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From The President

By Randall Victora, Society President

As Society President, I am frequently asked questions about Society operations by our members, conference attendees, and other interested individuals. Although occasionally these questions imply that we have made a mistake, most just reflect curiosity. One of the more common is "How are conference



locations selected? The answer is remarkably complex.

First, if the society is only a technical sponsor with no financial responsibility, we probably had nothing to do with site selection. Another point to realize is that our major conferences, MMM and INTERMAG, are sufficiently large that the number of hotels capable of housing us is small: in fact some surprisingly large cities do not have a single such hotel. Also, this size of conference usually requires a contract to be signed about 4 years in advance, meaning that many

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Update From The Nominations Committee

By Carl Patton, Nominations Committee Chair

The election for 8 new members of the AdCom for the 2010 - 2012 term is underway. The ballot with 18 individuals, as selected by the Nominations Committee from 32 "nominations for consideration for the ballot," was announced by IEEE Headquarters in mid-August.

Emails were sent to all members of the Magnetics Society with email addresses of record with information on the web-link to the ballot and instructions for voting. Members with no email addresses of record were send paper ballots. The IEEE has then followed up with email reminders to people who have not voted. As of the last report from the IEEE, **ONLY 8 PERCENT OF THE MEMBERSHIP HAS VOTED**.

PLEASE VOTE!

The election will close on October 15. Again, please vote. This is your Society!

Results will be announced shortly after October 15, as soon as an official report is received from the IEEE and the successful and unsuccessful candidates have been informed of the results.

Impact Factor Obsession

By Ron B. Goldfarb, Publications Chair

Journals' annual Impact Factors (IFs) are compiled in Thomson-Reuters' *Journal Citation Reports* (<u>http://</u> <u>isiknowledge.com/JCR</u>) as a ratio of citations to articles published. The numerator is the number of citations to articles published in the two previous years; the denominator is the total number of articles published in that same time period. Citations to articles published outside of the two year window do not contribute to IF.

Unfortunately, IF is often misused as a measure of journal quality, selectivity, and prestige, and is sometimes egregiously misrepresented as a measure of an individual author's impact [Gowrishankar 1999, Adam 2002]. Misguidedly, some universities and countries have begun to weight applications of candidates for positions, tenure, and funding by the IF of the journals in which they have published [Seglen 1997, Adam 2002]. Lawrence 2003].

It turns out that a journal's IF is mostly determined by citations to only relatively few papers [Seglen 1997, Adam 2002,

Colquhoun 2003, Antonoyiannalis 2009]. Also, journals in different fields have different average IFs, which makes comparisons across disciplines tenuous [Seglen 1997]. For example, the IFs of cell biology journals are higher than those of applied physics journals, which are higher than those of electrical and electronic engineering journals.

Some journals take advantage of the fact that opinion articles do not count in the IF denominator, but citations to those articles count in the numerator [Gowrishankar 1999]. Journals can manipulate the timing of articles to boost their IF. For example, papers with perceived high citation potential, such as review articles, can be delayed to January to take full advantage of the IF citation window of two calendar years. (The Magnetics Society has never sacrificed timeliness for IF. For example, *IEEE Transactions on Magnetics* usually publishes its large INTERMAG issue in the last quarter of the year instead of artificially delaying it to January. The Transactions editors believe they have an obligation to authors and readers to ensure

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SMM 19 - Torino 2009: Conference Review

By Giorgio Bertotti, SMM 19 Co-Chair

The 19th edition of the "Soft Magnetic Materials" conference (SMM 19) was held from September 6 until September 9 in Torino, Italy. The conference co-chairs were Fausto Fiorillo and Giorgio Bertotti, from INRIM, the Italian Institute for Research in Metrology.

Despite the widespread world economic crisis, the conference was quite successful, with 360 registered delegates from 35 countries, of which nearly 90 were students. This makes SMM 19 the largest SMM conference ever. The large participation and in particular the remarkably high number of students show that the area of soft magnetic materials is vital, with a lot of potential for the future.

Twelve invited talks from university and industry, twenty shorter oral contributions, and about 330 posters were presented; 129 conference-related papers will be published in the February 2010 issue of *IEEE Transactions on Magnetics*.

On Tuesday, September 8, a special oral session was held, which included the Magnetics Society Distinguished Lecture on spintronics by Hideo Ohno, Tohoku University, Japan, and a lecture about philosophical and historical aspects of magnetism by Vittorio Marchis, Politecnico di Torino. Both lectures were extremely interesting and very well received. This was a good service to the Magnetics Society, as more than 300 scientists from all over the world could discover and appreciate the value of the Magnetics Society Distinguished Lecturer program.

In the closing session on Wednesday, September 9, Ryusuke Hasegawa presented a most stimulating general overview of the SMM 19 technical program. After that and after the assignment of three best student presentation awards, it was announced that the next Soft Magnetic Materials conference, SMM 20, will be organized in Athens, Greece, in 2011.

Additional information about conference attendance and statistics will be available soon on the conference website, at: http://www.smm19.eu.

SMM 19 - Torino 2009: In Pictures



rontra Ngressi

Co-Chair Fausto Fiorillo

Opening Session



Co-Chair Giorgio Bertotti



The Audience



Passing of the Torch to SMM20's Evangelos Hristoforou



Student Awardees

From The President continued from page 1

people who will actually run the conference, such as the program and publication chairs have no voice because they have not even been selected yet.

Our most demanding conference is usually MMM (and the Joint MMM/INTERMAG conference every third year) because it has the most parallel sessions. It is also jointly sponsored by Physics Conferences Incorporated (PCI, associated with the American Institute of Physics) and the IEEE Magnetics Society. Typically, PCI and IEEE each name someone to join our conference coordinator (Diane Melton) in searching for hotels. Ideally, in my view, PCI and IEEE representatives would be the current chairman of the MMM ADCOM (the previous year's general chair) and the general chair that will actually be organizing the conference at the new location. Unfortunately, this new general chair has often not yet been selected, and thus a substitute makes the choice that will greatly influence the success of his conference. In any case, Diane sends out a request for bids and the three searchers examine them and then select a few hotels to visit. The hotels are thrilled to host their visit because it can translate into the better part of \$1,000,000 of revenue for them. I have seen them provide limousines, suites decorated with chocolatecovered strawberries arranged in the MMM logo or, in a different city, iced beer in a champagne bucket accompanied by unlimited pretzels. (I will not name which hotels did any of these things except to say that it did not work and none of the above were chosen!) In the end, the search committee reports back to the MMM ADCOM, who then votes. Typical discussion focuses on the quality of the meeting rooms, the quality of the financial offer, e.g., how many rooms must be contracted at a particular price, a desire to balance geographic location with previous years, accessibility, which usually translates into size of airport, and expected attendance.

United States based INTERMAGs are chosen in a similar fashion except that the chair of the Magnetics Society Conference Executive Committee is usually one member of the search party. More complicated is the choice of location when the conference goes overseas every third year to either Europe or Asia. In this case, local committees do most of the selection with a final site visit by Magnetics Society central leadership. For example, the location of Taipei for the 2011 INTERMAG was largely selected by a group representing Japan, South Korea, Singapore, Peoples Republic of China, Taipei, and Australia.

Finally, our small conferences select locations in a variety of ways. The Magnetic Recording Conference (TMRC) is usually co-located with one of the University Recording Centers including CMU DSSC, UCSD CMRR, U. Minnesota MINT, UC Berkeley CML, Stanford CMN, and U. Alabama MINT (this year). There is a desire to hold it on campus both for closer interaction with the University and for economy, but it has also taken place at hotels near the Data Storage Institute in Singapore and NIST Boulder. Location is ultimately selected by the TMRC ADCOM which consists of representatives from the above mentioned institutions and Tohoku University, which has not yet hosted a meeting.

Overall, the site search is both an interesting and exasperating experience. One need never forget that the hotel representative is an experienced salesperson who will do this many more times than any volunteer member of the search group. Fortunately, our conference coordinator is a professional who helps guide us through potential pitfalls. Hopefully, most choices have been wise and contributed to the strength of the conference.

Randall Victora can be reached via email at victora@umn.edu

New Senior Members

The following members of the IEEE Magnetics Society were recently elevated to the grade of Senior Member. Congratulations!

June 2009: Mike Gibbs & Sung-Chul Shin

August 2009: Eugene Chen, Paulo De Mora, Alexander Fedotov, Min Li & Porncha Supnith. Senior Member is the highest grade for which IEEE members can apply. For further information on the application process for Senior Membership, visit the IEEE Web site at:

www.ieee.org/web/membership/senior-members

Conference Calendar	
Oct 4 - 9, 2009	Advances in Magnetic Nanostructures Vail, CO, USA Web site: www.engconfintl.org/9bdabout.html
Oct 5 - 7, 2009	20th Magnetic Recording Conference (TMRC 2009) Tuscaloosa, AL, USA Web site: www.mint.ua.edu/tmrc2009/
Oct 12 - 13, 2009	Advanced Magnetic Materials and their Applications Hanau, Germany Web site: www.ukmagsoc.co.uk
Oct 27 - 28, 2009	China Magnetics 2009 Shanghai, China Web site: www.chinamagneticsconference.com
Nov 22 - 26, 2009	Compumag 2009 Florianópolis, Brazil Web site: www.compumag2009.com
Jan 18 - 22, 2010	11th Joint MMM-INTERMAG Conference Washington, DC, USA Web site: www.magnetism.org
Jan 28 - 29, 2010	Magnetics Conference 2010 Orlando, FL, USA Web site: www.magneticsmagazine.com
Mar 28 - Apr 1, 2010	4th Seeheim Conference on Magnetism Frankfurt, Germany Web site: www1.tu-darmstadt.de/magnetism/
Apr 20 - 25, 2010	International Conference on Superconductivity and Magnetism ICSM2010 Antalya, Turkey Web site: http://www.icsm2010.org/
May 25 - 29, 2010	8th International Conference on the Scientific and Clinical Applications of Magnetic Carriers Rostock, Germany Web site: www.magneticmicrosphere.com/meetings/
Jun 9 - 11, 2010	4th International Conference on Magnetism and Metallurgy WMM'10 Freiberg, Germany Web site: http://www.ukmagsoc.co.uk
Aug 29 - Sep 2, 2010	21st Workshop on Rare-Earth Permanent Magnets and their Applications Bled, Slovenia Web site: nano.ijs.si/repm10.htm

Record Submission for the 11th Joint MMM / Intermag Conference

By Kevin O'Grady, 11th Joint MMM / Intermag Conference General Chair

Members may like to know that the 11th Joint MMM/ Intermag conference which is scheduled to be held in the Wardman Park Marriott in Washington DC from the 18th – 22nd January 2010, received a record submission of digests this year. We received just over 2,300 submissions with just over 1,700 being accepted. This represents a rejection rate of approximately 26% which is normal or slightly lower than normal for our conferences.

We are also undertaking a number of innovations in the organisation of the meeting this year which are as follows:

- We developed a highly novel international Program Committee. We have 3 Program Chairs being Hiroaki Muraoka (Tohoku), Bernard Dieny (Grenoble) and Chris Leighton (Minnesota). It is gratifying that three Chairs from three different continents work so very well together.
- The Program Committee had eleven representatives from Asia, eleven from Europe with the balance coming from the United States.
- The paper submissions consisted of 50% from Asia with surprisingly only 23% from the United States.
- Following the experiment at the Madrid Intermag we are to have two invited posters each half day occupying a

prominently placed double poster board. These should be worth looking out for.

- Because of the internationalisation of the Program Committee and hard work by its Chairs we have been able to organise symposia on a truly international basis.
- We are also attempting to have a special event on motors due to the development of electric vehicles. We will have a short symposium and a concentrated poster session on a single half day.

We believe that we have generated a very high quality program indeed and I urge the membership to consider attending the conference which, due to the submission rate, is guaranteed to be a success.

I would also urge members to book early at the Wardman Park Marriott. This is an outstanding hotel in the heart of Washington DC. We have secured a rate of \$189 per night, which for that area of Washington is outstanding. I would also urge members working in academia to consider housing their students in the hotel since two students sharing a room costs less than \$100 per night each. As well as being a beautiful facility there are many eating houses in the immediate locality and of course a range of outside activities within easy reach.

Spain Chapter News

By Manuel Vázquez, Spain Chapter Chair

In the past few months the Spain Chapter has organized a number of meetings for its members:

- Joint Meeting within IEEE Spain Section on occasion of the celebration of 125th Anniversary of IEEE, June 12. (Sevilla)
- Meeting with Prof. Kannan Khrisnan, 2009 Distinguished Lecturer, July 11 (Madrid) and July 12 (Barcelona)
- Meeting with Dr. Stuart Parkin, 2008 Distinguished Lecturer, September 11 (Madrid). This seminar was not possible during 2008 due to the Dr Parkin's busy schedule.

 Meeting with Prof. Hideo Ohno, Distinguished Lecturer 2009, September 25 (Madrid)

Additional planned activities for the Chapter include:

- Meeting IEEE Spain Section. October 27th, (Madrid)
- Annual Meeting IEEE Magnetic Society Spain Chapter (renovation meeting), December 10th (Saragosse), and
- Joint Meeting organised in collaboration with Spain Club of Magnetism, with the participation of Prof. Theo Rasing, Distinguished Lecturer 2009, and 3 additional speakers to be decided. December 11th (Saragosse).

Impact Factor Obsession continued from page 2

that valid and relevant research is published as promptly as possible.)

IF is just one of several metrics that provide feedback to journals on their own performance. An interesting and arguably more useful alternative is Eigenfactor (http:// www.eigenfactor.org), a measure of citations over a five year period. It includes an iterative analysis of citation networks and adjusts for citation differences across disciplines.

Hirsch indexes are gaining currency in evaluating individual authors' citations. The h-index measures an author's citations against the number of his or her publications: "A scientist has index h if h of his or her N_p papers have at least h citations each and the other $(N_p - h)$ papers have $\leq h$ citations each" [Hirsch 2005]. For example, an author will have an *h*-index of 9 if his or her ninth-most-cited paper has been cited 9 times, the eighth-most-cited paper cited more than 9 times, and the tenthmost-cited paper cited fewer than 9 times. Even journals have been ranked using h-indexes by SCImago on the basis of Elsevier's Scopus database (http://www.scimagojr.com).

Portions of this commentary appear in an editorial prepared for IEEE Magnetics Letters, January 2010.

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Hong Kong Chapter News

By Philip Pong, Hong Kong Chapter Chair

In the past few months, the Hong Kong Chapter has organized



three seminars. On 28 July, we had the honor of having Prof. Jimmy Zhu (Carnegie Mellon University) as our speaker in the University of Hong Kong. Prof. Zhu gave a talk on "MRAM: Path to Low Power and Scalability" On 29 July, Prof. Zhong Wei, from the National

on Perpendicular Magnetic Recording (PMR) Media.

The new homepage of Hong Kong Chapter is now launched and its address is: <u>http://</u> www.eee.hku.hk/ieee/ magsoc/. The website will announce the latest event of the chapter and also



Microstructure Laboratory of Nanjing University in China, visited us. His lecture was titled "The Design, Synthesis, and Characterization of Nanocomposite Materials". On 21 Aug, a magnetics industrial seminar was organized and the speaker was Dr. Zhengang Zhang. He gave a seminar



contain the information of committee members, past events, and student group.

Recently, Hong Kong Chapter has recruited over ten undergraduate and postgraduate student volunteers to help in the Magnetics Society activities

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Italy Chapter News

By Ermanno Cardelli, Italy Chapter Chair

During the 19th Soft Magnetic Materials Conference, SMM 19, held in Torino, Italy, September 8, 2009 the Italy Chapter of the IEEE Magnetic Society co-sponsored a Special Session chaired by Prof. Paolo Allia. The Session featured the IEEE Magnetics Society Distinguished Lecture of Prof Hideo Ohno, titled "Spintronics: nanoscience and nanoelectronics" and

Back Issues Wanted

The Magnetics Society would like to post back issues of the Magnetics Society Newsletter on its Web site. If you have copies of old print issues of the Newsletter that you could loan for scanning, please contact Newsletter Editor Gareth Hatch via g.p.hatch@ieee.org.

Permanent Magnets Seminar

At the SMMA (Motor and Motion Association) Fall Technical Conference taking place Nov 3-5, 2009 in Arlington Heights, Illinois, Dr. Stan Trout of Spontaneous Materials will be giving a halfday pre-conference seminar titled "Permanent Magnets Fundamentals" in the afternoon of Nov 3. For more details, visit:

http://www.spontaneousmaterials.com/ Trout_Fall2009_Outline.pdf

special guest Prof. Vittorio Marchis who gave a very interesting lecture called "De Magnete: some philosophical considerations around magnetism". More than 250 people attended the Special session, among them more than 20 member of the Italy Chapter.

About the Newsletter

The purpose of the IEEE Magnetics Society Newsletter is to publicize activities, conferences, workshops and other information of interest to the Society's members and other technical people in the general area of applied magnetics. Manuscripts are solicited from Magnetics Society members, conference organizers, Society Officers & other volunteers, local chapters, and other individuals with relevant material.

The Newsletter is published in January, April, July and October electronically on the Magnetics Society webpage at www.ieeemagnetics.org. Submission deadlines are January 1, April 1, July 1, and October 1 respectively. Please send articles, letters & other contributions to the Newsletter Editor:

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