

FINAL PROGRAM

5/14/04 Hä

Wednesday May 19, 2004

Trip to the Magnet Lab in Grenoble - the largest in Europe

5/20/04 9:00		Registration for bus trip to Grenoble (<i>book early ONLINE, seat availability limited</i>)
5/20/04 10:00		Bus trip to the Magnet Lab in Grenoble , including lunch; bus leaves in front of the Novotel
5/20/04 17:00		Bus arrives back at the hotel
5/20/04 17:00	Registration desk opens	at the Ecole Normale Superieure, in front of the main auditorium; Please hand in your JMMM paper and deposit your talk on a CD/disk; Please also put up your posters immediately !
5/20/04 19:00		Cheese and wine party - the real start of the meeting
5/20/04 21:00		Registration desk closes; end of the cheese and wine party

Thursday, May 20, 2004

5/20/04 7:30 Registration desk opens at the Ecole Normale Superieur

Opening Session

5/20/04 8:30	Hafeli, Urs / Legastelois, Stephane	Welcome and short magnetic carrier review of the last 2 years	USA
--------------	-------------------------------------	---	-----

Analytical Methods, Magnetic Tweezers, and Nanotechnology (10 min. talks + 2 min. discussions)

- **Chair: Cordula Grüttner + Mischa Megens**

5/20/04 8:50	Viovy, Jean-Louis	INVITED TALK: Magnetic tweezers: Overview and applications	France
5/20/04 9:30	Kuznetsov, Oleg	Measurement of forces acting on Chara statoliths during their active transport using magnetic tweezers.	USA
5/20/04 9:42	Shang, Hao	Magnetic tweezers: a powerful tool for high throughput screening of peptide libraries	USA
5/20/04 9:54 Break / Time for Poster Discussion and Company Exhibits			
5/20/04 10:24	Eberbeck, Dietmar	Binding kinetics of magnetic nanoparticles on latex beads and yeast cells studied by magnetorelaxometry	Germany
5/20/04 10:36	Krozer, Anatol	Quantitative detection of PSA using Brownian relaxation of gold-coated magnetic nanoparticles	Sweden
5/20/04 10:48	Ludwig, Frank	Magnetorelaxometry for the Analysis of Biological Target Concentrations in Solution	Germany
5/20/04 11:00	Möller, Winfried	Relaxation of ferromagnetic nanoparticles in macrophages: in vitro and in vivo studies	Germany
5/20/04 11:12	Nemoto, Iku	Cytomagnetometric Study of Interactions between Microfilaments and Microtubules by Measuring the Energy Imparted to Magnetic Particles within the cells	Japan
5/20/04 11:24	Brückl, Hubert	Molecular diagnostics by magnetic markers	Germany
5/20/04 11:36	Megens, Mischa	INVITED TALK: Magnetic Biochips - a new Option for Sensitive Diagnostics	Netherlands

5/20/04 12:16 Lunch Break

5/20/04 13:16	Watson, James	INVITED TUTORIAL: Fundamentals and applications of high gradient magnetic separation (HGMS) - Part I	UK
----------------------	----------------------	---	-----------

Continuation of Analytical Methods and Nanotechnology (10 min. talks + 2 min. discussions) - **Chair: Jim Watson**

5/20/04 13:46	Hansen, Mikkel	Detection of Magnetic Beads Using Exchange Biased Planar Hall Effect Sensors	Denmark
---------------	----------------	--	---------

5/20/04 13:58	Hirota, Noriyuki	Control of the Structure of Feeble Magnetic Particles by Using Induced Magnetic Dipole Interactions	Japan
5/20/04 14:10	Tondra, Mark	Microfabricated tools for manipulation and analysis of magnetic microcarriers	USA
5/20/04 14:22	Chiriac, Horia	Magnetic Sensor based on Giant Magnetoimpedance Effect for Biomolecules Detection	Romania
5/20/04 14:34	Auernhammer, Günter	Frozen In Magnetic Order in Uniaxial Magnetic Gels: Preparation and Physical Properties	France
5/20/04 14:46	Wang, Shan	Magnetic DNA Microarray Based on Spin Valve Sensors and Monodisperse Nanotags	USA
5/20/04 14:58	Wilhelm, Claire	Magnetic Endosomes: a new biological probe of the cell interior	France
5/20/04 15:10	Nethe, Armin	Theoretical evaluation of the ferrofluid driven electric machine	Germany

5/20/04 15:22 Break / Time for Poster Discussion and Company Exhibits

Magnetic Drug Delivery / Drug Targeting / In vivo Applications (10 min. talks + 2 min. discussions) - Chair: Judy Riffle

5/20/04 15:52	Grief, Andrew	The Mathematical Modelling of Magnetically Targeted Drug Delivery	UK
5/20/04 16:04	Amirfazli, Alidad	Magnetic Targeting of Aerosol Particles for Chemotherapy	Canada
5/20/04 16:16	Azevedo, Ricardo	Morphological analysis of mice's lung after treatment with magnetite-based magnetic fluid stabilized with DMSA	Brazil
5/20/04 16:28	Kückelhaus, Selma	Biodistribution investigation of cobalt-ferrite nanoparticles endovenously administrated to Swiss mice	Brazil
5/20/04 16:40	Schulze, Katja	Intraarticular application of maghemite superparamagnetic nanoparticles and its uptake by synovial membrane - an experimental study in sheep	Switzerland
5/20/04 16:52	von Rechenberg, Brigitte	Biocompatibility, tissue reaction, cellular uptake and detection of coated and functionalized superparamagnetic iron oxide nanoparticles (SPION) in cells of musculoskeletal system	Switzerland
5/20/04 17:04	Richert, Hendryk	Magnetic drug delivery into the human digestive system	Germany
5/20/04 17:16	Kent, Tom	Clinical trials with MTC-Dox	USA
5/20/04 17:28	Chastellain, Mathieu	Development of functionalized superparamagnetic iron oxide nanoparticles for human cancer cell uptake	Switzerland
5/20/04 17:40	Denizot, Benoit	Comparative Biodistribution of Thin-Coated Iron Oxide Nanoparticles TCION: Effect of Different Bisphosphonate Coatings	France

5/20/04 17:52 End of the presentations

5/20/04 18:00 Start of the **walking tour through historic Lyon** in groups of 30 people

5/20/04 20:00 End of the walking tour / Dinner on your own in Lyon

Friday, May 21, 2004

Continuation of **Magnetic Drug Delivery / Drug Targeting / In vivo Applications (10 min. talks + 2 min. discussions) - Chair: Jim Ritter**

5/21/04 8:00	Alexiou, Christoph	Local Chemotherapy with Magnetic Drug Targeting	Germany
5/21/04 8:12	Kohler, Nathan	Methotrexate Immobilized Superparamagnetic Nanoparticles for Cancer Diagnostics and Chemotherapeutics	USA
5/21/04 8:24	Latha, Subbaih	Formulation and Evaluation of Ranitidine Hydrochloride Magnetic Microspheres	India
5/21/04 8:36	Müller-Schulte, Detlef	Thermosensitive magnetic nano- and microcarriers as contactless controllable drug carriers and tools	Germany
5/21/04 8:48	Mykhaylyk, Olga	Signal transduction of erythrocytes upon specific binding of doxorubicin immobilized on nanodispersed magnetite	Ukraine
5/21/04 9:00	Song, Tao	Site-directed Research of magnetic drug in magnetic drug targeting	China
5/21/04 9:12	Fu, Chao-Ming	Labeling efficiency of magnetite nanoparticles with Tc-99m radioisotope	Taiwan

5/21/04 9:24	Zhang, Chunfu	Synthesis of polyacrylamide modified magnetic nanoparticles and radiolabel with rhenium-188 for magnetically targeted radiotherapy	China
--------------	---------------	--	-------

5/21/04 9:36 Break / Time for Poster Discussion and Company Exhibits

Magnetized Stents / Gene Therapy (10 min. talks + 2 min. discussions) - Chair: Wolfgang Schütt

5/21/04 10:06	Ebner, Armin	Theoretical Analysis of Ferromagnetic Seeding for Magnetic Drug Targeting	USA
5/21/04 10:18	Yellen, Benjamin	Locally Targeted Drug Delivery to Magnetic Stents for Therapeutic Applications	USA
5/21/04 10:30	Ritter, James	Feasibility of Magnetizable Intravascular Stents for Sequestering Blood Borne Magnetic Drug Carrier Particles	USA
5/21/04 10:42	Yu, Shi	Synthesis and characterization of a magnetically responsive polymeric system for drug delivery	Singapore
5/21/04 10:54	Plank, Christian	Advances in Magnetofection – magnetically guided nucleic acid delivery	Germany
5/21/04 11:06	Reszka, Regina	Magnetosome-lipid/DNA-complexes: A gene delivery and monitoring system of the next generation	Germany

Magnetic Hyperthermia (10 min. talks + 2 min. discussions) - Chair: Urs Häfeli

5/21/04 11:18	Jordan, Andreas	INVITED TALK: First clinical experience with magnetic field hyperthermia (MFH) at the University Clinic Charite in Berlin, Germany	Germany
5/21/04 11:58	Brusentsov, Nikolai	Magnetic Fluid Thermochemotherapy of the Murine Tumor	Russia
5/21/04 12:10	Chen, Ching Jen	Synthesis and characterization of Polymer encapsulated Cu-Ni Magnetic nanoparticles for hyperthermia applications	USA
5/21/04 12:22	Gonzales, Marcela	Synthesis of Magnetoliposomes with Monodisperse Maghemite Nanocrystal Cores for Hyperthermia	USA
5/21/04 12:34	Kuznetsov, Anatoly	Local Radiofrequency-Induced Hyperthermia Using Magnetic Microparticles with Therapeutically Suitable Curie Temperature.	Russia

5/21/04 12:46 Lunch Break

5/21/04 13:46	Watson, James	INVITED TUTORIAL: Fundamentals and applications of high gradient magnetic separation (HGMS) - Part II	UK
---------------	----------------------	--	-----------

Continuation of Magnetic Hyperthermia (10 min. talks + 2 min. discussions) - Chair: Urs Häfeli

5/21/04 14:16	Hergt, Rudolf	Magnetic properties of bacterial magnetosomes as potential diagnostic and therapeutic tools	Germany
5/21/04 14:28	Hilger, Ingrid	Treatment of breast cancer by magnetic heating	Germany
5/21/04 14:40	Lacava, Zulmira	Effects of AC magnetic field and carboxymethyl-dextran-coated magnetite nanoparticles on mice peritoneal cells	Brazil
5/21/04 14:52	Wang, Xuman	The study of heat effect of magnetic fluids under an alternating magnetic field	China
5/21/04 15:04	Giri, Jyotsnendu	Synthesis, characterization and in-vitro evaluation of water-based temperature sensitive ferrofluids for hyperthermia applications	India

5/21/04 15:16 Break / Time for Poster Discussion and Company Exhibits

Preparation and Characterization of Magnetic Nanospheres (10 min. talks + 2 min. discussions) - Chair: Margret + Heiri Hoffman

5/21/04 15:46	Acar, Havva	Superparamagnetic Nanoparticles Stabilized by Polymerized PEGylated Coatings	USA
5/21/04 15:58	Bagaria, Hitesh	Aqueous Dispersions of Functionalized FePt Nanoparticles	USA
5/21/04 16:10	Bao, Yuping	Tailored and functionalized Cobalt Nanocrystals for Biomedical Applications	USA
5/21/04 16:22	Brinkmann, Rainer	Synthesis of Air Stable Co Particles	Germany

5/21/04 16:34	Chaudhuri, Anriban	Viscometric Characterization of Cobalt Nano-Particle-Based Magnetorheological Fluids Using Genetic Algorithms	USA
5/21/04 16:46	Hormes, Josef	Functionalized magnetic nanoparticles for an optimized breast cancer drug delivery system	USA
5/21/04 16:58	Hütten, Andreas	New Magnetic Nanoparticles For Biotechnology	Germany
5/21/04 17:10	Moras, Konrad	Production and characterisation of magnetic particles produced by laser evaporation for ferrofluids	Germany
5/21/04 17:22	Leslie-Pelecky, Diandra	Iron and Cobalt-Based Magnetic Fluids Produced By Inert Gas Condensation	USA
5/21/04 17:34	Liu, Huizhou	Preparation and Characterization of Novel Magnetic Polymer Nanospheres with high adsorption capacity	China
5/21/04 17:46	da Silva, Maria de Fatima	Polydisperse biochemical ferrofluids clusterization	Brazil
5/21/04 17:58	End of the presentations		
5/21/04 19:00	Walk to the Boat starting from the Novotel / group photo in front of the boat / boat trip with dinner		
5/21/04 22:30	Boat will be at the dock; bar and dancing on the boat until 1 in the morning		
5/22/04 1:00	Sleep well and rise early ...		

Saturday May 22, 2004

Continuation of Preparation and Characterization of Magnetic Carriers (10 min. talks + 2 min. discussions) - Chair: Stephan Legastelois

5/22/04 8:00	Kopelman, Raoul	Polyacrylamide Magnetic Nanoparticle Platforms Used As Combined Contrast Agent for MRI Molecular Imaging	USA
5/22/04 8:12	Riffle, Judy	Oxidatively-Stable Cobalt-Polymer Complexes	USA
5/22/04 8:24	Sen, Tapas	Multifunctional Magnetite and Silica-Magnetite Nanoparticles: Synthesis, surface activation and applications in life sciences	Italy
5/22/04 8:36	Takafuji, Makoto	Surface Modification of Magnetic Nanoparticles with Basic Polymers Using Graft-to Method	Japan
5/22/04 8:48	Terheiden, Annegret	Embedment of nanoparticles in phospholipid multilayers	Germany
5/22/04 9:00	Fonnum, Geir	Characterisation of Dynabeads by magnetization measurements and Mössbauer spectroscopy	Norway
5/22/04 9:12	Vidal, Richard	Manufacturing Methodology of Polymer Magnetic Microspheres	France

Magnetic Separation (10 min. talks + 2 min. discussions) - Chair: Maciej Zborowski / Jeff Chalmers

5/22/04 9:24	Carpino, Francesca	Analysis of magnetic nanoparticles using quadrupole magnetic field-flow fractionation	USA
5/22/04 9:36	Chalmers, Jeff	Quantification of the field interaction parameter and binding affinity of antibody or streptavidin/biotin conjugated magnetic nanoparticles	USA
5/22/04 9:48	Pekas, Nikola	Magnetic particle diverter in an integrated microfluidic format	USA

5/22/04 10:00 Break / Time for Poster Discussion and Company Exhibits

5/22/04 10:30	Smistrup, Kristian	Magnetic Separation in Microfluidic Systems Using Microfabricated Electromagnets - Experiments and Simulations	Denmark
5/22/04 10:42	Darashkevich, Oleg	A Device for Continuous Magnetic Separation	Belarus
5/22/04 10:54	Gruettner, Cordula	Dendrimer-coated magnetic particles for radionuclide separation	Germany
5/22/04 11:06	Gu, Hongchen	Study on properties of streptavidin-coated dendrimer modified magnetic nanoparticles	China
5/22/04 11:18	Holschuh, Karl	Preparative purification of antibodies with MagPrep Protein A-an alternative to conventional chromatography	Germany
5/22/04 11:30	Rosengart, Axel	Functionalized Magnetic Nanospheres for Selective Removal of Blood-Born Toxins I: Introduction and Initial Approach	USA
5/22/04 11:42	Kaminski, Michael	Functionalized Magnetic Nanospheres for Selective Removal of Blood-Born Toxins II: Preliminary Data	USA

5/22/04 11:54	Kondo, Akihiko	Application of Thermo-Responsive Magnetic Nanoparticles to Immobilization of Biomolecules and Affinity Separation	Japan
5/22/04 12:06	Marius, Merissa	Development of a Highly Magnetic Iron Sulphide for Metal Uptake and Magnetic Separation	UK
5/22/04 12:18	Ortiz, Susana	Polymeric composite particles for the separation of naphthenic acid from organic solvents	UK
5/22/04 12:30	Safarik, Ivo	Ferrofluid-modified plant-based materials as adsorbents for batch separation of selected biologically active compounds and xenobiotics	Czech Republic
5/22/04 12:42	Schwalbe, Manuela	Human plasma increases the magnetic separation of tumor cells from peripheral blood leukocytes	Germany

5/22/04 12:54 Lunch Break

5/22/04 13:54 **Watson, James** **INVITED TUTORIAL: Fundamentals and applications of high gradient magnetic separation (HGMS) - Part III** **UK**

Magnetic Carriers as Contrast Agents / Magnet Resonance Imaging (10 min. talks + 2 min. discussions)
- Chair: Jan Kehr / Jean-Louis Viovy

5/22/04 14:24	Lanza, Gregory	INVITED TALK: Molecular imaging and targeted drug delivery with a site specific nanoparticle platform technology: Emerging opportunities for non-invasive diagnosis and image-augmented therapy	USA
5/22/04 15:04	Anker, Jeffrey	Magnetically Modulated Optical Nanoprobes (MagMOONs) and Systems	USA
5/22/04 15:16	Duguet, Etienne	VUSPIO as Versatile Ultrasmall SuperParamagnetic Iron Oxide	France
5/22/04 15:28	Gillis, Pierre	Superparamagnetic Colloid Suspensions : Water Magnetic Relaxation and Clustering	Belgium
5/22/04 15:40	Kehr, Jan	Applications of gold-coated and dextran-coated iron oxide nanoparticles for labelling and tracking of transplanted neuronal stem cells by experimental MRI	Sweden

5/22/04 15:52 Break / Time for Poster Discussion and Company Exhibits

5/22/04 16:22	Pardoe, Heath	Non-invasive measurement and imaging of ferrimagnetic particle concentrations in the human brain with MRI: detection limits using proton transverse relaxation rate imaging	Australia
5/22/04 16:34	Riviere, Charlotte	Rat smooth muscle labeling with iron oxide nanoparticles: in vivo monitoring of abdominal aortic aneurysm cell therapy with MRI	France
5/22/04 16:46	Smirnov, Pierre	In Vivo Cellular Imaging of tumor infiltration by lymphocytes labeled with superparamagnetic particles : a comparative study at 7 and 9.4 T MRI	France
5/22/04 16:58	Veintemillas, Sabino	Surface characterisation of dextran coated iron oxide nanoparticles with application in Nuclear Magnetic Resonance Imaging	Spain
5/22/04 17:10	Martina, Marie Sophie	Sterically Stabilized Magnetoliposomes as Contrast Agents for in vivo Magnetic Resonance Imaging and Therapy of Solid Tumours	France
5/22/04 17:22	Mazzadi, Alejandro	Magnetic labeling of primary mouse macrophages with superparamagnetic nanoparticles	France
5/22/04 17:34	Moreland, John	Chip-scale Integration for Magnetic Resonance Imaging and Spectroscopy of Small Samples	USA

5/22/04 17:46 Häfeli, Urs Drawing of the Magnetic Microsphere Lottery
5/22/04 17:49 Schütt, Wolfgang Announcement of the Magnetic Carrier Meeting in 2006 !!!!!!!!!
5/22/04 18:00 Legastelois, Stephane End of the meeting