

WE HEAR THAT . . .

government advisory group headed by **Spiro Agnew**. Dessler has been chairman of the Rice University space-science department since 1963.

AEC Cites Three Men for Outstanding Contributions

The Atomic Energy Commission has awarded Lauriston S. Taylor, George B. Darling and Paul M. Gross citations for outstanding service to the national atomic energy program. Taylor, special assistant to the president of the National Academy of Sciences, is honored for his work in radiation protection; Darling's award is for his studies on the delayed effects of radiation on men (he is director of the Atomic Bomb Casualty Commission in Hiroshima); Gross, who helped organize the Oak Ridge Institute of Nuclear Studies and is president of Oak Ridge Associated Universities, is being honored for his work at Oak Ridge.

Visiting professor at the University of California, Riverside, this fall is **Richard J. Eden** of Cambridge University.

Kenneth C. Clark is the new program director for aeronomy in the atmospheric sciences section, division of environmental sciences of the National Science Foundation. Clark, a geophysicist, is on leave from the University of Washington.

William S. Porter has been promoted to professor at Southern Connecticut State College. **John W. Snyder** of Ohio State University and **Lee T. Matthews** of the University of Vermont are new assistant professors.

L. Eric Cross, professor of electrical engineering, and **Heinz K. Henisch**, professor of physics, have been appointed associate directors of the Materials Research Laboratory at Pennsylvania State University.

Craig J. W. Gunsul, formerly at the University of Delaware, has joined the physics department at Whitman College as assistant professor. **James G. Pengra**, of Whitman, is currently visiting at the Nuclear Research Center, Georgia Institute of Technology.

Joseph W. Weinberg has been named Kenan Professor of Physics at Syracuse

University. The Kenan professorships, named for William R. Kenan Jr, were established at five New York universities to improve the quality of undergraduate teaching. Weinberg, a theoretical physicist, was at Case-Western Reserve University before he came to Syracuse.

Dame Kathleen Lonsdale, past president of the International Union of Crystallographers, is visiting professor at the Ohio State University department of mineralogy this fall. Lonsdale is professor of chemistry at the University of London.

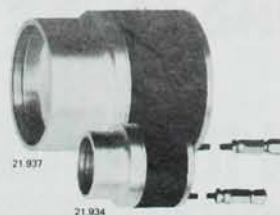
DeShalit of Weizmann Institute Dies at 42

It is our sad task to report that Amos deShalit died of acute pancreatitis on 2 Sept. at the age of 42. His untimely passing is a great loss to his family, to the world of physics, to his institute and country and to the entire world. A brilliant physicist, deShalit was one of the very few who are at home with both experiment and theory. He was a brilliant administrator; while he was head (1954-66), the nuclear physics department at the Weizmann Institute, Rehovoth (Israel) developed into a leading center for the study of nuclear and particle physics, rivaled in its impact by only a handful of other institutions. He was a brilliant educator; since 1963 he had been actively involved in improving science education in Israel, particularly in the



DESHALIT

Piezoelectric Translators



With a Lansing Piezoelectric Translator you can frequency stabilize your laser, examine its power tuning curve, scan an interferometer, or create custom optical control systems.

Most versatile units available

Lansing's Piezoelectric Translators are the most compact, have the best linearity, and the largest apertures — and they cost the least.



The removable mounting cups accept optics as large as 2 inches in diameter. The mounting system insures that the mirror face is normal to the motion.

Easy to mount

Each of the two series of translators mount in Lansing Angular Orientation Devices, and the small units will mount in any 2-inch mirror mount. Tapped holes make custom mounting easy. The translators have OD's of 1.375 inches and 2.375 inches, respectively, with apertures of 0.6 inches and 1.5 inches.

Supporting electronics

Lansing offers three versatile electronic units to be used with the translators to form closed or open loop control systems.

1. **Lock-in Stabilizer** — frequency stabilization of CO₂ and other gas lasers.
2. **High Voltage Ramp Generator** — linear ramp with variable slope, height, bias; for scanning.
3. **High Voltage DC Amplifier** — variable gain, bias; general purpose instrument for high C loads.

Specifications

The translators provide ample travel for use in systems with wavelengths to 10.6μ, without compromising safety or performance.

Series	Travel*	Linearity	Prices
21.800	to 3μ	better than 1%	\$185 - 335
21.900	to 12μ	better than 5%	\$185 - 335

*Used with the Lock-in Stabilizer, with its Mode Jump feature, the effective travel is infinite.

We will be happy to send you complete information about Piezoelectric Translators. Fill in this form and mail it today — or call us at 607-272-3265.

Lansing Research Corporation, 705 Willow Avenue, Ithaca, New York, 14850. (7)

☐ Please send complete free catalog.

Name _____
 Dept. or MS _____
 Company _____
 Street _____
 State _____
 City _____ ZIP _____

Lansing

VEECO HAS MORE THAN 39 BRIGHT IDEAS IN ION GAUGE CONTROLS FOR JUST ONE REASON. YOU



You'll be surprised at how many exclusive design improvements Veeco has incorporated in its new line of modular gauge controls — featuring a wide pressure range and two kinds of degassing. Veeco introduces totally new concepts to achieve compact, low cost, highly reliable packages. Offering true high pressure safety, fail safe operation and accessory control operation. And too many other design improvements to mention in this small space. So; for the complete story, send in your name and address to:



VEECO INSTRUMENTS INC.
Terminal Drive • Plainview, New York 11803
or call: 516/681-8300

CAN YOU ASSUME A MORE RESPONSIBLE POSITION

Our clients, leading national scientific organizations, are seeking scientists of proven ability to assume research and management positions. As these are extremely responsible positions, interested scientists must be able to demonstrate significant scientific accomplishment in one of the following areas:

*infrared . . . nuclear physics . . . thermodynamics
. . . radar systems . . . communications theory
. . . plasma physics . . . semi-conductor research
. . . magnetism . . . thin films . . . inorganic
. . . satellite systems . . . acoustics . . . optics
. . . cryogenics . . . or thermionics.*

Fees and relocation expenses paid by client companies.

If you qualify for these positions offering remuneration up to \$30,000, you are invited to direct your resume in confidence to:

Mr. Vincent A. Nickerson
Dept. PT-12



"EMPLOYMENT SPECIALISTS"
Serving the scientific community for over 40 years.

60 Hickory Drive
Waltham, Massachusetts 02154
(617) 899-6450

POSITIONS AVAILABLE AT THE AMERICAN INSTITUTE OF PHYSICS

The AIP is developing a computerized National Information System for Physics, as described in an article in this issue of Physics Today.

Positions are available for physicists at the PhD and MS levels (or their equivalents) in the information analysis of physics articles, i.e., in evaluating the content of articles for later retrieval from computerized files.

No previous experience in information activities is required. Please send resumes, in confidence to

Dr. Alan Z. Kranz
Information Division
American Institute of Physics
335 E. 45th St.
New York, N. Y. 10017

. . . an equal opportunity employer . . .

secondary schools. This activity was recently made formal by the creation at Weizmann of a department of science teaching that was headed by deShalit. Deeply committed to his country, he was much concerned with the problems of the Arab population.

DeShalit's involvement in world affairs motivated a great many of his activities; he did much to bring together physicists of all countries and political persuasions and helped to organize many international conferences. In July he gave the summary talk at the Heidelberg conference on heavy-ion induced nuclear reactions, and he had been scheduled to participate in a round-table discussion of the future of nuclear physics at an international conference that took place late in August.

He was one of the principal architects of the biennial international conferences on nuclear and high-energy physics; the proceedings of the most recent of these conferences, held at Columbia University, is to be dedicated to his memory. Involved for many years with the problems of developing countries, deShalit was a member of a United Nations advisory committee. At the time of his death he was host to a conference at Rehovoth on "Science and Education in Developing States" and had been scheduled to address it.

This partial list of his activities is a pale reflection of his personal impact; his greatest and unique contribution came from his direct and indirect influence upon friends and colleagues all over the world. Physics became more interesting and exciting to everyone who came in touch with him. His presence made a discussion more fruitful, a seminar more instructive, an experiment more significant. He raised questions and challenged ideas. He brought life and excitement to physics; this was not only because of his great insight, which enabled him to point to the essential ideas and relations, but also because of his readiness to listen and to follow the work of others, his openness to questions, his interest in any thought or idea, his enthusiasm for every new insight and his ability to recognize the significance of an idea.

So many friends had his help in developing their own ideas, help that he gave freely and unsparingly. When he visited laboratories, he left behind the seeds of many successful theories and

experiments. His remarks and suggestions spawned many papers.

DeShalit's own publications are in nuclear physics, although his master's thesis, done in 1949 under Giulio Rcah's direction, was on the self-energy problem. An experimental thesis in 1951 with Paul Scherrer at Zurich began a series of experimental and theoretical papers in which nuclear structure was probed through electromagnetic and weak interactions. DeShalit's fundamental contributions to the understanding and exploitation of the shell model culminated in 1962 with a seminal book that he wrote with Igal Talmi, titled "Nuclear Shell Theory."

He had been interested more recently in the application of tools developed in elementary-particle physics to studies of the nucleus. And, vice-versa, he was using methods developed for the shell model to extract from the electromagnetic properties of elementary particles some of their underlying structure. At the time of his death he had just completed the first volume of a two-volume book on nuclear theory that he was writing with one of us. He was scientific director of the Weizmann Institute from 1962 to 1966 and director-general from 1966 to 1968.

He was a member of IUPAP, one of the correspondents of *Comments on Nuclear and Particle Physics*, and on the editorial board of *Nuclear Physics*, *Annals of Physics*, *Nuclear Data* and *Nuclear Instruments and Methods*.

A member of the Israel National Academy of Sciences and Humanities, he received in 1964 the Israel Prize for the Exact Sciences and in 1969 was elected a foreign member of the American Academy of Arts and Sciences. In recent years he was a visiting professor at Stanford University and the Massachusetts Institute of Technology.

Amos deShalit is no longer among us. We will miss his imaginative insights and bold ideas. We will miss the contagious pleasure he had in physics. We will miss his warm personality, his directness, his ability to create bonds and bridges across political chasms. Men like him are sorely needed, and they are always in short supply; our world will be colder without him.

HERMAN FESHBACH
VICTOR F. WEISSKOPF
Massachusetts Institute of
Technology □

PHYSICON'S TOOLS for ELECTRON & ION BEAM APPLICATIONS



Heavy Ion Source

1 to 260 amu
to 1000 μ A

Ion beams from hydrogen to the heaviest masses can now be formed routinely. The Model 910 produces positive ion beams of most elements from hydrogen to the transuranium group, including the gases, alkali metals, alkaline earths, transition metals and rare earths. It operates on the principle of an oscillating electron ion source. Beams are well defined and may be accelerated further for atomic beam studies, surface effects, ion implantation, target preparation, isotope separation and injection into high energy accelerators.



ION or ELECTRON BEAM SCANNER SYSTEM

An analog transducer for determining exact intensity, profile and position of ion electron beams for an oscilloscope display at the control console. Operates on principle of an intercepting probe, motor driven at 18 cps. Scan amplitude is controllable up to 6" maximum and has a $\pm 30^\circ$ phase adjustment. Scanners are available with single sensors for scanning X or Y, or dual sensors for X and Y. Scanners are available with or without electronics, fiducial markers or vacuum housing. Used on Van de Graaffs, Tandems, Dynamitrons, cyclotrons, isotope separations, mass spectrometers and ionmolecule systems. Manufactured by Danfysik AS.

eV PARTS for ION and ELECTRON OPTICS

in the eV-keV region UHV materials, bakeable; tolerances to .001 inch, by INTERNATIONAL ION SYSTEM CORP.

BEAM PROFILE MONITOR • MAGNET
POWER SUPPLIES • BETA RAY SPEC-
TROMETERS • HEAVY ION ACCELER-
ATORS • ISOTOPE SEPARATORS

Write for Brochures

Physicon Corporation

P. O. Box 9186, Boston, 02114 Mass.
Telephone: (617) 491-7997