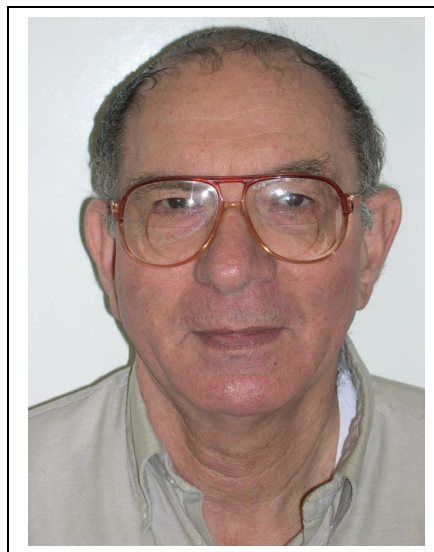


GMAG NEWSLETTER APRIL 2005

A Note From the Chair

Dear GMAG members,

As the new Chair of GMAG, I would like to thank you for belonging to GMAG and to invite you to participate in one or more of the GMAG activities described in this newsletter. These include organizing March Meeting 2006 symposia and Focus Sessions, adding items to a new 'Magnetism Pictures' section of the GMAG Web page, nominating candidates for APS Fellowship and APS Prizes and Awards, nominating candidates for GMAG PhD Dissertation Awards, and proposing magnetism-related Outreach Projects. As the third largest Topical Group in the APS, GMAG has the opportunity to effectively promote magnetism-related interests within the APS. But fulfilling this potential depends upon you, our members, as well as upon us, the Executive Board. We hope that you will participate actively in GMAG activities and encourage your colleagues with magnetism research interests to join GMAG and to help us to promote magnetism. The more members we have, the more effective we can be.



GMAG Election Results: Daniel Reich (Johns Hopkins University) is our new Vice Chair and our two new Executive Committee members are Chris Leighton (University of Minnesota) and Sara Majetich (Carnegie Mellon University). We thank departing Past Chair Frances Hellman and Executive Committee Members Julie Borchers and Jonathan Sun for diligent and effective service to GMAG. Thanks also to everyone who participated in the election. Lastly, it is time to begin considering nominations for the next GMAG election. Andy Kent (andy.kent@nyu.edu) is Chair of the Nominating Committee. *Please send to him suggestions for Vice Chair and Members at Large, no later than Sept. 1, 2005.* The Bylaws of GMAG (See the APS-GMAG web site) also specify a mechanism for nominations by petition.

March Meeting 2005: Symposia Nominations and Focus Session Topics: It is time to start organizing the magnetism part of the 2006 March Meeting in Baltimore. This year's Chair-elect, Jim Rhyne, is in charge of GMAG-sponsored: (a) Invited Symposia, which consist entirely of invited speakers (usually five), and (b) Focus Session Topics, which involve mostly contributed talks, with one invited speaker per session to provide context.

(a) GMAG is allowed to be lead organizer for three Symposia. *For each Symposium, we need nominations of topic, chair, and speakers. Please send these to Jim at rhyne@lanl.gov no later than August 1, 2005.*

(b) Last year we co-organized, along with DMP and/or DCOMP, five Focus Session topics:

- *Theory and Simulation of Magnetism and Spin Dependent Properties*
- *Magnetic Nanoparticles, Nanostructures, and Heterostructures*
- *Phase Complexity and Enhanced Functionality in Magnetic Oxides*
- *Spin Transport and Magnetization Dynamics in Metal-Based Systems*
- *Spin-Dependent Phenomena in Semiconductors*

As these Focus Session topics were all successful, we may well continue them (perhaps with modified titles), but we also solicit suggestions for additional topics. There is no limit on the number of Focus Session topics, except that each must attract enough contributed papers to generate at least one (and preferably more) sessions. ***To volunteer to help organize a Focus Session on one of the above topics, and/or to propose a title for a new one, please contact Jim. Rhyne by May 15, 2005.***

New ‘Magnetism Pictures’ section to GMAG Web Page. The GMAG Board has approved expanding the GMAG web page to include a section entitled ‘Magnetism Pictures’. To start, this section will be subdivided into six sections: (a) Magnetism, Fundamental Science; (b) Magnetism on Earth and in the Universe; (c) Magnetism in Industry; (d) Magnetism Education; (e) Magnetism-related Web Sites; and (f) Magnetism-related Books. Initially, clicking on one of the first four sections will bring up a list of figure captions, and clicking on a caption will bring up a figure. The intent is to make these figures available (with proper attribution) for private use and, perhaps, for magnetism-related brochures to be prepared by GMAG. If the Web site grows as we hope, the sections will have to be subdivided, and probably revised to reflect their contents and make those contents accessible. ***If you are interested in helping to organize and ‘fill’ this section, please contact Jack Bass (bass@pa.msu.edu).***

Nominations for APS Fellowship and for APS Prizes and Awards: *The nomination deadline for most of the APS prizes and awards is July 1, 2005.* Please be sure to nominate worthy people from the magnetism community for the various awards, which are listed on the APS web site (<http://www.aps.org/praw/>). The deadline for this year's fellowship nominations has already passed, but it is not too early to start preparing nominations for next year for a person that you think should be awarded APS Fellowship. All information on the requirements for all of these nominations can be found on the APS web site (<http://www.aps.org/>).

New GMAG-Sponsored APS Fellows: We congratulate the most recent Fellows (class of 2005) sponsored by GMAG for their outstanding contributions to the field of magnetism:

Peter Schiffer (Penn State University) *For pioneering studies of novel magnetic materials including colossal magnetoresistance manganites and geometrically frustrated magnets.*

Peter Dowben (University of Nebraska) *For his significant experimental contributions to surface magnetism, spin polarization in complex magnetic systems, and metal-to-nonmetal transitions in reduced dimensionality.*

Collin Broholm (Johns Hopkins University) *For his contributions to understanding low dimensional and frustrated quantum magnetism through neutron scattering.*

Student Awards and Student Membership support: To encourage graduate students working in magnetism, GMAG will continue two policies begun on a trial basis two years ago:

1) Free student membership in GMAG: Students who are members of APS can join GMAG without paying additional dues (GMAG will pay student GMAG dues to APS). *To join, students need to send a note to membership chair, Jeff Childress (Jeff.Childress@hitachigst.edu) with their name, APS membership number, mailing address, and e-mail address (note that students can join APS free for one trial year and \$26 for each succeeding year).*

2) Outstanding Dissertation in Magnetism Awards: GMAG will present up to three dissertation awards at the next March Meeting. These awards will recognize students who have conducted outstanding research leading to their dissertation and will consist of an invited talk in an appropriate session at the March APS Meeting, a \$500 prize to the student, and up to \$250 toward his/her travel expenses to the March meeting. The student must be in the final year before graduating with a Ph.D., and both the student and the advisor must be current members of GMAG. Nominations will consist of: a nominating letter; an extended abstract of the research; the student's CV and publication list; and contact information for the student, all submitted by the student's advisor or another senior researcher who knows the student's work well. The nominating letter must address the following issues:

- the quality and independence of the student's work;
- the student's speaking ability;
- the year the student began graduate school;
- the student's expected completion date (must be after Sept. 1, 2005 but before Sept. 1, 2006 to be eligible for the 2006 March Meeting);
- assessment of the student's future potential as a research scientist.

Nominations should be sent by email as a single pdf file to Jack Bass (bass@pa.msu.edu) by Sept. 1, 2005. Evaluation of the nominations will be conducted by part or all of the GMAG Executive Committee.

Outreach Funding from GMAG: Since last year, GMAG has invited applications from its members to support outreach activities involving magnetism. Limited funds (up to \$2500 per project) are available to cover supplies and expenses associated with activities that aim to educate non-scientists about magnetism and its applications. Preference will be given to innovative activities that will be documented so that they can be reproduced elsewhere. The outcome of the activities will be disseminated to the GMAG membership through the Newsletter and to the broader magnetism community through the GMAG website. Interested GMAG members should prepare a 1-2 page summary of the proposed activity (including expected duration and outcome) along with a 1 page CV and a list of anticipated expenses. *These should be mailed as a single file in .pdf format to the GMAG Chair, Jack Bass, at bass@pa.msu.edu.* The GMAG Executive Board will review proposals on an ongoing basis, beginning May 1, 2005.

In 2004-5, GMAG funded one outreach proposal, written by Patricia J. Dixon, Director, Center for Integrating Research & Learning of the National High Magnetic Field Laboratory (NHMFL). The GMAG funds allowed the NHMFL's educational outreach program to partner with Nims Middle School in Tallahassee, Florida. Their 'Girls in Science Program' targeted

girls from a structured after school program who have an interest in science. Two Wednesdays each month, educators from the lab, with support from the Women in Math, Science, and Engineering (WIMSE) group at Florida State University, presented hands-on science activities. A "behind the scenes" tour of the Magnet Lab provided an exciting look at real-world science. Plans are underway to expand the program for the next school year. Further details will appear on the GMAG web site.

Upcoming magnetism conferences and workshops.

24th Annual Conference on Properties and Applications of Magnetic Materials (PAMM 2005) (Chicago, IL, May 9-11, 2005) (<http://magnetic.iit.edu/>)

Nanomagnetism: Materials and Probes Workshop at the 2005 NSLS Annual Users' Meeting, (Brookhaven National Laboratory May 23-25, 2005)
<http://www.nsls.bnl.gov/users/meeting/2005/workshop1.htm>)

The 16th Magnetic Recording Conference (TMRC 2005) (Stanford Univ., Stanford, CA, August 15-17, 2005) (<http://tmrc.nanointernational.org>)

50th Conference on Magnetism and Magnetic Materials (MMM05) (San Jose, CA, Oct. 30 – Nov. 3, 2005) (www.magnetism.org). Symposia and Invited Talk nomination deadline: April 25, 2005. Abstract deadline: June 24, 2005.

Materials Research Society (MRS) 2005 Fall Meeting (Boston, Mass., Nov. 28-Dec. 2, 2005) (www.mrs.org)

Seventh Latin American Workshop on Magnetism, Magnetic Materials and their Applications (Renata, Chile, Dec. 11-15, 2005) (<http://www.law3m.cl/Law3m/index.htm>)

Again, we invite and encourage you to participate in the GMAG activities described above.

The GMAG Executive Committee

Chair: Jack Bass (bass@pa.msu.edu)

Chair-Elect: Jim Rhyne (rhyne@lanl.gov)

Vice-Chair: Daniel Reich (dmr@pha.jhu.edu)

Past Chair: Peter Schiffer (schiffer@phys.psu.edu)

Secretary-Treasurer: Caroline Ross (caross@mit.edu)

Executive Committee Members-at-Large: Jeff Childress, Andrew Kent, Chris Leighton, Laura Lewis, Sara Majetich, and Mark Stiles.