

International Workshop ECMAG - Magnetic Field Effects on Aqueous Solutions

April 20-21, 2017 / HZDR / Building 114 / Room 202

Final Program

| April 20 | |
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| 12:00 | <i>Lunch Buffet</i> |
| 13:00 | Welcome and Opening (G. Gerbeth, G. Mutschke, HZDR) |
| | Session 1 |
| 13:15 | <u>M. Coey</u> (TC Dublin) – Problems in Magnetochemistry |
| 13:45 | <u>L. Lukina</u> , J. Fransaer, K. Binnemans (KU Leuven) - Separation of rare-earth ions by strong magnetic fields |
| 14:15 | <u>X. Guan</u> et al. (Tongji U. Shanghai) - Enhanced Cr(VI) removal by zero-valent iron coupled with weak magnetic field: Role of magnetic gradient force |
| 14:45 | <u>K. Eckert</u> et al. (HZDR/TU Dresden) - Enrichment of paramagnetic ions in aqueous solutions by inhomogeneous magnetic fields |
| 15:15 | <i>Coffee + Poster</i> |
| | Session 2 |
| 15:45 | F.Z. Khan, A.G. Nicholson, C.K. Nash, <u>I. Fritsch</u> (U Arkansas) – Manipulating magnetic fields and ionic currents in redox-magnetohydrodynamic microfluidic systems involving polymer-modified electrodes |
| 16:15 | <u>K. Tschulik</u> (RU Bochum) – Magnetic Field Effects on Single Nanoparticle Electrochemistry Studies |
| 16:45 | <u>T. Lorenz</u> , M. Bertau (TU BA Freiberg) - RE Recycling via Solid State Chlorination and Magnetic Separation from Fluorescent Lamp Craps |
| 17:15 | <u>K. Kolczyk</u> , M. Wojnicki, D. Kutyla, R. Kowalik, P. Zabinski (AGH Krakow), A. Cristofolini (U. Bologna) – Analysis of REE ion transport in inhomogeneous magnetic field in static state. |
| 17:45 | <u>M. Studzinski</u> , I. Malinowska, A. Wronka (U Lublin), H. Malinowski (JINR Dubna) – Magnetochromatographic separation of d and f electron metal complexes |
| 19:30 | <i>Dinner (Rest. Lingnerterrassen/Dresden; Self-Payment)</i> |

| April 21 | |
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| 09:15 | Session 3 |
| 09:15 | A.-Y. Ali Omar, O. Aboubi, A.-L. Daltin, F. Bohr, <u>J.-P. Chopart</u> (U Reims) – Magnetic field effects during aniline electropolymerization |
| 09:45 | <u>M. Uhlemann</u> , V. Hähnel (IFW Dresden) – Potentiometric measurement of concentration in microfluidic channels |
| 10:15 | K. Kolczyk, <u>M. Wojnicki</u> , P. Zabinski (AGH Krakow), X. Yang, G. Mutschke (HZDR) - An attempt to enrich holmium ions in a flow system by inhomogeneous magnetic fields. |
| 10:45 | <i>Coffee + Poster</i> |
| | Session 4 |
| 11:15 | <u>Karin Leistner</u> et al. (IFW Dresden) – Voltage-tunable nano-magnets in liquid electrolytes |
| 11:45 | <u>R. Peipmann</u> , A. Bund (TU Ilmenau) – Magnetic fields and dispersion coatings |
| 12:15 | Closing |
| 12:20 | <i>Lunch (Canteen HZDR; Self-Payment)</i> |
| 13:30 | Lab Tour (MHD-department at HZDR, approx. 1 hour) |

| Poster List | |
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| J. König, C. Cierpka (TU Ilmenau) | Microfluidics Laboratory at TU Ilmenau |
| N. Kelly, C. Scharf (HZDR-HIF) | Current Projects and Objectives at Helmholtz Institute Freiberg - Department Metallurgy and Recycling |
| T. Weier et al. (HZDR) | Fluid Dynamics of Liquid Metal Batteries |
| M. Femerling, X. Yang, K. Eckert, G. Mutschke (HZDR) | On the accuracy of concentration measurements by UV/VIS spectrophotometry |
| Z. Lei, K. Eckert (TU Dresden/HZDR) | On the mechanism underlying the magnetic separation of rare earth ions in aqueous solution |

