Underwater Acoustics Medal was instituted in 1958 to honor five outstanding early workers in the field: H. J. W. Fay, R. A. Fessenden, H. C. Hayes, G. W. Pierce and P. Langevin. The Society established the Silver Medal in 1973 to recognize "contributions to the advancement of science engineering or human welfare through the application of acoustic principles or through research accomplishments in acoustics."

R. J. Baxter wins IUPAP Boltzmann Medal

The International Union for Pure and Applied Physics Commission on Thermodynamics and Statistical Physics has awarded the third Boltzmann Medal to Rodney J. Baxter of the Australian National University, Canberra. Baxter was honored "for his brilliant contributions to the field of critical phenomena, in the form of exact solutions of several two-dimensional models." He was cited in particular for his solution of the eight-vertex model, a model that now generally carries his name and "whose solution has cast new light on the concept of universality." The Boltzmann Award consists of a gold medal and is given every three years in recognition of outstanding contributions to statistical physics.

Baxter received his master's degree in 1961 from Cambridge University and his PhD in 1964 from the Australian National University. He is currently a research fellow at ANU.

Cameron receives AAPM Coolidge Award

At its 22nd annual meeting and exhibition in Minneapolis, the American Association of Physicists in Medicine presented its William D. Coolidge Award to John R. Cameron, Farrington Daniels Professor of Physics and Radiology at the University of Wisconsin, Madison. The ninth scientist to receive the award since 1972, Cameron was recognized for his "outstanding contributions to the field of medical physics." The award, which is the Association's most prestigious, is named for the inventor of the Coolidge x-ray tube.

Cameron is noted for his development of lithium fluoride thermoluminescence dosimetry in the 1960's. He is also recognized as the "father" of bone-mineral measurement techniques employing radionuclide scanning. Quantitative diagnostic radiology is another area of Cameron's expertise.

Cameron's educational credits include a BS degree (1947) from the University of Chicago, and an MA

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(1949) and a PhD in nuclear physics (1952) from Wisconsin. He began his career in 1952 as an assistant professor of physics at the University of Sao Paulo, Brazil. He joined the Wisconsin staff as a project associate in 1954 and then became an assistant professor of physics at the University of Pittsburgh the following year. Cameron returned to the Wisconsin faculty in 1958 as an assistant professor of radiology and physics. In addition to his named chair, Cameron also holds the directorships of the Biomedical Engineering Center and the Midwest Center of Radiological Physics.

James R. Killian, Jr., the country's first full-time presidential science adviser and long-time MIT educator, has been selected to receive the National Science Board's first Vannevar Bush Award. Bush directed the Office of Scientific Research and Development during the Second World War.

Gernot Kostorz, recently with the Max-Planck-Institut für Metallforschung, Institut für Werkstoffwissenschaften, Stuttgart, Federal Republic of Germany, has been appointed professor of physics at the Eidgenössiche Technische Hochschule, Zurich, Switzerland.

Ronald Gerhard has become sole owner and president of Arenberg Sage, Inc., Jamaica Plain, Massachusetts.

The American Society for Testing and Materials has awarded an Award of Merit to **Robert I. Scace**, a physicist at the Electron Devices Division, National Bureau of Standards, Washington, D.C. He was honored "for his leadership in the development of standards for the electron device industry."

Alan J. Toepfer has been appointed director of the Radiation Physics Division at Physics International Co, San Leandro, California.

The University of Georgia has named **Nathan W. Dean** assistant vice-president for research. Dean was formerly professor of physics and assistant dean of sciences and humanities at Iowa State University.

The following physicists have joined the Northeastern University physics department: **William N. Celmaster**, formerly of Argonne National Laboratory; **Jorge V. José**, recently of Rutgers University; **Robert S. Markiewicz**, previously of General Electric Co, and **Stephen W. McKnight**, formerly of Naval Research Laboratory.

John P. Andelin, Jr, a physicist and long-time Congressional staff member, has joined the Office of Technology Assessment as assistant director of its science, information and transportation division.

The former Fermilab director, **Robert Rathbun Wilson**, has been appointed Pupin Professor of Physics at Columbia University.

Ralph J. Cicerone is the new director of the Atmospheric Chemistry and Aeronomy Division of the National Center for Atmospheric Research, Boulder, Colorado. He was previously a research chemist at the Scripps Institution of Oceanography, La Jolla, California.

New assistant professors at the Colorado School of Mines, Golden, Colo., are **James M. Lockhart**, formerly of Stanford University, and **Frank V. Kowalski**, formerly of the Joint Laboratory for Laboratory Astrophysics, Boulder, Colo.

George W. Brandenburg, previously of MIT, has joined Harvard University as associate director of the High Energy Physics Laboratory.

Kali Mukherjee has become a professor of metallurgy and materials science at Michigan State University. He was formerly head of the metallurgy department at the Polytechnic Institute of New York.

Nobel laureate **Burton Richter** of SLAC has been appointed to a newly-established chair at Stanford University—the Paul Rigott Professorship in the Physical Sciences.

New faculty members at Harvey Mudd College, Claremont, Cal., are assistant professors **James C. Eckert** (formerly of the University of Southern California) and **Richard C. Haskell** (previously of the Johns Hopkins University).

we hear that

Crystal Technology of Palo Alto, Cal., has appointed **Edward V. Roos** as manager of its optical device department. Roos left Harris Corp., Melbourne, Florida, to take the new position.

The American Society of Testing and Materials has named **Arnold J. Lincoln** to receive a 1980 Award of Merit. Lincoln is a manager for the Englehard Industries Division of Englehard Minerals and Chemicals Corp., Newark, N.J.

obituaries

Leslie S. G. Kovasznay

Leslie Kovasznay died suddenly on 17 April 1980 at the age of 62. He was a world leader in turbulent flow research, best known for novel experimental techniques and crucial measurements, as well as significant contributions to theory.

Born in Budapest, 14 April 1918, Kovasznay earned his Dr. Tech. Sci. at the Royal Hungarian Institute of Technology in 1943; in the laboratory of E. Abody-Anderlik. After five years on that faculty (1941–46), he spent a year at Cambridge University's Cavendish Laboratory with Sir Geoffrey Taylor and then joined the new Aeronautics Department organized by Francis H. Clauser at The Johns Hopkins University, where he remained for more than 31 years. In December 1978 he resigned to become professor of mechanical engineering at The University of Houston.

The American Physical Society Councillor from the Division of Fluid Dynamics in recent years, he was an early and active member of the Division. He was a Fellow of the American Academy of Arts and Sciences, and a member of other technical and honorary societies.

Shortly after his arrival at Johns Hopkins, he became a consultant for the National Bureau of Standards, for which he designed an improved hotwire anemometry electronic system. As consultant for the Ballistics Research Laboratory, Aberdeen Proving Ground, he devised a condenser configuration that suppressed the troublesome "ringing" of microsecond spark discharge circuits used for short duration photographs. Meanwhile at Johns Hopkins he developed the first basis procedures for hot-wire anemometers in supersonic flows, procedures still in use. He was also one of the first to apply the statistical "information theory" of Claude Shannon to photographic measurements, treating the film graininess as the noise.

Kovasznay's other advances in experimental technique, many of them in collaboration with students, postdoctoral research associates and senior scholars, included the generalization of the hot-wire "length correction" to any

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three dimensional, non-uniform sensing device, the invention of a hot-wire array whose output is streamwise vorticity, the design of a modified hot-wire microphone for measuring surface pressure fluctuations and several other procedures for hot-wire measurements of turbulent velocities. Conditionally sampled data were the hallmark of his later experiments, not only in normally intermittent turbulent regions, but also in boundary layer transition to turbulence and in turbulent "spots," and in a "puffing" jet. In the 1970's he focussed also on aerodynamic sound generation and interactions of sound and turbulence.

Kovasznay's theoretical contributions relevant to turbulence began with the simplest plausible turbulence spectrum, and included the categorization of gas-dynamic fluctuations into vorticity, sound and entropy "modes" and the analysis of the lowest order non-linear interactions. After work on laminar instability and magneto-fluid dynamic fluctuations, he introduced a practical turbulent shear equation closure model. That was followed with partially deterministic turbulence models.

In his prepared lectures, Kovasznay was enthusiastic and illuminating. And at Johns Hopkins he offered courses in both theoretical and experimental fluid mechanics. His outstanding didactic effort was a sophomore-level course on experimental procedures in engineering science. The research spirit it conveyed contrasted sharply with most elementary laboratory courses.

He was a premier teacher of research students, and a lively listener to anyone seeking advice—he often asked new and interesting questions. This was one of many reasons that he was a welcome visitor at fluid dynamics research centers all over the world.

In fact, travel was one of Kovasznay's enduring enthusiasms. He rarely declined an invitation to lecture at another university or a conference, and made several extended visits to France and to Japan. In France his deepest involvement was with Alexandre Favre and his Institut de Mecanique Statisque de la Turbulence, Université d'Aix-Marseille. One principal result was their 1976 monograph on turbulent flow, co-authored with Aix-Marseilles colleagues. In Japan his initial host and guide was Itiro Tani of the University of Tokyo, and he eventually collaborated with researchers at several universities, especially during two years as scientific officer at the new ONR Tokyo liaison group 1975–77. As early as 1956 he had been awarded a Medal of the Université Libre of Brussels.

At the University of Houston, his new colleague A. K. M. Fazle Hussain had already developed a lively turbulence laboratory and Kovasznay was optimistically designing a neighboring one.

Kovasznay was gregarious and affable, a raconteur, a man who treasured friends all over the world. He took his hobbies seriously, and was a collector of bizarre and entertaining information, particularly about human foibles and appetites of all kinds. He was a gourmet cook, and a creative artist in several media.

Leslie Kovasznay was a key member of world fluid dynamics. He is already seriously missed.

STANLEY CORRSIN
Johns Hopkins University
Baltimore, Maryland

Aleksander Jabłoński

Aleksander Jabłoński, a distinguished Polish physicist, died on 10 September 1980 at the age of 82. His passing brings to an end an era in Polish science and he leaves behind him a rich heritage of scientific accomplishment as well as an abundance of pupils, many of whom now occupy university chairs of their own.

Jabłoński's scientific career began in 1925 at the University of Warsaw. He spent the years 1932–34 in Germany on a Rockefeller Postdoctorate Fellowship. In 1938 was appointed professor