

GMAG NEWSLETTER

Topical Group on Magnetism and its Applications
No. 19, February 2005

A Focused Group within the American Physical Society

A Note from the Chair

Dear GMAG members,

The March Meeting is rapidly approaching and will feature a large number of talks and activities of relevance to the magnetism community including many invited sessions and the presentation of the GMAG student dissertation awards. In this newsletter, we give you some of the details of the meeting as well as a guide to magnetism sessions (many of which are sponsored by GMAG). Your input to GMAG programs and activities is strongly encouraged. To learn more, please come to the annual Business Meeting and reception at the March Meeting in Room 153B of the Convention Center at 17:30 on Tuesday, March 22 (free soft drinks and snacks will be served). At this meeting, the new GMAG-sponsored APS Fellows and student dissertation award winners will be recognized, GMAG activities and budget for the past year will be presented, and plans for next year will be discussed. GMAG wants and needs your participation to be a successful

topical group representing the magnetism community both within APS and to the outside community.

I would also like to remind you that our annual elections are underway, and if you have not yet voted, please do so (information below). Also, this is the time of year to start thinking about nominations of people for the APS Fellowship, as well as to begin thinking of topics for the next March meeting (2006). Information about all of these topics and more is contained in this newsletter.

Thank you again for your membership and your participation.

— Peter Schiffer



GMAG Elections

We invite you to participate in the election of new GMAG officers. The open offices are Vice Chair (the Vice Chair becomes the Chair Elect and then Chair of GMAG in subsequent years) and two Member at Large positions on the Executive Committee. The election is open through 28 February 2005. You will be sent email by APS in January with instructions on how to vote. Voting electronically is most convenient, but, if you prefer to use a paper ballot, please contact Secretary/Treasurer Caroline Ross at caross@mit.edu (you will need to send her your ballot postmarked on or before 28 February).

The candidates are:

Vice-Chair: Mark Freeman and Daniel Reich

Executive Committee Members: Jonathan R Friedman, Yumi Ijiri, Chris Leighton, and Sara Majetich

Results will be announced at the Business Meeting at the March Meeting in Los Angeles.

Outstanding Dissertation in Magnetism Awards

GMAG is pleased to announce the following two GMAG dissertation awardees who will be giving invited talks at the upcoming March Meeting in Los Angeles:

Namjung Hur (Rutgers) "Magnetolectric and Magnetodielectric Effects in $REMn_2O_7$," Session D7, Monday, 2:30 pm.

Changyeon Won (Berkeley) "Exploring New Magnetic Properties in Coupled Magnetic Nanostructures," Session S42, Wednesday, 2:30 pm.

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Members at-Large of the Executive Committee

(Term ends March 200x)

Julie Borchers (2005)
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Jonathan Sun (2005)
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Laura Lewis (2006)
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Mark Stiles (2006)
mark.stiles@nist.gov

Jeff Childress (2007)
Jeff.Childress@hgst.com

Andrew Kent (2007)
adk1@nyu.edu

Awards continued from page 1

In addition to these two awardees, three other students received honorable mention in the award selection. These are: Hye Jang Kang (Tennessee), Patrick Mang (Stanford), and Christian Kaiser (Aachen).

We received many outstanding applications for this award, and choosing among them was not an easy task. The award consists of an invited talk in one of the GMAG sessions at the March APS Meeting (session number listed above), a \$500 prize to the student, and up to \$250 towards travel or other costs of attending the Meeting. The checks will be presented at the invited talks; please be sure to attend these sessions.

STUDENT MEMBERSHIP SUPPORT

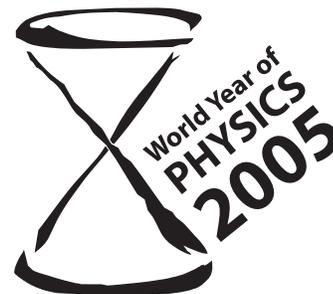
To encourage more students to participate in GMAG events, GMAG has implemented free student membership in GMAG: Students who are members of APS can join GMAG without paying additional dues (GMAG will pay student GMAG dues to the APS). Interested students should email Jonathan Sun (jonsun@watson.ibm.com) with their name, APS membership number, mailing address, and email address (note that students can join the APS free for one trial year and \$27 for each succeeding year).

Students! Don't pass up this great deal!

GMAG OUTREACH: BROCHURE AND FUNDING

Stimulated in part by 2005 being the World Year of Physics, and in part by a perceived need to tell people more about the excitement of research in Magnetism and Magnetism's importance in Industry and Life, GMAG plans to assemble a set of pictures with brief captions that can be accessed by people interested in magnetism and used by GMAG to construct 'brochures' about magnetism for various audiences. The tentative topic areas are: "Magnetism, Fundamental Science", "Magnetism on Earth and in the Universe", "Magnetism in Industry", and "Magnetism Education". Anyone interested in participating by taking charge of one of these topics, contributing material to folders, etc. should contact Jack Bass at bass@pa.msu.edu.

GMAG also has funds available to its members to support other outreach activities. Limited funds (up to \$2500 per project) are available to cover supplies and expenses associated with activities which 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 one-two-page summary of the proposed activity (including expected duration and outcome) along with a one-page CV and a list of anticipated expenses. These should be mailed as a single file in .pdf format to the GMAG Chair, Peter Schiffer, at schiffer@phys.psu.edu.



NOMINATIONS FOR APS FELLOWSHIPS

Each year, GMAG recommends 2-3 people for APS Fellowship (0.5% of our membership). The following 2004 APS Fellows were sponsored by GMAG:

Collin Broholm, Johns Hopkins University
Peter Dowben, University of Nebraska
Peter Schiffer, Penn State University

GMAG relies on the magnetism community for Fellowship nominations, and the nomination deadline for the upcoming year is April 1, 2005. Please consider nominating a worthy person from the magnetism community through GMAG. A list of Fellows named since 1995 can be found at the web site listed below, or you can look up an individual's name in the APS directory to see if he or she is already a Fellow. You may be surprised by the names of some of our colleagues who are not yet Fellows. The simple nomination package only includes a nomination form signed by two sponsors (both of whom must be APS members) and supporting letters. Complete information and the nomination form itself can be found at <http://www.aps.org/fellowship/>.

All nominations should be sent to:

Executive Officer
ATTN: Fellowship Program
American Physical Society
One Physics Ellipse
College Park, MD 20740-3844

MARCH MEETING

The 2005 APS March meeting will be held March 21-25 in Los Angeles, CA. Information about the meeting, registration, hotels, etc. can be found at <http://www.aps.org/meet/MAR05/>.

To help you plan for the meeting, we attach a table at the end of this newsletter showing magnetism-related sessions of three kinds: *invited sessions* (GMAG was lead sponsor of three and co-sponsor of three others); *focus sessions* (GMAG was lead sponsor of one and co-sponsor of four and session organizer for all 5); and *contributed sessions* (GMAG was lead sponsor and organizer for the entire magnetism category 6.x).

About 6500 abstracts were received for the entire meeting, with nearly 800 in magnetism category 6.x (including posters). The abstracts were sorted on December 10-11, 2004 by Jack Bass (team leader), Paul Crowell, H. Dennis Drew, Bill Egelhoff, Min Ouyang, Jian Shen, Sanjay Shinde, Jeffrey Simpson, Mark Stiles, Andrei Sushkov, Oleg Tchernyshyov, Evgeny Tsymbal, Shufeng Zhang, and Igor Zutic, who we can all thank for their efforts.

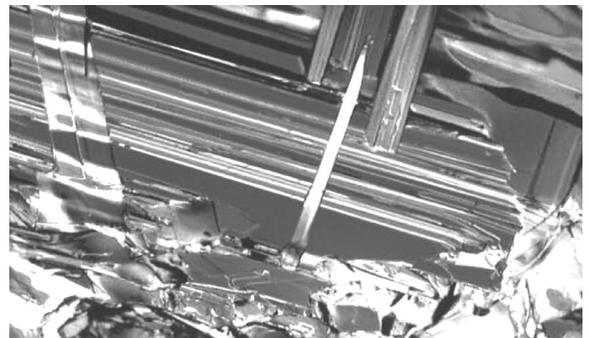
The GMAG-sponsored Focus Sessions are:

- 6.11.1 Theory and Simulation of Magnetism and Spin Dependent Properties (DCOMP/DMP/GMAG)
- 6.11.2. Magnetic Nanoparticles, Nanostructures, and Heterostructures (DMP/GMAG)
- 6.11.3. Phase Complexity and Enhanced Functionality in Magnetic Oxides (DMP/GMAG)
- 6.11.4. Spin Transport and Magnetization Dynamics in Metal-Based Systems (GMAG/DMP)
- 6.11.5. Spin-Dependent Phenomena in Semiconductors (GMAG/DMP)

GMAG will also sponsor two tables at the APS-organized "Students Lunch with the Experts", on Wednesday, March 23 from 1:00pm-2:30pm. The format is a round table with 8 students and an expert (box lunches provided). Mark Stiles of NIST and Norman Birge of Michigan State University will be this year's experts.

GMAG is also sponsoring two Sunday tutorials, one on Molecular Magnets, organized by Andrew Kent (Speakers: George Christou, Eugene Chudnovsky, and Andrew Kent), and one on Spintronics, organized by Mark Johnson (Speakers: Stuart S. P. Parkin, Sankar Das Sarma, Masaaki Tanaka, and Lloyd J. Whitman).

For those looking for jobs or recruiting, please remember the [APS March Meeting Job Fair](#). Organized by the APS, this fair seeks to connect employers and job seekers in all areas of physics represented at the March Meeting, including magnetism. For employer registration or for additional information, please contact Alix Brice at abrice@aip.org (website: www.aip.org/careers).



Magnetism is a topic at the APS March 2005 Meeting. Photo: Ceramic Superconductor Single Crystal by Michael W. Davidson, National High Magnetic Field Laboratory, DCMP Website

Nota Bene:

As mentioned in a previous newsletter, Dongqi Li, a gifted member of the magnetism research community in the Materials Science Division at Argonne National Laboratory (ANL) suffered a serious car accident in April 2004. Her recovery has been very slow and her medical expenses are significant. More details on her condition and information concerning donations are available at http://www.geocities.com/dongqi_l.

UPCOMING MAGNETISM-RELATED CONFERENCES:

A feature of the GMAG website (<http://www.aps.org/units/gmag/>) is a listing of upcoming conferences on magnetism-related topics (also listed below). If you would like to feature your meeting or conference on this web page, please contact the GMAG Secretary/Treasurer, Caroline Ross (caross@mit.edu).

2005 March Meeting

March 21-25, 2005
Los Angeles, CA
www.aps.org

Materials Research Society (MRS) 2005 Spring Meeting

San Francisco, California
March 28-April 1, 2005
www.mrs.org

2005 Intermag Conference

April 5-8, 2005
Nagoya, Japan
www.intermagconference.com

24th Annual Conference on Properties and Applications of Magnetic Materials (PAMM 2005)

May 9-11, 2005
Chicago, IL
<http://magnetic.iit.edu/>

Nanomagnetism: Materials and Probes

Workshop at the 2005 National Synchrotron Light Source (NSLS) Users' Meeting
Brookhaven National Laboratory
May 23, 2005.
<http://www.nsls.bnl.gov/users/meeting/>

The 16th Magnetic Recording Conference (TMRC 2005)

August 15-17, 2005
Stanford University, Stanford, CA
<http://tmrc.nanointernational.org>

50th Conference on Magnetism and Magnetic Materials

October 30 - November 3, 2005
San Jose, CA
www.magnetism.org

Materials Research Society (MRS) 2005 Fall Meeting

Boston, Massachusetts
November 28 - December 2, 2005
www.mrs.org

Seventh Latin American Workshop on Magnetism, Magnetic Materials and their Applications

December 11-15, 2005
Renata, Chile
<http://www.law3m.cl/Law3m/index.htm>

Please hand this to a colleague interested in Magnetism and its Applications

**Join GMAG Today
YOUR Group Needs You!**

GMAG is the topical group of the American Physical Society that represents the interests of Physicists working in Magnetism and its Applications. In only a few years we have grown to well over 500 members. Your membership counts with us. Besides organizing Invited Symposia and Focus Sessions at the March Meeting, we are sponsoring activities such as the Student Dissertation Award, and planning other programs for the benefit of our members. By becoming a member, you can have an impact influence on how APS represents our subject area.

Here's how you join: As an APS Member it only costs \$7. For a limited time students who are members of APS can join for free.

If you are an APS member and want to add the Topical Group on Magnetism and its Applications:

Mail a check for US\$7.00 to APS, noting the name of the topical group and your name or membership number. The address is: American Physical Society, One Physics Ellipse, College Park, MD 20740. Or go to the APS page for "Application to add units" (<http://www.aps.org/memb/unitapp.html>) and follow the easy instructions for adding a unit to your existing membership. You may use a credit card as payment if you select our secure server. Or call the APS at 301-209-3280, and tell one of the Membership Representatives that you want to join the topical group.

If you are NOT an APS member you may join the APS and the Topical Group on Magnetism and its Applications:

Go to the APS Membership Page (<http://www.aps.org/memb/index.html>) and follow the easy instructions for applying. You may use a credit card as payment if you select our secure server, or download an application, fill it out, and mail it or fax it to the APS with your payment. Call APS at 301-209-3280, and tell one of the Membership Representatives that you would like an application mailed to you.