INTERMAG 2003 PLENARY SESSION (BZ)

Monday, March 31, 2003, 2:00 PM
Salon E/F

Chair:
V. R. Ramanan
ABB Inc.

THE PROGRAM

1. **Presentation of 2003 IEEE Magnetics Society Awards: Ron Indeck, President**
   Dr. Carl E. Patton: IEEE Magnetics Society Lifetime Achievement Award
   Dr. H. Neal Bertram: 2003 IEEE Reynold B. Johnson Information Storage Award
2. **Recognition of 2003 IEEE Fellows from the Magnetics Society**
3. **Student Travel Award winners: Dave Thompson, Awards Chair**
4. **Plenary Address: Dr. John H. Marburger, III**
   Director, Office of Science and Technology Policy
   Executive Office of the President

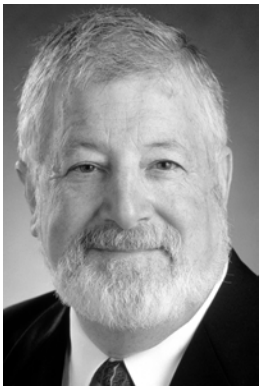
PROFILES

Dr. Carl E. Patton: IEEE MAGNETICS SOCIETY LIFETIME ACHIEVEMENT AWARD

Dr. Carl E. Patton is Professor of Physics at Colorado State University, Fort Collins, CO. He is a Fellow of the IEEE, a Fellow of the American Physical Society, and a recipient of an IEEE Third Millenium Medal in 2000. Dr. Patton has a B.S. in Physics from Massachusetts Institute of Technology, and M.S. and Ph.D. degrees in Electrical Engineering from California Institute of Technology.

Dr. Patton's group at CSU is involved in magnetics research on microwave and millimeter wave relaxation processes, Brillouin light scattering in magnetic films and superlattices, hexagonal ferrite materials, ferromagnetic resonance, nonlinear spin wave processes, and envelope solitons in thin films. Over the years, Dr. Patton has served the magnetics community in numerous ways, e. g., as Editor of the IEEE Transactions on Magnetics; as General or Publication Chair for several international magnetism conferences; as Chair of the newly formed American Physical Society Topical Group on Magnetism and its Applications; and, as a member of the International Organizing Committee for the International Conference on Ferrites.

Dr. H. Neal Bertram: 2003 IEEE REYNOLD B. JOHNSON INFORMATION STORAGE AWARD



Dr. H. Neal Bertram is an Endowed Chair Professor in the Electrical and Computer Engineering Department at the University of California at San Diego, associated with the Center for Magnetic Recording Research. Prior to joining UCSD, he was a member of the research department at Ampex Corporation, Redwood City, CA. Dr. Bertram is a Fellow of the IEEE, and a recipient of the annual technical achievement award from the International Storage Industry Consortium. He was an IEEE Distinguished Lecturer in 1986. Dr. Bertram has a B.A. from Reed College in Portland, OR, and a Ph.D. in Physics from Harvard University.

Dr. Bertram's focus on research at Ampex Corp. was on magnetization reversal and general properties of particulate magnetic media. He developed models of the *ac*-biased recording process, generalized reciprocity, and saturation in write-transducers. He engaged in a variety of experimental studies of magnetic tape recording, focusing on high density signals and noise. Later he became involved in experimental studies of thin film disc media and the design of high frequency write pole tips.

At UCSD, Dr. Bertram directs a research program in the physics of magnetic recording, including studies of polycrystalline thin film media, write and read transducers, fine particle tape systems and general analyses of ultimate limits in ultra high density recording. In these areas, his students engage in both experimental and theoretical studies of basic issues in high density magnetic recording, including noise phenomena, nonlinearities, dynamic processes, thermally induced relaxation and large scale numerical simulations of high density magnetic recording.

Dr. Bertram has created graduate courses in magnetic recording theory, analysis of recording materials and magnetic recording measurements, and has published a book: *Theory of Magnetic Recording* (Cambridge University Press, March 1994). He has had a life-long interest in music, plays the cello, and gives concerts on occasion.

Dr. John H. Marburger, III: PLENARY ADDRESS

Dr. John H. Marburger, III is Director of the Office of Science and Technology Policy in the Executive Office of the President. Dr. Marburger also co-chairs the President's Committee of Advisors on Science and Technology, and supports the President's National Science and Technology Council. Before his appointment in the Executive Office of the President, he served as Director of Brookhaven National Laboratory from 1998, and as the third President of the State University of New York at Stony Brook (1980-1994). Dr. Marburger attended Princeton University (B.A., Physics) and Stanford University (Ph.D., Applied Physics).

Until 1980, Dr. Marburger was Professor of Physics and Electrical Engineering at the University of Southern California, serving as Physics Department Chairman and Dean of the College of Letters, Arts and Sciences in the 1970's. At USC, Dr. Marburger focused on research in nonlinear optics, developing theories for various laser phenomena, and co-founded the Center for Laser Studies there. His teaching activities included "Frontiers of Electronics", a series of educational programs on CBS television.

Dr. Marburger guided the opening and growth of the University Hospital and the development of the biological sciences as a major strength of SUNY Stony Brook. During his tenure as President, federally sponsored scientific research at SUNY Stony Brook grew to exceed that of any

other public university in the northeastern United States. He also served on numerous boards and committees, including Chairmanship of the Governor's Commission on the Shoreham Nuclear Power Facility, and Chairmanship of the 80 campus "Universities Research Association", which operates Fermi National Accelerator Laboratory, and served as a Trustee of Princeton University and many other organizations. He also chaired the highly successful 1991/92 Long Island United Way Campaign.

In 1994, Dr. Marburger returned to the faculty at Stony Brook, teaching and doing research in optical science as a University Professor. In 1997 he became President of Brookhaven Science Associates, a partnership between the university and Battelle Memorial Institute, that won the competition for the contract to operate Brookhaven National Laboratory. As Director of the laboratory, Dr. Marburger carried out the mandates of the Department of Energy to improve management practices there. His company, Brookhaven Science Associates, continued to produce excellent science at the lab while achieving ISO14001 certification of the lab's environmental management system, and winning back the confidence and support of the community.

The Office of Science and Technology Policy was established in 1976, with a broad mandate to advise the President and others within the Executive Office of the President on the impacts of science and technology on domestic and international affairs. The OSTP is also authorized to lead an interagency effort to develop and to implement sound science and technology policies and budgets, and to work with the private sector, state and local governments, the science and higher education communities, and other nations toward this end. The OSTP also provides technical support to the Office of Homeland Security through a joint arrangement.

Dr. Marburger's talk will focus on the current, significant changes in R&D trends and the government policies formulated to address and impact these changes.