

# Stanford Center for Research on Information Storage Materials

## Workshop on Emerging Magnetic Nanotechnologies And The Tenth Annual Program Review

November 7, 2003

**Hartley Conference Center, 1<sup>st</sup> Floor, Mitchell Building**

8:00 AM      **Continental Breakfast**

### **Session I: Workshop**

**Chair: Prof. Shan Wang**

8:30 AM      Welcome, Prof. Bruce Clemens, Chair of MSE Dept.

8:35 AM      Dr. Stuart Parkin, IBM Fellow  
Spintronics

9:25 AM      Prof. Hans Siegmann, Stanford University  
Magnetism beyond the Picosecond Time Scale

10:15 AM      **Coffee Break**

10:30 AM      Dr. Kamel Ounadjela, Senior Director, Cypress Semiconductor  
Industrial Prospects of Magnetic Random Access Memory

11:20 AM      Dr. Chris Bajorek, Executive VP, Komag  
Patterned Magnetic Disk

### **Session II: CRISM Poster Presentations**

12:10 PM      **Lunch and Poster Presentations by Students and Postdocs**

Eric Straver, High Resolution Imaging of Vortices in Superconductors

Ioan Tudosa, Enhanced Gilbert Damping and Role of Interfaces in Large  
Angle Spin Precession

Masamitsu Hayashi, Current Induced Domain Wall Motion in Magnetic  
Nanowires

Dongwoon Shin, Growth of Cu Nanoparticles in SiC Matrix for  
Application in CPP GMR Spin Valves

Liangliang Li, High Resistivity and High Permeability Materials for  
Integrated Inductors

Mike Chapline, Growth of Half Metal and Spin Filter Materials

Dr. Seung-Young Bae, Thin Film Magnetite Tunnel Junctions

Ankur Mohan, High Frequency Integrated Inductors with Magnetic  
Materials

Guanxiong Li, Magnetic DNA Microarray

Juliet Risner, Analytical Electron Microscopy of Hard Disk Media at the  
Nanoscale Level

Unoh Kwon, HRTEM Studies of CoCrPtO Perpendicular Magnetic  
Recording Media

Dr. Yves Acremann, Time resolved imaging of magnetic vortex

oscillations

Bill Schlotter, Lensless imaging of magnetic materials with x-rays

Scott Andrews, Fabrication and x-ray characterization of spin injection

Rajesh Kelekar, Heusler alloy half metal

### **Session III: CRISM Oral Presentations**

**Chair: Prof. Robert L. White**

- 2:00 PM Prof. Shan Wang, Stanford University  
Overview of CRISM, Memberships, IP Issues
- 2:10 PM Prof. Kathryn Moler, Stanford University  
High Resolution Magnetic Force Microscopy
- 2:25 PM Ankur Mohan  
High Frequency Integrated Inductors with Magnetic Materials
- 2:40 PM Guanxiong Li  
Magnetic DNA Microarray
- 2:55 PM Prof. Robert Sinclair, Stanford University  
Stanford Nano-Characterization Facilities: Reaching Magnetic Materials at the Nanoscale
- 3:15 PM Juliet Risner  
Analytical Electron Microscopy of Hard Disk Media at the Nanoscale Level
- 3:30 pm Unoh Kwon  
HRTEM Studies of CoCrPtO Perpendicular Magnetic Recording Media
- 3:45 PM **Coffee Break**

### **Session IV: CRISM Oral Presentations**

**Chair: Prof. Bruce Clemens**

- 4:00 PM Prof. Joachim Stohr, Stanford University  
X-rays and Magnetism: Past, Present and Future
- 4:30 PM Dr. Yves Acremann  
Time resolved imaging of magnetic vortex oscillations
- 4:45 PM Bill Schlotter  
Lensless imaging of magnetic materials with x-rays
- 5:00 PM Scott Andrews  
Fabrication and x-ray characterization of spin injection samples
- 5:15 PM Rajesh Kelekar  
Heusler alloy half metal
- 5:30 PM **Adjourn and Advisory Board Meeting**
- 6:30-8:30 PM **Dinner Reception at Stanford Faculty Club**