

# IEEE MAGNETICS SOCIETY NEWSLETTER



GARETH HATCH, EDITOR

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## From The President

By Randall Victora, Society President

Over the next few months, the Magnetics Society will be developing its 2011 budget. Total revenues will be about \$2,000,000. Where does it all go?

A large part of it goes to non-discretionary expenditures such as publishing papers in Transaction on Magnetics and Magnetic Letters and running our conferences, e.g. INTERMAG. About 20% is taxed by IEEE to support other parts of its organization that do not have strong revenue sources, e.g. the Member and Geographic Activities Board (regions) and the overarching IEEE administration. We also must support the Magnetics Society Executive Director and pay various smaller fixed expenses. More interesting is the large discretionary part left over that, depending on the year, is about \$500,000. We have, in recent years, made member benefits the major beneficiary of these



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## ICMM 2010 - 3rd Call for Papers: Deadline Extended

By Vincent Harris, Conference General Chair

The International Conference on Microwave Magnetics will be held June 1-4, 2010 at Northeastern University in Boston, MA, USA. The conference will focus on new developments in all branches of fundamental and applied microwave magnetics.

Plenary speakers tentatively include Gerald Dionne (MIT), Alex Goldman (Ferritec) and Carl Patton (Colorado State University). The conference will

include sessions on RF, microwave & millimeter wave devices, high frequency materials, magnetization dynamics & relaxation, nonlinear phenomena and emerging technologies.



Abstracts should be submitted by April 30, 2010, with notification acceptance by May 10, 2010.

Please submit abstracts via the ICMM2010 conference web site at [www.icmm2010.org](http://www.icmm2010.org).

# MMM / INTERMAG 2010: Conference Review

By Kevin O'Grady, Conference General Chair

The 11th Joint MMM/Intermag conference was held at the Wardman Park Marriott Hotel in Washington, D.C. from January 18-22, 2010. The decision to go to Washington, D.C. was something of a risky choice two years ago. However the overall perception was, assuming we did not have very bad weather, that many people would want to visit the capital of the USA, and also the hotel facilities themselves were of the highest possible standard. We obtained a very preferential rate in the hotel of \$189 per night, which for downtown D.C. is incredibly cheap. Credit for this decision goes almost entirely to Diane Melton of Widerkehr Associates who proposed this location and did a lot of work with the hotel on our behalf.

As usual, Diane was shown to be wise and I am pleased to report to the Society that we had what I believe is the largest Joint Conference ever with some 1,719 people attending. The venue proved highly attractive for members from all over the world. I believe there are two reasons for this: The first as stated above, is that many people wanted to visit the US capital and the second, less obvious, reason, was the availability of direct flights from almost every country on earth. The availability of direct flights makes travel not only easier and quicker, but also significantly cheaper, particularly when the routes are competitive as they were for Washington. The slightly higher hotel room rate did not appear to impact either attendance or the take-up of the block of rooms that we are obliged to reserve. In fact we exceeded our room block by a significant margin despite our initial concerns that \$189 per night was quite expensive.

Of course the attractiveness of the conference will always critically depend upon the quality of the programme. As an innovation for this Joint Conference we made an effort to internationalise the Programme Committee having approximately half the membership from outside the United States. This made an inevitable impact on costs. Similarly I appointed three Programme Chairs with the first among equals being Hiroaki Muraoka from Tohoku University with two colleagues, Bernard Dieny from CEA in Grenoble and Chris Leighton from the University of Minnesota in the US. With hindsight this was a very wise decision. To begin with we had over 2,300 digests submitted which required over 4,600 assessments. At this level of submission having three very able people was clearly a good idea. A second impact was that because we had three people with largely complimentary interests, we were able to seek symposia and invited papers on a

truly international basis and covering the full breadth of interest of the Joint Conference which is greater than that of an Intermag or MMM alone. In this way I believe we had some of the highest quality symposia that we have ever had at a Joint Conference. The symposia sessions were all well attended but with over 1,700 at the meeting that is not really a surprise. It is my duty and my pleasure to thank my Programme Chairs on behalf of all those who attended the conference and the Society itself. I am pleased to report that each of them has said to me that they enjoyed the experience and learnt an awful lot about the organisation of our conferences.

Of course with such a large attendance it would be astonishing if the conference were not also a financial success. At this time there are still a number of outstanding bills to come in and so I cannot provide the Society membership with an accurate figure for the surplus made. However due to the high costs of working in Washington D.C. and the increased costs associated with a truly international Programme Committee, we had to budget conservatively in other areas. One such area was in terms of a conference reception. This was unfortunate because it was clear from the experience in Sacramento that a well provisioned reception was very popular with the attendees and very much appreciated. Aided a little by the flow of alcohol, Sacramento was one of the best receptions ever in terms of individuals networking and enjoying each other's company on a wider basis than is the case when a group of friends simply go for dinner. As it became clear that the attendance at the conference was going to be very high and with a significant degree of help from Diane and the excellent staff at the hotel, it was decided that we could mount a full reception for the attendees following the Awards and Plenary session. I am told that this reception was the best we have ever had. Personally I had to leave the hotel to attend another function; but up until at least 9:30pm there were still hundreds of people networking and discussing magnetism and generally enjoying themselves, with a more than adequate supply of food and drink to hold their attention. Great credit again is due to Diane and the hotel staff for organising this event on our behalf.

With the uncertain economic times managing the finances of any conference is a difficult matter. Usually we are able to budget from a couple of years out and things don't change very much. In this instance we were still worried about the budget from a couple of weeks out we even changed items of expenditure during the meeting itself. Running conference

# From The President

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funds, but the question is which member benefit. Listed are five of the largest.

1. Chapter support typically receives about \$50,000. It is largely spent on their meetings. For example, many chapters offer pizza and other inexpensive food at chapter meetings & lectures by visiting speakers (my understanding is that it promotes attendance, particularly among students!). This money used to be split among 20-25 chapters, but recently we have been very successful at increasing the number of chapters, including new units in Toronto, Beijing, and Nanjing. Our chapter's chair is sure to present a strong case for increasing this sum correspondingly.
2. The Distinguished Lecturer program supports four lecturers to travel around the world and give a lecture suitable for a technically literate, but non-specialized audience. Typically there are more than 100 lectures given and our appropriation is about \$80,000. However, currency rates have fluctuated against the dollar and a larger sum would be appreciated.
3. We have frequently paid for the reception at the INTERMAG or MMM conferences. This is highly

appreciated by conference attendees. However, it is very difficult at a major hotel to pay less than \$50,000 for the food and drink necessary to feed more than 1000 people.

4. The Magnetics Society Summer School educates 50-100 graduate students each year. We pay their travel expenses plus the expenses of 12 senior lecturers. We feel that this helps build a strong magnetism community and a strong Magnetics Society, but it is very expensive (\$110,000 last year).
5. We provide about \$30,000 worth of student travel awards each year, so that more students can attend our conferences.

There are, of course, many additional smaller expenses competing for our funds. The Magnetics Society Administrative committee (ADCOM) tries to determine, among all these possibilities, those that are the most beneficial. We are aided by our Finance Chair, Jan-Ulrich Thiele, who tells what we can afford. I would welcome any thoughts that you, the reader, may have. Please email me by April 20, 2010. I will try to incorporate your thoughts in our budgeting process.

*Randall Victora can be reached via email at [victora@umn.edu](mailto:victora@umn.edu)*

## A Reminder About MOMAG 2010

By Renato Carlson, South Brazil Chapter Chair

MOMAG2010 brings together the **14th Brazilian Microwave and Optoelectronics Symposium** and the **9th Brazilian Conference on Electromagnetics**. It will be held at Transamerica Flat Pasárgada, Vila Velha - ES, Brazil, from Aug 29 to Sep 1, 2010. This conference is jointly organized and sponsored by the Brazilian Microwave and Optoelectronics Society (SBMO), the Brazilian Electromagnetic Society (SBMag), the Regional Council of Engineering, Architecture and Agronomy of Espírito Santo State (CREA-ES) and receives technical support from the Section Brazil of the International Union of Radio Science (URSI – Union Radio-Scientifique Internationale).

Technical sessions, invited talks, courses and workshops will take place at the conference as well as company exhibition.

Authors of works addressing advancements and describing innovations in the fields of microwave, optoelectronics and

electromagnetism are invited to submit papers for review and possible presentation in the conference. The main topics include antennae, aerospace and industrial applications, electrical machines and low frequency devices, electromagnetic compatibility, microwave devices, historical aspects and electromagnetic education, nanotechnology, integrated optics, optical communication, access and optical networks. More information is available at [www.momag2010.org.br](http://www.momag2010.org.br).

The official languages of the Conference are English and Portuguese. Papers can also be submitted in English and the best ranked papers will be invited to possibly compose a special issue of the Journal of Microwaves, Optoelectronics and Electromagnetic Applications.

The paper submission deadline is April 30, 2010 and the notification of paper acceptance is on June 30, 2010.

## Conference Calendar

**Apr 20 - 25, 2010** International Conference on Superconductivity and Magnetism ICSM2010  
Antalya, Turkey  
Web site: [www.icsm2010.org](http://www.icsm2010.org)

**May 9 - 12, 2010** 14th Biennial IEEE Conference on Electromagnetics Field Computation  
Chicago, IL, USA  
Web site: [www.cefcc2010.org](http://www.cefcc2010.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/](http://www.magneticmicrosphere.com/meetings/)

**Jun 1-4, 2010** International Conference on Microwave Magnetics ICMM 2010  
Boston, MA, USA  
Web site: [www.icmm2010.org](http://www.icmm2010.org)

**Jun 9 - 11, 2010** 4th International Conference on Magnetism and Metallurgy WMM'10  
Freiberg, Germany  
Web site: [www.ukmagsoc.co.uk](http://www.ukmagsoc.co.uk)

**Jun 28 - Jul 2, 2010** IV Euro-Asian Symposium "Trends in Magnetism": Nanospintronics  
Ekaterinburg, Russia  
Web site: [conference.imp.uran.ru/en/eastmag2010/](http://conference.imp.uran.ru/en/eastmag2010/)

**Jul 6 - Jul 10, 2010** 13th International Conference on Megagauss Magnetic Field Generation  
Shanghai, China  
Web site: [www.megagauss.org](http://www.megagauss.org)

**Jul 12 - Jul 16, 2010** International Symposium on Advanced Magnetic Materials & Applications  
Sendai, Japan  
Web site: [www.ecei.tohoku.ac.jp/isamma2010/](http://www.ecei.tohoku.ac.jp/isamma2010/)

**Aug 29 - Sep 1, 2010** 14th Brazilian Microwave & Optoelectronics Symposium and 9th Brazilian Conference on Electromagnetics MOMAG 2010  
Vila Velha - ES, Brazil  
Web site: [www.momag2010.org.br](http://www.momag2010.org.br)

**Aug 29 - Sep 2, 2010** 21st Workshop on Rare-Earth Permanent Magnets and their Applications  
Bled, Slovenia  
Web site: [nano.ijs.si/repm10.htm](http://nano.ijs.si/repm10.htm)

**Sep 19 - 24, 2010** 7th International Symposium on Metallic Multilayers MML2010  
Berkeley, CA, USA  
Web site: [mml2010.lbl.gov](http://mml2010.lbl.gov)

To list your conference in the Newsletter Conference Calendar, please contact the Editor

# MMM / INTERMAG 2010: Conference Review *cont'd from page 2*

budgets is a time consuming and demanding task and I wish to pay due credit to Jan Ulrich Thiele and Petru Andrei for their efforts. Jan Ulrich has been doing the conference Treasurer's job for a number of years now, and in the interests of his sanity, Petru has been appointed as a "Sorcerer's Apprentice". For subsequent Intermag conferences, Petru will now take over as the Treasurer and Jan Ulrich is going to pursue other services to the Society. Due in no small part to the technical management of the budget and the wise counsel from my Treasurer and his Apprentice we believe that the conference will generate a surplus of the order of \$100k. It has been argued that this sum in full will be passed to the next MMM conference to help reduce registration fees.

## Obituary: Andrew Booth

In January 2010 The Times published an obituary for Andrew Booth, a "computer scientist, physicist and engineer" who passed away on November 29, 2009 aged 91.

Dr. Booth invented the first magnetic storage device for computers, as well as a complex multiplication algorithm known as the "Booth multiplier". That first device, based on a rotating drum, is currently on display at the Science Museum in London.

The full Times obituary can be found at:

<http://www.timesonline.co.uk/tol/comment/obituaries/article6983892.ece>

In a report of this type it is not possible to mention all those who contributed to the conference and therefore I am obliged to pick out just a few individuals. However I would like to place on record my appreciation to all who contributed to the conference and its success including the members of the Programme Committee, the Publication Editors who I believe have handled all the papers efficiently so that we are on track for on time publication, those who managed the various awards activities so well and all the staff at Widerkehr Associates who worked with Diane in providing a very good experience for all who attended the Joint Conference.

## New Senior Members

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

January 2010: Elke Arenholz, Haralambos Pozidis

February 2010: Petru Andrei, Richard Doherty, Mahbub Khan, Siddharth Pratap, Manuel Vazquez

Senior Member is the highest grade for which IEEE members can apply. For further information, visit the IEEE Web site at:

[http://www.ieee.org/membership\\_services/membership/grade\\_elevation.html](http://www.ieee.org/membership_services/membership/grade_elevation.html)

## New Chapters for the IEEE Magnetics Society

By Kaizhong Gao, Chapters Chair

In the last quarter of 2009, the newest approved Chapter for the Magnetics Society was from Nanjing, China. In the first quarter of 2010, Toronto and Beijing have received their approval from the IEEE to form chapters. Congratulations to them both! The Beijing chapter was organized by Prof. Xiufeng Han and the Toronto chapter was organized by Dr. Alireza Sadeghian.

There are three simple requirements to form a new chapter:

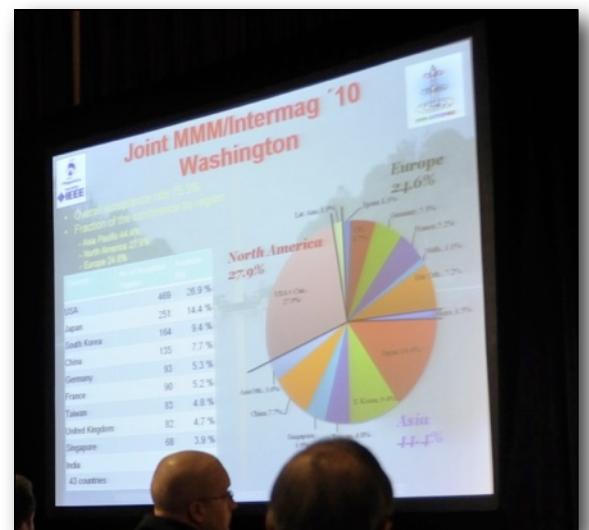
1. A petition with 12 signatures of current Magnetics Society members that is higher than student grade from your section,

2. Approval of the section executive board then send it to IEEE for approval, and
3. Approval of the society president.

The Magnetics Society is ready to support the activities of its chapters around the globe. Please reference <http://www.ieeemagnetics.org/newpages/toplevelpages/chapters.htm> for information on chapter formation and obtain contact information for your own region, or email me at [kaizhong.gao@seagate.com](mailto:kaizhong.gao@seagate.com).

# MMM / INTERMAG 2010: In Pictures

Photographs by Masahiro Yamaguchi



# MMM / INTERMAG 2010: In Pictures

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## 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.ieee-magnetics.org](http://www.ieee-magnetics.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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