



IEEE MAGNETICS SOCIETY

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JODIE CHRISTNER, EDITOR

IN MEMORIAM: Donald Krahn

Dr. Donald R. Krahn passed away on 18 November 1995 at the age of 47. Don was diagnosed with kidney cancer in 1992. He died in his home in Eagan, Minnesota surrounded by his family and friends. He is survived by his wife Betina, and sons Nathan and Zebulun.

At Honeywell, Don was a Senior Principal Development Engineer in the magnetic sensor development group. He developed high-sensitivity magnetoresistive transducers and also did important work on magnetic random access memory. In 1992, he was awarded Honeywell's highest technical award – the H. W. Sweatt award – as a member of a team that developed the advanced integrated magnetometer.

Don finished his undergraduate work at St. Olaf College, Northfield, Minnesota, and doctorate work at Ohio State University, Columbus, Ohio, both in physics. Before joining Honeywell he was on the faculty of Southwestern Oklahoma State University in Weatherford, Oklahoma, and an engineer at Sperry Corporation in Eagan, Minnesota. He had numerous papers and patents to his credit in the field of magnetics.

Don was dedicated to his work, his family, his church, and his friends. As a colleague he was extremely responsive to other people's needs. He would often work late if that would help someone else's project. He had a breadth of knowledge in magnetics, especially in areas related to materials and their engineering properties, which his colleagues found valuable. Outside of work, Don took an interest in the lives of his colleagues and offered help where help was needed. He also dedicated a considerable amount of time to his profession, actively participating in the Magnetics Society of the IEEE and as an officer of the Magnetism and Magnetic Materials Conference for several years.

Don made a positive difference to the lives of the people he touched as a friend and a professional, and his contributions will be remembered for a long, long time.

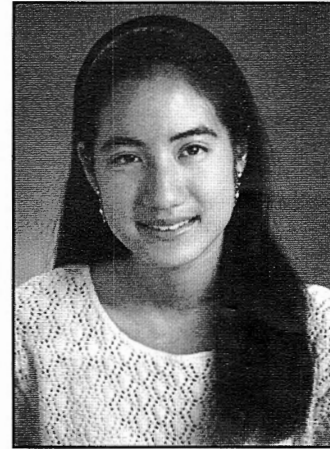
IEEE DIVISION IV DIRECTOR'S REPORT

By Rolf H. Jansen

Previously described as a Division not leading the pack in transnational membership with its Societies, in 1995 Division IV participated in one of the major initiatives within IEEE to develop a foothold in Eastern Europe (EE) and the Former Soviet Union (FSU). This initiative started originally as a joint activity of the Microwave Theory and Techniques Society and the Electron Device Society and is now growing into a joint effort of Division IV and Division I with its incoming Director Mike Adler. As a result of this cooperation, 6 new Chapters have been established in the EE/FSU region by the end of 1995 and 4 - 5 more in other parts of Region 8 and in Region 10 have been set up or are close to being formed. Antennas and Propagation has been encouraged to join in, making use of their natural links of technical interest and the first progress is seen in this respect, too. Further, the Electromagnetic Compatibility Society is a natural contender to benefit from the synergies of this process. With the continuation and consolidation plan at hand already for 1996, it is very likely that there will be 4 more Chapters created in EE/FSU by the mid of the coming year under the umbrella of the mentioned initiative.

Working as a Division Director, the first year of my term of office gave me a lot of insight into the globalization process within the Institute and the organizational structures engaged in it. Serving in parallel as a member of the RAB/TAB Transnational Committee brought me into direct contact with other initiatives and groups involved in the development of transnational membership and in the improvement of services for this IEEE community outside of the US. Last but not least, sitting together in the Board with the Directors of Regions 8 - 10 provided the necessary cross-links with RAB and the procedures and committees installed there to pursue similar goals. In this complex organizational environment, it became very obvious to me that I would have to work as a Division Director on enhancing the coordination of the many disconnected structures and activities dealing with Transnational Activities and Globalization within the IEEE. This will help all Societies in Division IV

MAGNETICS SOCIETY '96 MERIT SCHOLARSHIP WINNER



Elisa Kuo-Min Cheng

and beyond to achieve their transnational goals. As a specific step, the development of a model (organizational structure, interaction and guidelines) that shall serve as a vehicle for transnational activities for the IEEE Societies was brought on the way by myself within the RAB/TAB TC. In the relatively short term, the Magnetics Society and the Society for Nuclear and Plasma Sciences could benefit from this with their membership potential in the EE/FSU region. In the joint effort conducted by Divisions I and IV, the model will be modified and optimized to be truly applicable to all IEEE Societies. While this can be well done within the framework of the current IEEE and Society bylaws, the coming Organizational Improvement process may also provide the chance to yield the presently disconnected structures well coordinated and efficient.

During the second year of my term of office as Division Director, I shall try to link my transnational activities with an initiative in Educational Activities, conforming with my statement of candidacy. Improving the quality of engineering education is an important topic presently in Europe where the IEEE could also play its role of technical leadership and step out of the US to contribute to educational program definition as a global promoter of high standards. A first brainstorming on this was already conducted together with Jerry Yeargan, the incoming Vice President of Educational Activities. I look forward to another exciting year of service. Thanks to all of you in Division IV and beyond for your support.

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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.

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Elisa K. Cheng, 18 years old, is this year's recipient of the IEEE Magnetics Society National Merit Scholarship. She is a recent graduate of Henry M. Gunn High School in Palo Alto, CA. Her father, David Cheng, is a Research Staff Member and the manager of Recording Physics at IBM Almaden Research Center.

Elisa's interests span a wide range, including sports, student governments, creative writing, science and music. She has been the class president in junior and senior year, and a dedicated tutor since the seventh grade. Her musical endeavors include 12 years of piano and two years as the harpsichordist with the Palo Alto Chamber Orchestra, which toured Asia last summer. She was also a piano soloist with PACO and performed in a music lecture series at Stanford University. Her short stories have been recognized with the Grand Prize in the "Olympiad of the Arts" competition (Both '94 and '95) and the National Council of Teachers of English Achievement Award. Her efforts in varsity soccer and track & field during high school led to three MVP awards in track and the overall Coaches Award in senior year.

Elisa has participated in numerous math and science contests. The team she organized for the Junior Engineering Technical Society competition took 1st place in California and 10th place in the nation. She took AP classes in BC Calculus, Physics and Biology in her junior year and a multivariable calculus class at Stanford University in her senior year. She has won many science and math awards, including the 1st place in Santa Clara University Math Contest, the U.S. Army National Scholar/Athlete Award, the Bausch & Lomb Honorary Science Award, the Rensselaer Polytechnic Institute Math & Science Medal, the Bank of America Math & Science Plaque, and the U.S. Air Force Math & Science Award. Elisa has also been recognized as an AP Scholar with Honors, and American Academy of Achievement honoree, a Tandy Technology Outstanding Student, a Cornish & Carey Scholar, and a NASA Galileo Memorial Scholarship finalist.

Elisa will attend Harvard-Radcliffe University in the fall. She plans to major in Biochemistry.

'96 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:

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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.

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The latest information on MMM '96 can be obtained on the 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

- March 18-20, 1996** **Seventh Biennial IEEE Conference on Electromagnetic Field Computation (CEFC '96)**
Okayama, Japan. CEFC '96 Secretariat, Koji Fujiwara, Department of
Electrical and Electronic Engineering, Okayama University, Okayama 700, Japan;
TEL: +81-86-251-8114; FAX: +81-86-253-9522;
e-mail: cefc@eplab.elec.okayama-u.ac.jp.
- April 9-12, 1996** **Intermag '96**
Seattle, Washington USA. Diane Suiters, Courtesy Associates, 655 15th Street NW,
Suite 300, Washington, DC 20005; TEL: 202 639-5088; FAX: 202 347-6109;
<http://www.seas.gwu.edu/seas/institutes/INTERMAG96/index.html>.
- April 27 - May 3, 1996** **Society of Magnetic Resonance Fourth Scientific Meeting and Exhibition.**
Society of Magnetic Resonance, 2118 Milvia Street, Suite 201, Berkeley, California 94704
USA; TEL: 510-841-1899; FAX: 510-841-2340; email: info@smr.org.
- 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.
- November 12-15, 1996** **41st Annual Conference on Magnetism and Magnetic Materials**
(MMM '96)
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