, Justin	Magnetic Barcoded Microcarriers for Biomolecular Labelling Applications	Cambridge, U.K.	Talk 76
10:15	<b>Coffee break / exhibitors</b>			
<b>Session 13: Biological Applications II - Chair: Jeff Anker (U.S.A.)</b>				
11:00	Riegler, Johannes	A simplified mathematical model for targeted magnetic delivery of cells using an MRI scanner	London, U.K.	Talk 77
11:15	Shoshi, Astrit	GMR-based real-time cell endocytosis monitoring of magnetic particles	Vienna, Austria	Talk 78
11:30	Sureshkumar, Manthiriyappan	Multifunctionalized magnetic bionanocomposites for biotechnology applications	Taipei, Taiwan	Talk 79
11:45	Thanh, Nguyen TK	Superparamagnetic Fluorescent Nickel-Enzyme Nanobioconjugates: Synthesis and Characterization of a Novel Multifunctional Biological Probe	London, U.K.	Talk 80
12:00	Torres-Lugo, Madeline	Examination of the Enhanced Potentiation of Combined Cisplatin Treatment with Magnetic Fluid Hyperthermia	Mayaguez, U.S.A.	Talk 81
12:15	Rozhkova, Elena	Biofunctionalized Magnetic-Vortex Microdisks for Biomechanical Cell Actuation	Argonne, U.S.A.	Invited talk 5
12:55	<b>Lunch</b>			
<b>Session 14: Biosensors - Chair: Frank Ludwig (Germany)</b>				
14:00	Dempsey, Nora	Micro-structured hard magnetic films for lab-on-chip applications	Grenoble, France	Talk 82
14:15	Donolato, Marco	On chip detection and manipulation of biological entities carried by magnetic beads via domain wall conduits	Como, Italy	Talk 83
14:30	Enpuku, Keiji	AC susceptibility measurement of magnetic markers for liquid phase detection of biological targets	Fukuoka, Japan	Talk 84
14:45	Kinnunen, Paivo	Growth Measurements of Individual Bacteria with a Magnetic Bead Rotation Sensor	Ann Arbor, U.S.A.	Talk 85
15:00	Li, Yuanpeng	Biomarker quantification in unprocessed human sera by a competition-based nanomagnetic protein assay and high-magnetic-moment nanoparticles	Minneapolis, U.S.A.	Talk 86
15:15	Østerberg, Frederik	Chip-based measurements of Brownian relaxation of magnetic beads using a planar Hall effect magnetic field sensor	Lyngby, Denmark	Talk 87
15:30	Sivagnanam, Venkataragavalu	Study of spatio-temporal immunofluorescence on magnetic bead patterns in a microfluidic channel	Lausanne, Switzerland	Talk 88
15:45	<b>Closing Comments and Announcement of the NEXT MEETING: Wolfgang Schuett / Jian Ping Wang</b>			
16:00	<b>Meeting ends</b>			