

The new head of the Gordon Research Conferences will be **Carl Storm** of Los Alamos National Laboratory, who currently serves as chief scientist in the lab's explosives technology and application division office and program manager for technology development. Storm will retire from Los Alamos and assume his new post around the first of December.

The New York Academy of Sciences presented its 1993 Presidential Award to **Walter H. Munk**, emeritus professor of geophysics at the Scripps Institute of Oceanography of the University of California, San Diego.

Jun Zang of the City College of the City University of New York received the Minoru and Ethel Tsutsui Distinguished Graduate Research Award for "the exceptional originality of research in several frontier topics of condensed matter theory."

Abdumannob Pulatov, chair of the Human Rights Society of Uzbekistan and formerly of Tashkent University, was given the Heinz R. Pagels Human Rights of Scientists Award for his "personal heroism in confronting a brutal dictatorship."

The physics, astronomy and mathematics division of the Special Libraries Association awarded **Henry H. Barschall**, emeritus professor of physics at the University of Wisconsin, Madison, its 1993 P-A-M Award. The award was given for his "contribution to the physics literature via a groundbreaking journal cost study, and in appreciation of his defense of the right to publish and exchange such information."

Barschall also was honored by the Association of Research Libraries in 1990 for "his contributions to research libraries and the scholarly academic community, specifically for his work in analyzing the cost-effectiveness of scientific journals."

Arthur C. Upton received the Lovelace Medical Foundation's 1993 Award for Excellence in Environmental Health Research. The award to Upton, who is a clinical professor of pathology at the University of New Mexico Medical School, recognized

his contributions to "understanding the relationship between the environment and human health."

OBITUARIES

Moti Lal Rustgi

Moti Rustgi, a professor of physics at the University at Buffalo, State University of New York, died of a heart attack on 16 November 1992. He was 63 years old.

Rustgi was born in Delhi, India. He received his BSc and MSc degrees from Delhi University in 1949 and 1951, respectively. He obtained his PhD in physics at Louisiana State University in 1957, after which he went on to postdoctoral positions at Yale University; the National Research Council in Ottawa, Canada; and Harvard University. He returned to India as a reader in physics at Banaras Hindu University from 1961 until 1963; he was an assistant professor of physics at the University of Southern California for a year before moving once more to Yale. He joined the University at Buffalo as an associate professor in 1966 and was promoted to full professor in 1968.

The bulk of Rustgi's work was in atomic and nuclear physics. He worked on electromagnetic interactions with nuclei, the nucleon-nucleon interaction, parity violation in nuclei and the structure of nuclei, as well as the scattering of high-energy particles from nuclei. His favorite topic was undoubtedly the photodisintegration of the deuteron. In atomic physics he worked on relativistic radiative transitions, atomic form factors, atomic ionization and the stopping power of matter at high energies.

In the last decade Rustgi's interests broadened into other areas: the absorption of rf and microwave radiation in biological systems; Monte Carlo calculations for the electron spectrum produced by photons in materials of interest to health physicists; and studies of quantum well structures in semiconductors.

Rustgi was an outstanding citizen of the University at Buffalo. He was

highly regarded as a teacher and gave freely of his time in service to the university. Most recently he had served as director of graduate studies for the physics department. He was well liked by the students and in turn was extremely devoted to them.

Beyond all of this, Moti Rustgi was an extremely good-natured and kind person, always concerned with the welfare of others. He leaves behind a great many friends and admirers.

MICHAEL FUDA
BRUCE MCCOMBE

*The University at Buffalo,
State University of New York*

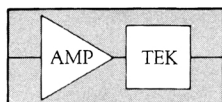
Mark Rasolt

Mark Rasolt died suddenly on 24 November 1992 as he was returning from a conference in Australia. He was 49 years old.

Mark was raised in New Jersey. He graduated with honors in electrical engineering from Stevens Institute and took his PhD in physics under Neal Ashcroft at Cornell in 1971. He subsequently worked at the National Research Council of Canada, at the University of Toronto, at Battelle Institute at Columbus and finally, from 1978 on, in the solid-state division at the Oak Ridge National Laboratory.

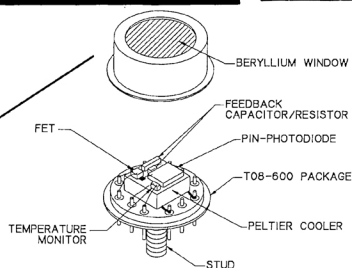
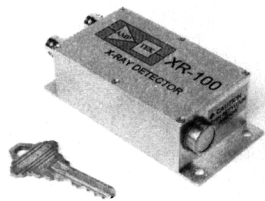
Mark spent his early professional years working on the theory of many-body effects in electronic systems. He soon broadened his interests and made important theoretical contributions in a number of areas. These included surface physics, critical phenomena, electron density functional theory in magnetic fields, the quantum Hall effect, the dilute Bose gas, high- T_c superconductivity, and superconductivity and other phenomena in very high magnetic fields.

Mark was a very exacting man. He invoked symmetry, simplicity and beauty to understand nature and honesty to deal with people. Wherever he went, Mark saw the sights, drank wine in the bars and cafés, and went to the symphony or the opera if there was a performance. His approach to new problems in physics was as creative and unrelenting as



X-RAY DETECTOR WITH 750 eV RESOLUTION

XR-100



FEATURES

- Si-PIN Photodiode
- Peltier Cooler
- Cooled FET
- Amptek A250 Preamp
- Temperature Monitor
- Beryllium Window
- Hermetic Package (TO-8)

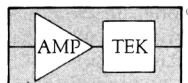
APPLICATIONS

- X-Ray Fluorescence
- Medical X-Ray Detectors
- X-Ray Lithography
- Portable X-Ray Instruments
- X-Ray Research
- Mossbauer Spectrometers
- X-Ray Space and Astronomy

Model XR-100 is a new high performance X-Ray Detector, Preamp, and Cooler System using a Si-PIN Photodiode as an X-Ray detector mounted on a thermoelectric cooler. On the cooler are also mounted the input FET + RC feedback components to the Amptek A250 charge sensitive preamp, and a temperature monitor. The hermetic TO-8 package of the detector has a light tight, vacuum tight 10 mils (0.25 mm) Beryllium window to permit soft X-Ray detection.

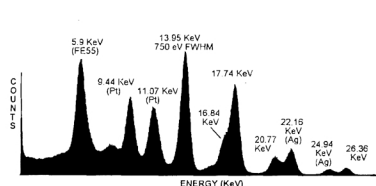
WORLD-WIDE SALES

DIRECT FROM THE FACTORY



All the critical connections between detector and preamplifier have been made internally to the XR-100 to ensure quick, first-time operation by the user. The cooler maintains the internal components at -30°C in order to minimize the leakage current of the detector and input FET. The output of the XR-100 can either connect to the Amptek A275 post amplifier/shapers or to a standard NIM shaping amplifier before connecting to a Multichannel Analyzer (MCA). The XR-100 is provided complete with BNC connectors and power cable. The system resolution for the 13.95 keV (Am^{241}) is 750 eV FWHM, for the 5.9 keV (Fe^{55}) is 710 eV FWHM, and for the 14.4 keV (Co^{57}) is 680 eV FWHM.

Am^{241} and Fe^{55} Spectra with the XR-100



AMPTK INC.

6 DE ANGELO DRIVE, BEDFORD, MA 01730 U.S.A.

TEL: 617-275-2242

FAX: 617-275-3470

Circle number 116 on Reader Service Card

Measurement Errors Theory and Practice

Semyon Rabinovich

This volume offers practical recommendations and procedures for problems related to the estimation of measurement errors. The author covers a wide range of subjects, including classical concepts of metrology, modern problems of instrument calibration, estimation of single and multiple measurement errors, and modern probability-based methods of error estimation. A valuable resource for graduate students, applied physicists, and engineers.

284 pages, cloth, ISBN 0-88318-866-X

\$100.00 (Member price \$80.00)

Please indicate your AIP Member Society when ordering.

To order, call 1-800-488-BOOK

In Vermont: 1-802-878-0315. Fax: 1-802-878-1102

Or mail check, MO, or PO (plus \$2.75 for shipping) to:

**AMERICAN
INSTITUTE
OF PHYSICS**

**American Institute of Physics
c/o AIDC, 64 Depot Road
Colchester, VT 05446**

his handwriting was atrocious. At ORNL, we cannot replace him. His collaborators elsewhere will share our loss of a friend.

TED KAPLAN

MARK MOSTOLLER

Oak Ridge National Laboratory

Oak Ridge, Tennessee

David Lichtman

David Lichtman, a member of the department of physics at the University of Wisconsin, Milwaukee, passed away on 11 September 1992.

Born in 1927 in Brooklyn, New York, David received his academic training at the City College of New York and Columbia University.

After completing his education, David worked at Airborne Instruments Corp, Sperry Gyroscope Company and the Honeywell Corporate Research Center. He also was an instructor at Adelphi College in Garden City, New York, and was responsible for establishing a fruitful relationship between Adelphi and Sperry. He joined the physics faculty at Milwaukee in 1967.

Throughout his academic career, David primarily studied solid surfaces at the atomic and molecular level. His investigations into physisorption and his discovery of electron-induced negative-ion desorption are among his contributions to surface science.

In 1982-83 David served as a member of the board of the directors of the American Vacuum Society. Under the auspices of the education committee of AVS, David coauthored the book *Partial Pressure Analyzers and Analysis* (1980), which remains the definitive work in its field.

During his tenure at Milwaukee, David was instrumental in the creation of the Surface Studies Laboratory, and he served as its director from 1968 to 1974.

David was a charismatic, thoughtful and thorough teacher. His favorite classes were for undergraduate students who were not physics majors. He delighted in showing such students how science affected and enriched their lives.

David's integrity and deep intellect were complemented by his warm personality and sense of humor. His concern for the "common good" resulted in numerous procedures, facilities and conventions from which we, his colleagues, benefited.

RICHMOND B. MCQUISTAN

University of Wisconsin, Milwaukee ■