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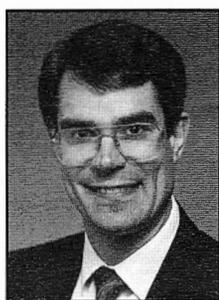
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September 1998

RICHARD DEE and JOHN NYENHUIS, EDITORS

Message from the President of the IEEE Magnetics Society

Dan Stancil • Data Storage Systems Center • Carnegie Mellon University • stancil@cmu.edu



As a member of the Magnetics Society, you help to sponsor a wide range of projects related to applied magnetism. These include the premier journal for magnetics, the leading international conferences on applied and basic magnetism, the distinguished lecturer program, tutorials offered at conferences, chapter activities, student travel awards, and more. I

hope that you will make plans to benefit from as many of these programs as possible during the coming year. However, in this column I would like to suggest how you can derive even greater benefit and strengthen the Society at the same time: become directly involved in some of these activities!

With the stresses of today's work environment, it is probably difficult to see how to find time to contribute to a volunteer organization. If you are in the early stages of your career, perhaps part of the key is making such involvement part of your career strategy. Participating in the Society's activities doesn't have to be pure altruism; it gives you an opportunity to develop leadership skills, organizational skills, and to network with others in the profession.

It is difficult for engineers and scientists to devote time

to professional activities without the support of their supervisors. If you are a manager, you may feel like your organization is challenged to meet deadlines as it is, and you simply can't spare the time it would take for some of your best people to take on volunteer professional responsibilities. Again, I think it is important to look beyond altruism: there are significant long-term benefits from helping people to grow professionally. Jim Opfer, the Past President of the Society, once observed that leadership experience in a volunteer organization in which you have no real authority can help you learn how to interact with and motivate people. As a result, you become a more effective leader when you do have authority.

Finally, if you are a senior engineer, scientist, or manager, we need your leadership to meet future challenges facing the Society. The opportunity to interact with your counterparts from other organizations in a "neutral" context can be very stimulating, and showing your organization to be a good professional citizen can have long-term payoffs as well.

To explore how you can increase your involvement in the Society, a good place to start is our home page (www.ieee.org/society/mag). Under the Magnetics Society Information link you will find the names of the people presently leading the various activities. As always, I would be glad to hear from you as well (stancil@cmu.edu).

MMM '98 to be held Nov. 9-12, 1998 in Miami, Florida USA

The 43rd Annual Conference on Magnetism and Magnetic Materials will be held at the Intercontinental Hotel, Miami, Florida USA. The Conference annually brings together scientists and engineers interested in recent developments in all branches of fundamental and applied magnetism. Information on MMM '98 is available on the Web at www.aip.org/mmm. This site includes the program, and forms for registration and hotel reservations. The registration fee is \$325 with a reduced rate of \$145 for students and retirees. As in the past, MMM '98 attendees may register at the Conference and pre-registration is also available before October 9. The Conference Hotel rate is approximately \$120 per night with 12.5% taxes additional. Early reservations are encouraged. This year's Social Event will be

a dinner cruise held on Tuesday evening, November 10, on Biscayne Bay. The ticket price of \$45 per person will include a buffet dinner with wine, available in two separate seatings in an enclosed dining salon. The buffet will include both chicken and vegetarian entrees. Guests will board the boat at a dock adjacent to the InterContinental, and the entire cruise will last approximately four hours.

Please contact the Conference Coordinator if you have questions or need additional information:

Courtesy Associates
2000 L Street NW Suite 710
Washington, DC 20036 USA
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Letter to the Editors

In the June issue, we printed Carl Patton's letter in which he stated his opinion that the paper version of the Newsletter continue. Below are additional letters which we received on this topic. We thank the authors for writing and the comments will be forwarded to the ADCOM.

Editor:

I agree with Patton. If I don't get the paper copy, I very likely will not read it. If it takes \$10K to keep the members informed do it! The electronic medium has more hype and promise than performance. Paper serves a broader function.

Simon Foner, sfoner@slipknot.mit.edu

Editor:

I'd like to register a strong vote in support of Carl Patton's letter urging you to continue to print and mail the Magnetics Society Newsletter. This way, I read it. On the Web, it's very unlikely I'd make the trouble to dig it out unless I was seeking a specific bit of urgent information. To save a few thousand dollars at the expense of losing a large fraction of your readership is, as Carl says, false savings.

Jim Livingston, jdliv@MIT.EDU

Editor:

I read with interest the announcement that the paper edition of the SMAG Newsletter will be dropped beginning in 1999. I share Carl Patton's concerns about this decision, but for slightly different reasons, and not the fact that I too am a past editor of the Newsletter, preceding Carl's period of responsibility.

I can appreciate the financial drivers which has led the AdCom to this decision, but I am concerned that you will be losing a major communication vehicle between SMAG management and the members of SMAG. Access to high speed connections to the Internet is not ubiquitous, even in the US. While high-tech industry-based and university-based members can take for granted access to the Internet, I would venture to say that a large fraction of SMAG members do not have that benefit.

Secondly, the Newsletter is not published frequently enough or on a sufficiently regular schedule that the readership will develop a pattern of going to the IEEE home page to see if a new issue has been published. The value of the Newsletter will then be lost as a medium for rapid communication, even though it may be available earlier to those who seek it out.

I am a firm believer in the value of having information come across my desk if I am expected to take some action. How many mass-mailers do you know who have replaced their letters or announcements which come through the Post Office with a web page? I believe the purpose of the Newsletter is to inform SMAG members of developments in the field of magnetics; it is not an archival journal used for reference purposes.

Let me suggest the following compromise which should achieve the cost savings that SMAG is looking for without giving up the announcement characteristic of the Newsletter. When a new issue of the Newsletter is placed on the Internet, send an email notice to SMAG members who have provided an email address to the IEEE in advance. The email addresses could be gathered with the submission of annual dues. The notice might be as simple as giving the URL of the latest issue of the Newsletter.

Good luck in finding a solution which meets the financial needs of SMAG without jeopardizing the ability of SMAG to communicate with its members.

Jim Lommel, lommel@crd.ge.com or lommel@aol.com

NMMM '98 Conference Summary

The 16th New Magnetic Materials for Microelectronics meeting (Novie Magnitnie Materiali Mikroelektroniki, NMMM) was held June 23-26, 1998 at Moscow State University in Moscow, Russia. In these times of economic hardship in the former Soviet Union, the dedication and perseverance of scientists and engineers from Kiev to Vladivostok was manifested by 369 oral and poster presentations covering a broad range of fundamental and applied magnetism. More than 250 participants from 10 countries of the former USSR (Russia, Ukraine, Kazakhstan, Uzbekistan, Belarus and so on) took part in the discussions. There were sessions on thin films, magnetoelastic and spin waves, kinetic effects, experimental techniques, microstructure of magnetics, domain wall dynamics and resonance, phase transformations and optics of magnetics, magnetization processes, and magnetic semiconductors.

The plenary address, "News from the world of magnetic films", was given by Prof. Feodor V. Lisovskiy of the Russian Academy of Sciences. Special honor was given to the memory and accomplishments of Prof. Andrey S. Borovik-Romanov, who passed away on July 31, 1997.

Digests of the papers at NMMM XVI have been published in two volumes with ISBN number ISBN 5-88417-146-3. Participants at the conference were also given the dictionary "Magnetism and Magnetic Materials - Dictionary of Terminology" by F.V. Lisovskiy and L.I. Antonov. This useful work is a multi-language dictionary of 697 terms in magnetism, such as domain-wall mobility and magnetic alloys. The terms are arranged in alphabetical order in Russian with the definitions in Russian, and translations of the terms into English, French and German. There is a separate index of terms for each language. Send email to j.a.nyenhuis@ieee.org if you are interested in purchasing the NMMM XVI digest book or the Dictionary of Terminology.

About the Newsletter

The objective of the IEEE Magnetics Society Newsletter is to publicize activities, conferences, workshops and other information of interest to the Society membership and technical people in the general area of applied magnetics. Copy is solicited from the Magnetics Society membership, organizers of conferences, officers of the Society and local chapters and other individuals with relevant material. The Magnetics Society Newsletter will be published four times a year.

In 1998, the paper version of the Newsletter will be sent to members of the IEEE Magnetics Society and the electronic version, which includes the contents of the paper version plus additional information, is on the Magnetics Society Web Page. Present plans are that, commencing in 1999, the paper version of the Newsletter will be discontinued and the Newsletter will only be published only on the Web at www.ieee.org/society/mag

Please send articles, letters and other contributions to one of the co-editors:

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INVMTC '98 Conference Summary

The IEEE 1998 International Nonvolatile Memory Technology Conference (INVMTC'98) was held in Albuquerque, NM, at the Albuquerque Marriott from June 22-24, 1998. The three-day interdisciplinary conference provided a forum for discussing nonvolatile memory and data storage technologies across conventional boundaries and specializations. Presentations were given on semiconductor, magnetic, optical, and biochemical memory and data storage technologies that related to a variety of applications.

The conference consisted of six serial sessions, with one session held each morning and one session held each afternoon. In order, the sessions were the Plenary Session, on Nonvolatile Memory Needs, Requirements and Forecasts; the Semiconductor and Ferroelectric Nonvolatile Memory Technology Session; the Magnetic Nonvolatile Memory Technology Session; the Advanced Data Storage Technology Session; the Advanced Memory Technology Session; and the Nonvolatile Memory Packaging, Controllers, and System Technology Session. Presentations were given by representatives of a variety of governmental, industrial, and academic institutions. The conference proceedings is scheduled to be available by October, 1998. Information on INVMTC'98, including the listing of the advance technical program, is given on the INVMTC'98 website at <http://www.sandia.gov/eqrc/INVMTC/INVMTC.html>

For further information on INVMTC'98, please contact Dr. Michael Knoll at Sandia National Laboratories at knollmg@sandia.gov or Gail Wesling at g.wesling@ieee.org.

Seagate Names Mark Kryder

Director of New Research Division

On August 24, 1998 Seagate Technology, Inc. announced that Dr. Mark H. Kryder has joined the Company as senior vice president and director, Seagate Research. Dr. Kryder will be based at Seagate's new research facility in Pittsburgh, Pennsylvania and will oversee internal research and development activities while also continuing the Company's partnerships with premier research universities worldwide. Dr. Kryder joins Seagate from Carnegie Mellon University where he was the Stephen J. Jatrass University professor of Electrical and Computer Engineering and director of the Data Storage Systems Center. In addition to his other accomplishments and honors, Dr. Kryder was awarded the IEEE Magnetics Society Achievement Award in 1995 and is the U.S. General Chairman for Intermag '99. More information on Dr. Kryder's new position is available at <http://www.seagate.com/corp/vpr/releases/kryder.shtml>

TMRC '98 Conference Summary

The Magnetic Recording Conference, TMRC'98, was held from August 17-19 in Boulder, Colorado this year and was focused on the topic of Magnetic Recording Heads. It was sponsored by the IEEE Magnetics Society and many of the recording centers across the US. The hosts were the folks from NIST in Boulder and the conference was chaired by Ted Schwarz. It was very well attended with approxi-

mately 340 attendees. The format for TMRC is single session 25 minute invited talks only, allowing some depth into the subject matter. The 6 sessions allowed for 36 invited papers on Inductive and Write heads, Head Modeling and Characterization, Magneto-resistive and Read Heads, Heads for Flexible Media (Tape), Heads and Media Interfaces and Heads Materials and Characterization. Most of the advanced recording issues that result from the areal density growth path were addressed at this conference. This included high speed writing and metrology, high saturation magnetization recording materials, lowering the head/media spacings and a strong presence of GMR spin valve read devices. The group from IBM (C. Tsang et al.) again delivered a high areal density demonstration now at 12Gb/in² using conventional thin film write heads and spin valve read heads. The proceedings of this conference are expected in the January 1999 issue of the IEEE Transactions on Magnetics.

Intermag '99 to be held May 18-21, 1999 in Kyongju, Korea

Intermag 99 will be held on Tuesday through Friday, May 18-21, at the Hotel Hyundai in Kyongju, Korea. The registration desks will be open on Monday, May 17, 1999. Full details regarding hotel reservations, Conference registration fees, and form will appear in the Advance Program to be mailed in February.

Kyongju is located about 350 km south-east of Seoul, and transportation is available from Seoul by air, train or bus. It is old capital of Shilla Kingdom (up to 10th century) and there are many old cultural remains (many Buddhist) which was designated UNESCO as a world cultural heritage. The venue, Hyundai Hotel, is located by a lake in the resort area. Room rate including tax and services is about \$100 in current exchange rate.

Contributed papers are solicited in all areas of applied magnetics, magnetic phenomena, and materials and information storage technologies. Topic of wide interest in recent years have included all aspects of magnetic recording, various magnetic and other memory technologies, microwave magnetics, soft and hard magnetic materials and technologies, control, power conversion and conditioning, magnetometry and sensors, magnetic separation, magnetic field calculations, and magnetic materials properties and processing. This list is intended to be suggestive rather than restrictive. Digests (See Instructions for Preparation of Digests) must be received by November 24, 1998, and should be sent by mail to:

The Korean Magnetics Society Rm 905, The Korea Science and Technology Center Yeoksam-dong 635-4, Kangnam-ku Seoul 135-703, Korea. Detailed information on Intermag '99 is available at <http://intermag99.kist.re.kr>

Please contact the Conference Coordinator if you have questions or need additional information:

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Congratulations to Faeza Rashid

Faeza Rashid (age 22) was the recipient of a Magnetics Society sponsored National Merit Scholarship for 4 years (1994 to 1998) - 2 years at Rensselaer Polytechnic Institute (RPI) and 2 years at Albany Medical College, Albany, New York. In May 1998, she graduated from RPI with a perfect GPA of 4.0/4.0, and received two degrees - BS in Biology, and BS in Psychology. Also, She has completed her 2nd year at Albany Medical College and is expected to receive an MD degree in May 2000.

Faeza is the daughter of Drs. Muhammad H. and Fatema Rashid. Dr. Muhammad H. Rashid is a Professor and Program Director, Department of Electrical and Computer Engineering, University of Florida.

MMPA Offers Scholars Money

The Magnetic Materials Producers Association (MMPA) Scholars Program Announces the application phase for two \$5,000 awards to be given in May of 1999. Applications are now being accepted. The Magnetic Materials Producers Association implemented this program in 1994 to encourage graduate-level study in the field of magnetics. Recipients of these awards are eligible to receive up to \$10,000 over a period of two years.

The deadline for the receipt of applications for the program is October 9. Winners will be announced February 1999. If you have questions or require additional information and/or application material, please contact Magnetic Materials Producers Association, 8 South Michigan Avenue, Suite 1000, Chicago, IL 60603, (312) 456-5590, Fax (312) 580-0165

CONFERENCE CALENDAR

- November 1-6, 1998** **FIFTH INTERNATIONAL SYMPOSIUM ON MAGNETIC MATERIALS, PROCESSES AND DEVICES**
Boston, Mass. USA For more information, contact: L.T. Romankiw IBM Corporation Thomas J. Watson Research Center P.O. Box 218 Yorktown Heights New York 10598 USA, Phone: (914) 945-1208, Fax: (914) 945-4081 E-mail: roman@watson.ibm.com
- November 9-12, 1998** **43rd Conference on Magnetism and Magnetic Materials**, Miami, Florida USA For info: Diane Suiters, Courtesy Associates 2000 L Street NW, Suite 710 Washington, DC 20036 TEL: 202 973-8668 FAX: 202 331-0111 email magnetism@courtesyassoc.com <http://www.ieee.org/society/mag>
- January 10-14, 1999** **Magneto Optical Recording International Symposium '99** (Moris '99), Doubletree Hotel,, Monterey, CA USA , For more information, contact: Prof. Akiyoshi Itoh, Dept. of Electronic Engineering, College of Science and Technology, Nihon University, 7-24-1 Narasino-dai, Funabashi 274-8501 JAPAN TEL +81-474-69-5455 FAX +81-474-67-9683, email:aitoh@cst.nihon-u.ac.jp, <http://www.amsc.cst.nihon-u.ac.jp/moris>
- May 18-21, 1999** **Intermag Conference**, Kyongju, Korea. For info: Diane Suiters, Courtesy Associates, 2000 , Street NW, Suite 710, Washington, DC 20036, TEL: 202 973-866, FAX: 202 331-011, email magnetism@courtesyassoc.com
- May 17-19, 1999** **Electrosoft 99 - Software for Electrical Engineering** Seville, Spain. For more information, contact: Liz Kerr, Wessex Institute of Technology, Ashurst Lodge, Southhampton SO40 7AA, United Kingdom, TEL +44-1703-293223, FAX: +44-1703-292853, liz@wessex.ac.uk, <http://www.wessex.ac.uk>
- Nov. 15-18, 1999** **44th Conference on Magnetism and Magnetic Materials**, San Jose, California, USA. For information, contact: Diane Suiters, Courtesy Associates, 2000 L Street NW, Suite 710, Washington, DC 20036, TEL: 202 973-8668, FAX: 202 331-0111, email magnetism@courtesyassoc.com

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