



IEEE MAGNETICS SOCIETY

NEWSLETTER

VOLUME 33, NO. 2

ISSN 1059-8340

April 1996

JODIE CHRISTNER, EDITOR

MESSAGE FROM THE PRESIDENT

by Jim Opfer,
President, IEEE Magnetics Society



The April 12, 1996 meeting of the Magnetics Society Administrative Committee was decidedly more upbeat than the meeting a year earlier. Reversing the trend of an alarming decrease the Society net worth at the end of 1995 rose to \$495k from a year earlier value of \$236k. The improvement in financial conditions came about because of a number of factors, but most encouraging was the effort of volunteers to understand the nature of the Society finances; to submit budgets consistent with the recommendations of the Planning Committee chaired by vice-president Dan Stancil; and to work to keep expenses in line with existing budgets. Because of improvement in the financial condition, the Society was removed from its short-lived stay on the IEEE Technical Activities Board watch list for societies with potential financial problems. However the net worth of the Society is well below the annual expenditure budget of approximately \$675k, an amount believed to be appropriate for a healthy financial condition.

Other than a source of revenue to offset predicted expenses of the Magnetics Society, an adequate financial reserve at this time is particularly necessary to facilitate operation of conferences and to allow for possible changes in publications - two of the most important services provided to society members. Conferences held outside the United States often have an associated risk of financial losses which can be tolerated only if there is a reserve on which to draw. Last year a decision to hold Intermag 96 in Seattle rather than at an overseas site was taken expressly because of inadequate reserves. Increased reserves allow appropriate risks to be taken as the Magnetics Society meets its commitment to hold conferences at a variety of locations to satisfy the needs of its worldwide membership. Society publication activities in the future will present a changing tradeoff between policies/procedures and finances that will engage the attention of the Society in the coming years. Some aspects of this tradeoff and proposed Society response

will be described here.

The Magnetics Society realizes a modest surplus from the publication of the Transactions on Magnetics. This surplus depends upon the relatively very low cost of publishing papers, initially presented at conferences, in camera ready format rather than regular (typeset) format. While the quality of camera ready papers has consistently improved, providing copies of the papers on compact disks (CD) is done as scanned bit-mapped images with limited capability for character-based searches. Increasing distribution of papers on CD's will increase the pressure to make all information available in electronic form. We in the Magnetics Society start with papers mostly prepared by computers in electronic form, convert them to camera ready hardcopy, and then have them scanned for CD publication - a procedure that cries out for change. In the past changes in the publication process were not considered because of the expected adverse financial impact, but changes will inevitably be required and financial reserves may need to be tapped to make a transition. The present cost of regular typeset papers involving a process that makes the paper available in electronic form would dramatically affect the finances of conferences. At these costs, there might be need to place undesirable restrictions on the number of conference papers accepted, on the number of papers from conferences published in the Transactions, and on the number of papers presented and published by a fully-paid conference registrant. In the meantime, hopefully, the cost of electronically compatible publishing will decrease. The Society Planning Committee has done excellent work in identifying the related issues, but because of the complex nature of the problem associated with the future of publications of the Society, I have appointed Stan Charap to chair an ad-hoc committee to investigate the problems that the Society might face in the transition to electronic publishing. Along with accomplishing a favorable turnaround in Society finances, this investigation will be the most important activity of the Society in my tenure as president. Suggestions related to the issue of publications can be sent by E-mail to me at j.opfer@ieee.org. I will forward them as is appropriate. We on the Society Adcom appreciate your support as we work to make the changes necessary for successful evolution of the Society for the future.

WEB UPDATE: A CRITIC'S 'THUMBS UP' TO IEEE-USA ONLINE

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SCIENCE & ENGINEERING NETWORK NEWS applauded IEEE-USA's Web environment in a cover-page review in its Feb. 1996 issue. The Internet-resource publication's Dan Romanchik examined IEEE-USA's site as part of his look at IEEE Online — "one of the largest presences on the Internet," he stated. Following are his comments about IEEE-USA's Web offerings:

"Overall, I'd say that the USAB section is one of the most useful on [IEEE's] site. The first section is the publications section, which contains a couple of electronic newsletters, including [IEEE-USA] PROFESSIONAL PERSPECTIVE."

"I found PROFESSIONAL PERSPECTIVE to be quite interesting. When I visited there were articles on early retirement and how to start your own business, as well as a review of the book, THE CLOSET ENTREPRENEUR."

In addition to PROFESSIONAL PERSPECTIVE, the publications section includes links to several other newsletters:

- * [IEEE-USA] IMPACT, which has several interesting articles on the IEEE's reorganization;
- * [IEEE-USA] FRONTLINE REPORT, with information on employment trends;
- * The AICNCC NEWSLETTER, a newsletter for consultants; and
- * The IEEE-USA LEGISLATIVE REPORT, with highlights of recent developments in D.C.

"In addition to the newsletters, the USAB section contains much public-policy information of concern to American engineers. When I visited the site, they had just posted information on immigration reform, including the full text of the Immigration Reform Act of 1995."

"Finally, this is the place to find job-search services. The first service is the usual list of job postings, sorted by region of the country. There is also a resume-listing service, but this is restricted to IEEE members. And if you still can't find a job, this page has links to a dozen more Internet job search services."

IEEE Magnetics Society Newsletter is published quarterly by the Magnetics Society of The Institute of Electrical and Electronics Engineers, Inc. Headquarters of the IEEE is 345 East 47th Street, New York, NY 10017-2394, \$1.00 per member per year (included in Society fee) for each member of the Magnetic Society. Printed in USA. Second-class postage paid at New York, NY and at additional mailing offices. **Postmaster:** Send address changes to IEEE Magnetics Society Newsletter, IEEE, 445 Hoes Lane, Piscataway, NJ 08854-4150.

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 Newsletter is published in January, April, July and October. Submission deadlines are December 1, March 1, June 1, and September 1, respectively.

Please send contributions to:

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ANNOUNCING INTERMAG 97 INTERNATIONAL MAGNETICS CONFERENCE NEW ORLEANS, LOUISIANA, APRIL 1 - APRIL 4

The International Magnetics Conference, sponsored by the Magnetics Society of the IEEE will be held at Hyatt Regency Hotel (adjacent to the Superdome) in New Orleans, Louisiana from April 1-4, 1997. The purpose of INTERMAG '97 is to provide a forum for presentation of new developments in applied magnetics, related magnetic phenomena, and information storage techniques. In addition to the contributed papers, there will be invited papers, sessions wherein competing technologies can be assessed, tutorial sessions, and workshops for less formal discussion of timely and/or controversial topics. Special emphasis will be placed on applications oriented topics. Contributed papers are solicited in all areas of applied magnetics, information storage technologies, and magnetic phenomena. Topics of wide interest in recent years have included all aspects of magnetic recording, magneto-optics, magnetic memory technologies, microwave magnetics, permanent magnet materials and technologies, power magnetics, magnetometry and transducers, magnetic separation, magnetic levitation and drives, applied superconductivity, field calculations, processing and properties of magnetic materials, and biomagnetism. This list is intended to be suggestive rather than restrictive.

Digests, prepared in 2 page format, should be sent to:

INTERMAG '97,
c/o Courtesy Associates,
655 15th Street NW,
Suite 300,
Washington, DC 20005 USA,
TEL 202-639-5088,
FAX 202-347-6109,
email: magnetism@mcimail.com

by November 1, 1996. Digests must be sent by mail or courier service, not by fax or email. Instructions for the preparation of digests will be mailed with the call for papers. Requests to be placed on the conference mailing list should be sent to the above address. Other Conference information may be obtained from the conference publicity chair:

Prof. John Nyenhuis,
Purdue University,
School of Electrical and Computer Engineering,
West Lafayette, IN 47907-1285 USA,
TEL 317-494-3524,
FAX 317-494-2706,
email: nyenhuis@ecn.purdue.edu

The latest information on Intermag '97 can be obtained on World Wide Web via the IEEE Magnetics Society Home Page: <http://yara.ecn.purdue.edu/~nyenhuis/ieeesmag.html>
We hope to see you in New Orleans!

1997 ACHIEVEMENT AWARD OF THE MAGNETICS SOCIETY

The Magnetics Society of the IEEE honors one of its outstanding members each year for his or her lifelong professional achievement. This is the highest award of the Magnetics Society and is given for scientific, technical and service contributions to the society. The award is presented at Intermag each year and consists of a diploma with citation and a cash prize.

The past award winners were Fred Luborsky 1981, Herb Storm 1982, Harold Lord 1984, Joe Suozzi 1985, Fritz Friedlaender 1986, Andrew Bobeck 1987, Floyd Humphrey 1988, Paul Biringer 1989, Daniel Gordon 1990, Emerson Pugh 1991, Yoshifumi Sakurai 1992, William Doyle 1993, Richard Barker 1994, Mark Kryder 1995 and Koosuke Harada 1996.

Nominations are requested. For your convenience, please use the Achievement Award nomination form obtainable from Fritz Friedlaender, Floyd Humphrey or the IEEE. Any member of the Magnetics Society may nominate a candidate at any time. To be considered for the 1997 award, nominations should be received before November 1, 1996. Please send nominations to: Floyd B. Humphrey, Chairman, Achievement Awards Committee, P.O. Box 722, Meredith, NH 03253-0722, Voice/FAX (603)279-3395, E-mail FBH@ENGA.BU.EDU.

IEEE 1996 INVMTC

IEEE 1996 International Nonvolatile Memory Technology Conference will be held on June 24-26, 1996, at the Holiday Inn-Pyramid, in Albuquerque, New Mexico, USA. It is sponsored by the IEEE Components, Packaging, and Manufacturing Technology Society and the IEEE Computer Society, in cooperation with the Solid-State Circuits Council and the IEEE Magnetics Society.

The IEEE 1996 INVMTC is the premier international forum for the presentation of NVM technology options. The conference's mission is to promote communication between NVM technologists and users. Its scope includes all classes of implementation technologies, and applications from very small to very large storage systems. The technical program embraces current and emerging approaches, and present and future system requirements. Technologies include, but are not limited to, semiconductor, magnetic, and optical NVM. Technology and applications are emphasized, and overview analyses and comparison studies are of interest.

Topics of Interest: Emerging Storage Requirements, Current NVM Research Topics, New Memory Media, Mass Storage Systems, Space Storage Systems, Avionics and Missile Storage, Crash Recorder Technology, Mainframe Storage Systems, PC Storage Systems, Packaging Technology, Memory Card Technology, Memory Power Management, Error Control Approaches, Magnetic and Optical Disks, Magnetic and Optical Tapes, Miniature Recording Technology, Magnetoresistive Memory, Bloch Line Technology, Ferroelectric Memory, Flash Memory,

EEPROM Devices, SONOS Devices, CMOS/Battery Devices, and Analog Storage Devices

Copies of past INVMTC proceedings are also available for purchase.

Exhibitors' Information: Exhibit space will be available to exhibitors at the IEEE 1996 INVMTC for the cost of the nominal conference registration fee. For information, please contact Gail Wesling, Chappell Enterprises, 12250 Saraglen Dr., Saratoga, CA 95070, USA, Phone: (408)252-9051, FAX: (408)285-9670, Email: g.wesling@ieee.org

For further information you may contact either the **Conference General Chair:** W. D. Brown, University of Arkansas, 3217 BELL, Fayetteville, AR 72701, USA Phone: (501)575-6045, FAX: (501)575-7967, email: wdb@engr.uark.edu or the **Publicity Chair:** R. Katti, CSMT, Jet Propulsion Lab, Caltech, MS 300-329, 4800 Oak Grove Dr., Pasadena, CA 91109, USA Phone: (818)354-3054, FAX: (818)393-4820, email: katti@vlsi.jpl.nasa.gov

41ST ANNUAL CONFERENCE ON MAGNETISM AND MAGNETIC MATERIALS, NOVEMBER 12-15, 1996, ATLANTA, GEORGIA USA

The 41st Annual Conference on Magnetism and Magnetic Materials will be held at the Atlanta Hilton Hotel, Atlanta Georgia USA. The Conference annually brings together scientists and engineers interested in recent developments in all branches of fundamental and applied magnetism. Emphasis is traditionally placed on experimental and theoretical research in magnetism, the properties and synthesis of new magnetic materials and advances in magnetic technology. The program will consist of invited and contributed papers. Selection of contributed papers is based on abstracts which are due on May 27, 1996. An Abstract Booklet will be available in advance of the Conference from the American Institute of Physics. Registrants will receive the booklet at the Conference. Proceedings will be published in the Journal of Applied Physics. Individuals who are not on the Conference mailing list may obtain Conference information and details concerning the preparation of abstracts by contacting either of the persons below.

Conference Coordinator: Diane Suiters, Courtesy Associates, 655 15th Street NW, Suite 300, Washington, DC 20005 USA, TEL 202-639-5088, FAX 202-347-6109 email: magnetism@mcimall.com. **Publicity Chair:** Prof. John Nyenhuis, Purdue University, School of Electrical & Computer Eng., West Lafayette, IN 47907-1285 USA, TEL 317-494-3524, FAX 317-494-2706, email: nyenhuis@ecn.purdue.edu

The latest information on MMM '96 can be obtained on World Wide Web via the IEEE Magnetics Society Home Page: <http://yara.ecn.purdue.edu/~nyenhuis/ieeesmag.html>

This topical conference is sponsored jointly by the American Institute of Physics and the Magnetics Society of the IEEE in cooperation with the American Physical Society, the Office of Naval Research, the Minerals, Metals and Materials Society, the American Society for Testing and Materials and the American Ceramic Society.

CONFERENCE CALENDAR

- April 29- May 2, 1996** **4th Magneto-Optical Recording International Symposium (MORIS'96) .**
Noordwijkerhout, The Netherlands. J.C. Lodder, MESA-Research Institute, University of Twente; P.O. Box 217; 7500 AE Enschede, The Netherlands; TEL: +31 53 892750; FAX: +31 53 309547;email: lodder@el.utwente.nl.
- May 13-15, 1996** **Conference on Properties and Applications of Magnetic Materials.**
Illinois Institute of Technology, Chicago, Illinois USA.
Bonnie Dow, Illinois Institute of Technology, TEL: (312)567-6809.
- August 19-21, 1996** **TMRC '96 - Media, Santa Clara University, Santa Clara, California USA.**
Mardi Geredes, IST, mgeredes@bigbird.scu.edu; TEL: 408-554-5478;
<http://www-iist.scu.edu/IIST/tmrc/tmrc96.html>.
- September 3-6, 1996** **7th International Conference on Ferrites**
Bordeaux, France. Bordeaux Congress Service, 33300 Bordeaux LAC, France,
TEL: (33) 56 11 88 88; FAX: (33) 56 43 17 76.
- October 7-9, 1996** **ASM World Congress on Hard and Soft Magnetic Materials, Cincinnati, Ohio USA.**
J.H. Bularzik, Tel: (219) 399-8158, FAX: (219) 399-8562 or K.S. Narasimhan,
TEL: (609) 829-2220, FAX: (609) 829-1651.
- November 12-15, 1996** **41st Annual Conference on Magnetism and Magnetic Materials**
(MMM '96), Atlanta, Georgia USA. Diane Suiters, Courtesy Associates,
655 15th Street NW, Suite 300, Washington, DC 20005, TEL: 202 639-5088;
FAX: 202 347-6109; email: magnetism@mcimall.com.
- April 1-4, 1997** **INTERMAG 97, New Orleans, Louisiana**
Diane Suiters, Courtesy Associates, 655 - 15th Street NW, Suite 300,
Washington, DC 20005, TEL: (202) 639-5088, FAX: (202) 347-6109,
email: magnetism@mcimall.com, <http://yara.ecn.purdue.edu/~nyenhuis/ieeesmag.html>

