

Conference Program

Monday, 25 June, 2007

08:45 AM Registration

Session Chair: Philip Pong, NIST

09:00 AM Philip Pong Opening remarks, orientation, safety  
 09:15 AM Robert McMichael **Tutorial** - Computational Magnetism  
 09:45 AM Michael Donahue **Plenary Talk** - Overview and Outlook of the OOMMF Micromagnetic Modeling Package  
 10:15 AM Antonio Zambano High-throughput Investigations of Exchange Coupling Interaction in Soft/Hard Magnetic Bilayer Systems for Development of Nanocomposite Magnets  
 10:30 AM Paul Ohodnicki Induced Anisotropy and Core Losses in Transverse Field Annealed Co-Rich Amorphous and Nanocomposite Alloys

10:45 AM Break & Posters

Session Chair: Ed Della Torre, George Washington University

11:15 AM Robert Shull Reversal Asymmetry in CoPt Thin Films  
 11:30 AM K. Gilmore First-Principles Calculation of Precession Damping in Itinerant Ferromagnets  
 11:45 AM ☆ Tingyong Chen Enhanced Curie Temperature and Spin Polarization in Mn<sub>4</sub>FeGe<sub>3</sub> Compound  
 12:00 PM ☆ C. Heiliger Influence of Amorphous Electrodes on Tunnelling Magnetoresistance Effect in Fe/MgO/Fe

12:15 PM LUNCH & Posters

Session Chair: Robert McMichael, NIST

01:15 PM	IEEE Magnetics Society Distinguished Lecturer	Imaging Magnetic Surfaces with Atomic Resolution
02:15 PM	Miyeon Cheon	Exchange Bias and Uncompensated Magnetization in FexNi <sub>1-x</sub> F <sub>2</sub> /Co and FexZn <sub>1-x</sub> F <sub>2</sub> /Co Bilayers
02:30 PM	Makoto Murakami	Exchange Bias Study between Ferromagnetic Metals and Multiferroic Materials
02:45 PM	Alan Edelstein	<b>Plenary Talk</b> - Advances and Barriers in Magnetometry

03:15 PM Break & posters

Session Chair: Prasanta Dutta, West Virginia University

03:45 PM J.R. Hattrick-Simpers Combinatorial Exploration of Magnetostriction in FeGaX Ternaries  
 04:00 PM Patrick Downey Mechanical Properties of Iron-Gallium Nanowires with Applied Magnetic Field  
 04:15 PM ☆ Amshumali M.K. Room Temperature and Near Room Temperature Coordination Polymer Magnets  
 04:30 PM Mark Harvey Mono- and Di- substituted TCNE Analogs that Form Room Temperature and Near-Room Temperature Molecule Based Magnets  
 04:45 PM Ed Della Torre **Tutorial** - A Vector Preisach Model

05:15 PM Adjourn

Tuesday, 26 June, 2007

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**Session Chair:** *Lawrence Bennett, George Washington University*

**09:00 AM** Lawrence H. Bennett **Tutorial** - Quantum Statistics of Nanomagnets

09:30 AM	IEEE Magnetics Society Distinguished Lecturer - Sarah Majetic	Magnetic Nanoparticles: Self-Assembly and Nanoscale Behavior
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**10:30 AM** **Break & Posters**

**Session Chair:** *Brian Maranville, NIS*

**11:00 AM** ☆ Seok-Hwan Chung Sensing Bio-conjugated Magnetic Nanoparticles in Fluids

11:15 AM ☆ Prasanta Dutta Superparamagnetism and Blocking in Thiol-capped Gold Nanoparticles

11:30 AM Vivek Singh Magnetic Properties of 4nm Ni Nanoparticles Dispersed in SiO<sub>2</sub> Matrix

11:45 AM Sean McCooney Microwave Measurements of the Complex Permeability and Permittivity of Fine Magnetic Particles at Frequencies from 4 GHz to 18 GHz

**12:00 PM** *Close*

☆ - Rising Star Lecturer

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**Posters:**

- (throughout the whole conference)
1. Kelsey Miller FeCo- Co-Ferrite Core Shell Structures for Heat Sources in Thermoablative Cancer Therapy
  2. Sridhar Patibandla Spin Transport Studies in Nanowires
  3. Robert Booth Modeling of Microwave Absorption of Magnetic Microwires
  4. Robert McMichael Variation of Thin Film Edge Magnetic Properties with Patterning Process Conditions in Permalloy Stripes
  5. Se Young O X-ray Diffraction Study of the MgO Growth for Magnetic Tunnel Junctions