

WE HEAR THAT

Ketchen and Chaisson Honored by AIP

At the annual meeting of the American Institute of Physics's Corporate Associates in Dearborn, Michigan, in October, two individuals were recognized for their contributions to physics. The Prize for Industrial Applications of Physics was given to **Mark Ketchen**, director of physical sciences at the IBM Corp's Thomas J. Watson Research Center in Yorktown Heights, New York. The citation accompanying the prize praised Ketchen for "the design and development of integrated superconducting quantum interference devices that are the basis for the emerging commercial applications of magnetic sensing, such as biomagnetism, non-destructive testing and materials characterization."

Eric J. Chaisson received the AIP Science Writing Award to a Scientist for his book *The Hubble Wars* (HarperCollins, 1994). The book recounts the scientific and political struggles surrounding the Hubble telescope. Chaisson, who was a senior scientist at the Space Telescope Science Institute from 1987 to 1992, is now at Tufts University, where he serves as director of the H. Dudley Wright Center for Innovative Science Education and also is a research professor of physics and astronomy and of education.

ASA Presents Awards at Fall Meeting

At its fall meeting in Saint Louis the Acoustical Society of America announced the winners of several of its awards. The Silver Medal in Engineering Acoustics was presented to **James E. West** for "developing and optimizing polymer electret transducers." West is a fellow of AT&T Bell Laboratories in Murray Hill, New Jersey.

The Pioneers of Underwater Acoustics Medal went to **William A. Kuperman**, director of the marine physical laboratory at Scripps Institution of Oceanography. He was chosen for "the development and application of models for ocean acoustic propagation and scattering."

The von Békésy Medal was given to **Peter Dallos**, the Hugh Knowles Professor of Audiology and John

Evans Professor of Neuroscience at Northwestern University. ASA cited Dallos for his "contributions to the understanding of cochlear processes."

A. Harold Marshall received the Wallace Clement Sabine Award for his "contributions to the field of architectural acoustics, particularly for the understanding and design of concert halls." Marshall is a professor of architecture at the University of Auckland in New Zealand.

Several individuals were recognized by ASA for their writing on acoustics. The Science Writing Award for a Professional in Acoustics was shared by **Lawrence A. Crum**, a research professor of bioengineering and electrical engineering at the University of Washington, and **Christopher E. Ruckman** of the Naval Surface Warfare Center in Bethesda, Maryland. Crum was recognized for his article "Sonoluminescence," published in *PHYSICS TODAY* in September 1994. Ruckman was chosen for his Internet FAQ on active noise control. **Sandra Blakeslee** won the ASA Science Writing Award for a Journalist for her article "New Clue to Cause of Dyslexia Seen in Mishearing of Fast Sounds," which appeared in the *New York Times* on 16 August 1994.

IN BRIEF

The new director of the Institute for Theoretical Physics at the University of California, Santa Barbara, will be **James Hartle**. Hartle, a physics professor at UCSB, succeeds **James Langer**, who has returned to full-time teaching and research at the university.

At the International Conference on Phenomena in Ionized Gases, held last summer, the Penning Award was given to **James E. Lawler**, chair of

the physics department at the University of Wisconsin—Madison. Lawler was cited in recognition of "his distinguished work in the fields of plasma physics and the behavior of ionized gases." The Penning Award is supported by Philips Lighting.

The physics department at the University of North Carolina at Chapel Hill, has added two assistant professors to its faculty: **Frank Tsui**, who had been a research fellow at the University of Michigan, and **Arthur Christopher Thompson**, formerly a research associate at the Canadian Institute for Theoretical Astrophysics at the University of Toronto.

Michael Hart has been appointed chairman of the National Synchrotron Light Source at Brookhaven National Laboratory. He replaces **Denis McWhan**, who has been promoted to associate director for basic energy sciences at the lab. Hart took early retirement from Manchester University in England in 1993 and had been a consultant and research collaborator at Brookhaven until his appointment.

The National Science Teachers Association has selected **Gerald F. Wheeler**, a professor of physics at Montana State University and director of the university's science/math resource center, to serve as the association's new executive director. He succeeds retiring director Bill Aldridge.

One of the 1995 Science for Art Prizes has gone to **Steven Chu**, the Theodore and Frances Geballe Professor of Physics at Stanford University. Chu won for images generated during his studies of the relaxation of individual polymer strands after they are stretched by optical tweezers.

OBITUARIES

Aaron N. Bloch

Aaron N. Bloch died suddenly at his home in Amherst, New York, on 8 April 1995 at the age of 53.

After earning a BS in chemistry at Yale University, Bloch completed his PhD in chemical physics under the tutelage of Stuart Rice at the University of Chicago. His thesis, a study of the optical reflectivity of the surface

of liquid mercury, reported the first clear evidence that the local surface properties of a liquid metal differ from those of the bulk. An amalgam of precise experimentation and penetrating theoretical analysis leading to a significant discovery, the thesis foreshadowed a distinguished and productive career in science.

Following a postdoctoral year at MIT, Bloch moved in 1969 to Johns



AARON N. BLOCH

Hopkins University. There, with Dwaine Cowan, he built a world-renowned group devoted to the synthesis and characterization of new organic conductors. He played a major role as a pioneer and leader in this field because he combined the insight of a first-rate solid-state chemist with mastery of the relevant condensed matter theory. The second of his major scientific interests, the microscopic basis of global trends in the properties of solids, also emerged at Johns Hopkins with his discovery of the capacity of the so-called Bloch-Simons radii, extracted from atomic wavefunctions, to organize the structures of solids.

In 1981 he left Johns Hopkins for the Exxon Corporate Research Laboratories, where he played a leadership role in building their capabilities. Noteworthy among his achievements during this period was the formation and leadership of a profoundly influential research program on the physics of complex fluids. The alumni of that group continue to play a dominant role in the subject worldwide.

Also while with Exxon, Bloch developed further an interest in and an extraordinary talent for the management and fostering of creative intellectual endeavors. He began to exercise this talent on a wider stage in 1988, when he joined Columbia University as vice provost with responsibilities for science, engineering and technology transfer. There he helped build one of the nation's most successful technology-transfer programs.

In 1992 he moved from Columbia to the State University of New York at Buffalo, assuming the office of university provost. In that position he was

able for the first time to give full scope to his broad intellectual interests, which extended well beyond science; to his deep concern for education, educators and especially students; and to his conviction that the current challenges facing universities could be met while still building excellence.

Bloch served on the American Physical Society Council and chaired APS's Panel on Public Affairs in 1994. He was also a member of the Committee on Public Policy of the American Institute of Physics.

He was a person of warmth and wit, a fond friend of many and a leader to more.

MORREL H. COHEN

*Exxon Research and Engineering Company
Annandale, New Jersey*

Lee C. Northcliffe

The physics community experienced a great loss when Lee Northcliffe, a well-known nuclear physicist, died on 4 June 1994.

He was born in Manitowoc, Wisconsin, in 1926 and served in the US Navy in 1944-45. He received his BS, MS and PhD (1957) from the University of Wisconsin. Lee was a faculty member at Yale University from 1957 to 1965 and a visiting scientist at Oak Ridge National Laboratory from 1962 through 1966.

At Texas A&M University he rose from associate professor in 1965 to full professor in 1970. He initiated the nucleon-nucleon research program at the Texas A&M Cyclotron Institute. In the nucleon-nucleon group his colleagues included E. P. Chamberlin, Robert Graves, John C. Hiebert, Charles W. Lewis and John W. Watson. Lee also was one of the coprincipal investigators for the initial nucleon physics program at Los Alamos National Laboratory's Clinton P. Anderson Meson Physics Facility.

Lee was a prominent and respected researcher in nucleon-nucleon studies, proposing and carrying out many experiments in the medium-energy range at Los Alamos. Among his coworkers were Tarlochan Bhatia, Howard Bryant, Michael Evans, Mahavir Jain, Subrata Nath, Peter J. Riley, Harold Spinka and W. Brad Tipkens. Lee proposed the first neutron beam experiment at the LAMPF nucleon physics laboratory (area B). The program used both polarized and unpolarized targets for the measurement of spin variables and resulted in a unique determination of the nucleon-nucleon elastic amplitudes from 400 to 800 million electron volts. Con-

straints on time reversal invariance and on dibaryon resonances also came out of this work, for which Lee encouraged and supported an extensive development of large area gas counters and scintillator neutron detectors. Lee was interested in extending the spin studies to higher energy and collaborated with physicists at Brookhaven National Laboratory and the National Laboratory for High Energy Physics (KEK) at Tsukuba, Japan, to that end. Lee is also well-known for his definitive work on the stopping of charged particles. His monograph *Range and Stopping Power Tables for Heavy Ions*, written with Ralph Schilling, is still used extensively worldwide.

A quiet and thoughtful person, Lee will always be remembered and admired by his colleagues for his open and unassuming way of dealing with people. Behind this agreeable interaction style was a patient, steady and tenacious core that served him well in experimental work. He was conscientious in teaching, and his class notes were always meticulously prepared. He loved backpacking in the wilderness, especially with his sons David and Chris. He also enjoyed playing a violin that he had crafted himself. Lee Northcliffe left behind many colleagues and students who remember that he always strived to be good, not necessarily to just look good.

GEORGE GLASS

JAMES E. SIMMONS

*Los Alamos National Laboratory
Los Alamos, New Mexico*

ROBERT KENEFFICK

JOHN A. MCINTYRE
*Texas A&M University
College Station, Texas*

Shyamadas Chatterjee

Shyamadas "S. D." Chatterjee, the doyen of Indian physicists, passed away in Calcutta on 27 May at the age of 86.

He earned his BSc degree in 1930 and his MSc degree in physics in 1932 from the University of Calcutta, where his teachers included Nobel laureate C. V. Raman. In 1938 Chatterjee joined the Bose Institute, in Calcutta, and demonstrated his experimental skills by constructing one of India's first Wilson cloud chambers.

When news of the discovery of nuclear fission reached India in 1939, Chatterjee set up his own experiment with indigenous components to detect emitted neutrons. The following year he became the first researcher to detect the spontaneous fission of uranium. His estimate of the half-life of