

Shuichi Nosé

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at the Ultrafast Group at the University of Oxford, UK.

Adair Is Voted AAPT Vice President

Lila M. Adair has been elected vice president of the American Association of Physics Teachers for 2006, succeeding **Harvey S. Leff** (see *PHYSICS TODAY*, February 2005, page 80). Adair, who took office on 25 January during AAPT's annual meeting in Anchorage, Alaska, will serve as president-elect in 2007 and president in 2008.

Currently an adjunct faculty member at Piedmont College in Demorest, Georgia, Adair teaches a course in science methods and supervises student teachers. She earned a BS degree from Oglethorpe University in Atlanta in 1967 and a Masters of Art for Teachers in physics from Georgia State University in 1978. She received an educational specialist degree in physics and educational leadership from Emory University in Atlanta in 1990.



Adair

Adair has been an active member of the physics community and her experience will be helpful on the AAPT executive board, the association said in a press release after the election. In a prepared statement, Adair called for continued teamwork among AAPT members.

"[In AAPT] I have found a place for professional growth, academic enrichment and lasting friendships," Adair said. She said she plans to work to strengthen relationships and collaborations among members and to boost members' commitment to high-quality physics education at all levels.

During her career in physics education, Adair has received several honors, among them the AAPT Distinguished Service Award in 2004, the American Physical Society's Distinguished Physics Teacher for Georgia in 1999, and the Presidential Award for Excellence in Science Teaching in 1985.

Some of Adair's other activities, largely focused on physics education outreach, include serving on *The Physics Teacher* editorial board and being the chair and a member of the AAPT high-school committee. She also was the high-school representative to AAPT's executive board and

served as district director of the Georgia Science Teachers Association and as APS local physics alliance co-chair.

Also taking office last month were **Dwain M. Desbien**, two-year-college member-at-large, for a three-year term, and **Charles E. Robertson**, re-elected as treasurer for a two-year term. Desbien is a physics instructor at Estrella Mountain Community College in Avondale, Arizona, and Robertson is senior lecturer emeritus in the department of physics at the University of Washington.

In Brief

The former Japanese ambassador to Croatia, **Kaname Ikeda**, has been appointed director general of ITER. The decision on Ikeda's appointment was made last fall at a meeting in Vienna of officials from the European Union and five participating nations—Japan, China, Russia, South Korea, and the US—according to published reports. At press time, an agreement was being formalized for ITER. Ikeda, who studied engineering at the University of Tokyo, joined the Japanese government's science and technology agency in 1968 and served as both head and deputy vice minister of the research and development bureau and as director of the now-defunct National Space Development Agency of Japan. He was named ambassador to Croatia in 2003. News reports said he was recommended for the ITER post because of his familiarity with science and technology policies and his involvement in significant international projects.

Raymond Chiao, a professor in the physics department of the Univer-

sity of California, Berkeley, has accepted a joint faculty appointment in the fledgling schools of natural science and engineering at UC's new Merced campus. He is pursuing a new line of research in gravitational radiation. Chiao is an atomic, molecular, and optical physicist whose research focuses on the behavior of photons. UC Merced opened last September as the 10th campus in the UC system.

Douglas B. Chrisey has been named the deputy director for research and development at the Center for Nanoscale Science & Engineering (CNSE) at North Dakota State University in Fargo. In his new position, which he started last September, Chrisey leads teams of faculty, staff, and students performing research on wireless-sensor design and fabrication, electronics miniaturization, polymers for electronics, and protective coatings developed through combinatorial materials research. He is also serving as a research professor in nanoscience and technology at NDSU. Previously he was a senior member of the technical staff at the US Naval Research Laboratory in Washington, DC.

Chiow San Wong, a physics professor at the University of Malaya, has won a Science and Technology Award from the Malaysia Toray Science Foundation. Wong received the honor, which was accompanied by a cash prize of 30 000 Malaysian ringgits (about \$7955) for contributing to the enhancement of scientific knowledge, according to the foundation. The awards ceremony was held 28 November in Kuala Lumpur.

Obituaries

Shuichi Nosé

Shuichi Nosé, distinguished for his unique contribution to statistical physics—the Nosé thermostat—passed away on 17 August 2005 in Yokohama, Japan, following a year of medical treatment for cancer.

Nosé was born in Kyotango City in Japan's Kyoto prefecture on 17 June 1951. He received his undergraduate

degree in chemistry from Kyoto University in 1974 and graduated from the Kyoto University Graduate School of Science in 1979. He obtained his DSc degree from Kyoto University in 1981 under the guidance of Tsunenobu Yamamoto. At that time, Yamamoto and his group were interested in rotational tunneling and nuclear spin-conversion in solid methane. For his thesis, Nosé used

PHYSICS TODAY is changing the way it publishes obituaries. Some will continue to appear in print, but most will be available only online (see *PHYSICS TODAY*, October 2005, page 10). Subscribers can visit <http://www.physicstoday.org/obits> to notify the community about a colleague's death and submit obituaries up to 750 words, comments, or reminiscences. Each month, recently posted material will be summarized here, in print. Select online obituaries will later appear in print.

molecular simulation to study the classical model, originally proposed by Hubert James and Thomas Keenan, for solid methane's phase transitions. An account of that work, "A Monte Carlo study of phase transitions in a fcc octupolar array," was published in 1981 in the *Journal of Chemical Physics*. Subsequently, Nosé collaborated with Yoshiaki Ozaki, Kazuo Maki, and Yosuke Kataoka to explain the recently measured inelastic neutron scattering spectrum of methane on graphite.

After receiving his DSc, Nosé moved to Canada, where he was briefly a research associate in the Institute for Material Research at McMaster University in Hamilton, Ontario. He then moved to Ottawa, where from 1981 to 1983 he was a Natural Sciences and Engineering Research Council fellow in the chemistry division of National Research Council Canada (NRCC) and then until 1984 a research associate at NRCC. His three years in Canada were remarkably productive, and he wrote a number of highly original and much-cited works. In particular, he contributed methodological extensions of the Anderson-Parrinello-Rahman molecular-dynamics schemes that enabled computer simulations of structural phase transitions in molecular crystals.

While still at NRCC, he produced the truly unique contribution to the field of computer simulation: the Nosé thermostat. Two articles on this topic were submitted in 1983 and appeared the following year, somewhat delayed by referees who had difficulty accepting the new and highly original formulation. The articles—"A unified formulation of the constant tempera-



Shuichi Nosé

ture molecular-dynamics methods," in the *Journal of Chemical Physics*, and "A molecular-dynamics method for simulations in the canonical ensemble," in *Molecular Physics*—remain key pedagogical texts, and their importance cannot be overemphasized. They spawned new applications and encouraged generalizations by the computational science community.

In April 1984, following a call from Ryogo Kubo, Nosé returned to Japan as a research assistant in the department of physics at Keio University. Initially, Nosé became interested in melting and crystallization and published a highly cited article on the topic in 1986. In 1988 he became a lecturer, in 1989 an associate professor, and in 2003 a professor. Nosé published a frequently quoted review article on constant-temperature molecular-dynamics methods in 1989. For his influential work on the constant-temperature method, he was honored in 1989 with the IBM Science Prize. During the 1990s Nosé carried out research on colloidal systems and was particularly interested in the Car-Parrinello methodology for ab initio molecular dynamics.

Nosé was a rare and remarkable individual. He was an immensely gifted scientist who loved his family greatly. His highly original and creative work has had an immense impact on the fields of computational science and statistical physics. We cherish the memory of the years we worked with him and are saddened by his passing.

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Dieter Joseph Sigmar

Dieter Joseph Sigmar died in Austin, Texas, on 31 July 2005 after a lengthy and courageous battle with multiple sclerosis. During his long and productive career, he played a key role in the US and international magnetic-fusion energy and plasma-science programs.

Dieter was born in Vienna, Austria, on 11 April 1935. He received his undergraduate degree in physics in 1960 from the Technical University of Vienna. After receiving his PhD in nuclear physics there in 1965, Dieter spent four years as a staff scientist at Oak Ridge National Laboratory (ORNL). He then went to MIT in 1970 as a postdoctoral fellow working with Bruno Coppi in the physics department and stayed on as an associate professor in the nuclear engineering department until 1976. While at MIT, Dieter did seminal work on collisional transport theory in tokamaks, including a classic review article with Steven Hirshman on the role of impurities. Collisional transport remained his interest even after his retirement and is the subject of the superb textbook *Collisional Transport in Magnetized Plasmas* (Cambridge U. Press, 2002), which he coauthored with Per Helander.

For the next nine years he worked at ORNL, where he became the associate head of theory. He returned to MIT in 1985, where he served at various times as head of theory, acting director, and deputy director of the Plasma Science and Fusion Center while maintaining his ties to the nuclear engineering department.

At ORNL and then as theory head at the PSFC, Dieter pursued his interest in the role of alpha particles in burning tokamak plasmas. He made important contributions to the understanding of collisional transport in tokamaks and the behavior of alpha particles in fusing plasmas. He incited the national and international fusion communities to focus their attention on stability and transport issues associated with fast particles, and he urged experimentalists to develop techniques for observing alpha-related phenomena.

During Dieter's tenure as acting director of the PSFC, he realized that the US edge-physics program needed strengthening because of the increasingly important role of the edge region and the need for a divertor at the edge of a tokamak reactor to handle the heat load. He responded by establishing a divertor physics program at the PSFC and subsequently was appointed by

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- Alexandru A. Marin
25 June 1945–14 November 2005
- Richard B. Dunn
14 December 1927–29 September 2005
- Peder Gregers Hansen
11 January 1933–20 July 2005
- Tatiana A. Germogenova
10 April 1930–27 February 2005
- Edward Pollack
28 April 1931–11 February 2005