we hear that

APS Forum honors Drell and Shurcliff

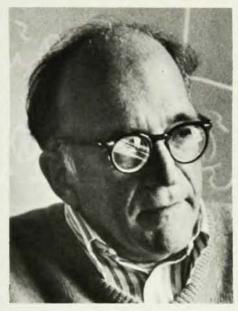
The American Physical Society Forum on Physics and Society has selected Sidney D. Drell, deputy director and executive head for theoretical physics at the Stanford Linear Accelerator Center, and William A. Shurcliff, a honorary research associate at Harvard University, to receive the Forum's prizes for 1980.

Drell won the Leo Szilard Award for Physics in the Public Interest for his "outstanding contribution to the formulation of national policy through the application of physical principles to the analysis of critical problems, particularly in the areas of arms control and national security policy." While pursuing a career as a high-energy physicist, Drell has served as a consultant to numerous agencies of the federal government including the President's Science Advisory Committee, the US Arms Control and Disarmament Agency, the Office of Science and Technology Policy, the Office of Technology Assessment and the National Security Council

The University of Illinois granted Drell a PhD in physics in 1949. In 1956 he rejoined the Stanford faculty (having worked there early in his career) and has remained there since. Drell's research has included studies of quantum field theory, elementary-particle physics and hadron structure—particularly the quark confinement problem.

Shurcliff received the 1980 APS Forum Award "in recognition of his work on two . . . issues of great public interest and substantial technical content: sonic booms and solar heating." Since his retirement from the Harvard University Cambridge Electron Accelerator in 1973, Shurcliff has devoted his time "to gathering and publishing information on solar heated buildings ... " and to inventing solar heating systems and components. He is also a consultant on the subject. In 1967 Shurcliff founded the Citizen's League Against the Sonic Boom, which has been credited with informing the public about the problem in a responsible fashion. He served as the League's director until 1978.

Shurcliff earned his PhD in physics



DRELL

from Harvard in 1934. The following year he took a position as a researcher at the Spectrophotometric Laboratory, American Cyanamid Co. From 1942 to 1945 Shurcliff served with the Office of Scientific Research and Development working at one point in connection with the Manhattan Project. During the next three years he was scientific adviser for the New York State Department of Commerce, the head of the Office of the Technical Historian of the



SHURCLIFF

First Atomic Bomb Tests at Bikini Atoll and a program analyst for the US Atomic Energy Commission. He spent the period from 1948 to 1959 as senior scientist and project leader at Polaroid Corp. Shurcliff first became a member of the Cambridge Electron Accelerator Staff in 1960.

The awards, which include a plaque and \$250 honorarium, were presented at the APS General Meeting in Washington, D. C. in April.

National Academy elections

The National Academy of Sciences has elected 59 members and 12 foreign associates. Among the American scientists of interest to physicists are: Kinsey A. Anderson, professor of physics, University of California at Berkeley; R. Stephen Berry, professor of chemistry, The James Franck Institute, University of Chicago; Richard G. Brewer, IBM fellow, IBM Research Laboratory, San Jose, Cal.; George W. Clark, professor of physics, MIT; Marvin L. Cohen, professor of physics, University of California at Berkeley; Sidney R. Coleman, professor of physics, Lyman Laboratories, Harvard University; Cyril M. Harris, Charles Batchelor

Professor of Electrical Engineering and professor of architecture, Columbia University; Frederick Kaufman, professor of chemistry, University of Pittsburgh; Martin D. Kruskal, professor of astrophysical sciences, Princeton University; Joel L. Lebowitz, professor of mathematics and physics, and director of the Center for Mathematical Science Research, Rutgers University; Theodore H. Maiman, vice president for advanced technology, TRW Electronics, Los Angeles, Cal., and Frederick Reines, professor of physics, University of California at Irvine.

The following foreign scientists were among those honored with associate



never put quality second.

When nuclear physicists wanted better detectors, they started their own company to build them. That's us. The first with quality first. And still the company with the R&D team to keep us first.

The first manufacturer to grow germanium. And pass the savings on to you.

Thanks to R&D, we grow all of our germanium. Very high purity Ge for both N and P type detectors. And all able to stay on-the-shelf at room temperature. We also grow the pure driftable germanium for our Ge(Li) detectors. So now that we control both our crystal quality and supply, we can pass the savings and quality on to you. Check our latest stock list.

First with a full line of photon detectors. Including the detectors of the future.

Nobody has a better price/ performance ratio across their line. And it's a broad line, encompassing needs from physics to fusion. There are temperature cyclable detectors of ion-implanted HPGe in both coaxial and low energy photon spectrometry models. Or there's an HPGe well detector, the ultimate geometry for concentrated lowlevel samples. There are Si(Li) detectors for premium performance from 1 keV to 60 keV. And for those of you who could use two detectors in one, there's the detector of the future. The Gamma-X™ combines the performance of an HPGe LEPS and a coax with an energy range from 5 keV to 10 MeV. It has 25 times the neutron radiation damage resistance of other coaxial detectors. And it's temperature cyclable too.

The first streamlined cryostat

You can identify our new cryostats by what isn't there. Our hybrid circuit technology enables us to reduce the size of both preamp and HV filter and tuck them inside. Now it's slim, less than 3" in diameter, for a trim fit in shields

and caves. No electronic boxes to get in the way. Slides open for fast repair or replacement.

First in charged-particle detectors. From here to outer space.

Nobody manufactures more types or better quality charged-particle detectors. We were the first commercial manufacturer, pioneered the technology and set unsurpassed standards of reliability and quality. From spacecraft to mine shaft, we're number one.

First in off-the-shelf selection for immediate delivery.

Typically, over 70 photon detectors and hundreds of charged-particle detectors are fully assembled, tested and ready to ship. Ask for our stock list.

First class service. Including 3-continent manufacture/ repair. So you'll call us first.

EG&G sales offices circle the globe. And there are now manufacture/repair centers in France and Japan, as well as the U.S. So wherever you are, you can get fast answers and fast service. In fact, we even have a toll free Hot Line to make it easier for you to call us first. EG&G ORTEC, 100 Midland Road, Oak Ridge, TN 37830. Instruments Hot Line: 800/251-9750.

LEGEG ORTEC

Circle No. 28 on Reader Service Card

Gamma-X **

HPGe LEPS

Ge(Li) True Coax

HPGe Coax

Ge(Li) EG&G ORTEC Closed End

memberships: Jacques-Emile Blamont, director of the Service d'Aeronomie, Centre National de la Recherche Scientifique, Verrieres-le-Buisson, France; John G. Bolton, division of radiophysics, Commonwealth Scientific and Industrial Research Organization, Epping, New South Wales, Australia, and Paul Erdös, Mathematical Research Institute, Hungarian Academy of Sciences, Budapest, Hungary.

Institute of Physics presents annual awards

The Institute of Physics (UK) awarded a series of prizes at its annual dinner held on 7 May in London. Among those honored were the following eight scientists.

Alan E. Costley, principal scientific officer at the National Physical Laboratory, was awarded the Charles Vernon Boys Prize for his work on the development of rapid-scan Fourier transform spectroscopy for characterizing electron cyclotron emissions from pulsed plasmas. Costley studied applied physics at Brunel University where he earned a BTech in 1968. He did his doctoral studies at NPL and has remained there since earning his PhD in 1976.

The Duddell Medal and Prize was given to Albert V. Crewe of the University of Chicago for his development of an ultra-high resolution scanning transmission electron microscope. In addition to his physics professorship at Chicago, Crewe is dean of the physical science division and member of the Enrico Fermi Institute staff. Crewe received a BSc (1947) and a PhD in cosmic-ray physics (1950) from the University of Liverpool. He lectured at Liverpool until 1955 when he joined the Chicago faculty. From 1961 to 1967 Crewe directed Argonne National Laboratory.

Paul G. Murphy, professor of physics at the University of Manchester, and John J. Thresher, head of high-energy physics at the Rutherford Laboratory shared the Rutherford Medal and Prize for "their contribution to elementaryparticle physics, through the measurement of elastic scattering and polarization differential cross sections for pionproton scattering." Murphy was awarded a bachelor's degree by Cambridge University in 1953, and master's and doctoral degrees by the University of Chicago in 1957. He spent the next two years at the University of Liverpool and the five succeeding years at the Rutherford Laboratory. Murphy has been at Manchester since 1965. Thresher obtained his BSc at Cape Town University and his DPhil in nuclear physics at Oxford University. In 1955 he accepted an appointment at AERE, Harwell, moving to the Rutherford Laboratory a few years later.

The Glazebrook Medal and Prize was presented to Michael C. Crowley-Milling for "the development, design and construction of the multi-computer control system of the 400 GeV proton synchroton at CERN." Crowley-Milling studied mechanical sciences at Cambridge University. In 1943 he received his MA and three years afterward he became leader of the accelerator section of Metropolitan-Vickers Research Laboratory. Crowley-Milling was group leader at Daresbury Nuclear Physics Laboratory from 1963 until 1971, when he joined the CERN staff.

Michael E. Fisher, Horace White Professor of Chemistry, Physics and Mathematics at Cornell University, won the Guthrie Medal and Prize for "his outstanding contributions to the theory of phase transitions and critical phenomena." Fisher graduated with a BSc from King's College, London in 1951. Six years afterwards the same institution granted him a doctoral degree in physics. He remained at King's until coming to Cornell in 1966.

David J. Wallace of the University of Edinburgh physics department was awarded the Maxwell Medal and Prize for "his studies of critical phenomena in statistical physics using quantum field theory." Wallace received a BSc and PhD from Edinburgh. From 1970 to 1972 he was a Harkness Fellow at Princeton University and upon his return from the US, he joined the University of Southampton physics department. In 1979 Wallace was appointed to the Tait Chair of Mathematical Physics at Edinburgh.

Honorary Fellowship of the Institute of Physics was conferred upon Victor F. Weisskopf, Institute Emeritus Professor at MIT. The Institute cited "his theoretical work in quantum electrodynamics, the structure of the atomic nucleus, and elementary particle physics." Weisskopf earned his PhD from the University of Göttingen in 1931. He worked at the Universities of Copenhagen and Zurich until 1937 when he left Europe to join the University of Rochester faculty. Weisskopf stayed there until he was appointed to the Manhattan Project in 1945. In that same year he became associate professor at MIT. From 1960 to 1966 Weisskopf served as director-general of CERN. He received the US Medal of Science in 1979.

The 1979 Washington Academy of Sciences Award in Physical Sciences has been presented to E. Joseph Friebele, research physicist at the Optical Sciences division of the Naval Research Laboratory.

obituary

Allen Goodrich Shenstone

Allen Goodrich Shenstone, Class of 1909 Professor of Physics, Emeritus at Princeton University died on 16 February 1980.

Shenstone was born on 27 July 1893 in Toronto. He was admitted to Princeton in the fall of 1910 (the only Canadian among 400 freshmen) and perhaps as expected of a Canadian, he played on the hockey team. He graduated in June 1914 and was continuing his studies of physics at the Cavendish Laboratory, Cambridge, at the outbreak of World War I. Shenstone immediately joined the British army as a second lieutenant in the Royal Engineers, and participated in most of the major battles on the British front in France from 1915 to 1918. He was promoted to captain and won the British Military Cross for Bravery. Shenstone was demobilized in 1919, after serving as commanding officer of the 56th Field Company of Royal Engineers of the Army of Occupation in Germany. This extensive experience with British comrades in arms, added to his deep British loyalties, led him to maintain his Canadian citizenship throughout a life spent mainly in the United States. Shenstone returned to Princeton and received his MA in 1920 and PhD in 1922. During this period he also spent part of one year at Cambridge working with Sir Ernest Rutherford.

After three years as an instructor at Toronto University, Shenstone returned to Princeton in 1925. So continued his lifelong association with Princeton, interrupted again only by World War II, during which he was a special assistant to the president of the National Research Council of Canada, first as a scientific liaison officer between the Council and American scientific organizations, and later as liaison officer between the Council and British scientific organizations. For this service he was made an Officer of the Order of the British Empire.

The Princeton physics department of the 1920's and 1930's included such notables as Henry D. Smyth, Karl T.