we hear that

awarded the Guthrie Medal and Prize "for his outstanding contributions to the study of surfaces."

J. Robert Oppenheimer Prize awarded to Nicholas Kemmer

The University of Miami's center for theoretical studies has presented the J. Robert Oppenheimer Memorial Prize to Nicholas Kemmer of the University of Edinburgh, Scotland. Kemmer received the award—a gold medal, citation, and $1000—for his role in the discovery of certain regularities and symmetries in the classification of elementary particles.

Kemmer, a USSR native, studied at the universities of Zürich and Göttingen under Max Born and Gregor Wentzel. He earned his PhD in 1936 and has taught at Imperial College in London, Cambridge University and the University of Edinburgh where he is the Tait Professor of Mathematical Physics.

Bernard R. Cooper has become Claude Worthington Benedum Professor of Physics at West Virginia University. Cooper was formerly with General Electric Research and Development Laboratories, Schenectady, New York.

John J. White III has been appointed research scientist at Battelle Columbus Laboratories, Columbus, Ohio.

Simon C. Moss has been appointed professor of physics at the University of Houston. **John T. Ho** and **Ed V. Hungerford** have joined the department as associate professors, and **Joseph McCauley, Alex Ignatiev** and **William R. McIntire** have been appointed assistant professors.

John B. Gruber, Washington State University professor of chemical physics, has been named dean of the college of sciences and mathematics and professor of physics at North Dakota State University in Fargo.

New assistant professors of astronomy at Boston University are **Saul J. Adelman, Lucas W. Kamp** and **Michael Mendillo.**

obituaries

Darrell J. Drickey

Darrell J. Drickey, professor of physics at the University of California at Los Angeles and an internationally known elementary-particle physicist, died on 10 December at the age of 40. At the time of his death he was on leave from UCLA to work on the development of the energy doubler at the Fermi National Accelerator Laboratory in Illinois.

Drickey spent his boyhood on the family ranch outside of Rapid City, South Dakota, where work and play could be pursued with an intensity limited only by one's innate abilities and capacities. In later years he enjoyed talking about life on the ranch and contrasting this with his experiences as a teacher and a scientist. His region of South Dakota was so recently settled that it was possible during his boyhood to talk directly to the men who settled it as pioneers. This had a great influence on his outlook toward both physics and life. He was aware of life's complexities but also knew that seemingly insurmountable difficulties can be overcome. Above all he learned to understand people and knew how to improvise in carrying out his work.

After graduating from the South Dakota School of Mining and Technology in 1956 Drickey went to Stanford

DRICKEY

University as a physics graduate student. While at Stanford he worked for a period as accelerator operator at the Mark III Electron Accelerator, gaining a unique perspective and the excellent rapport with the accelerator staff that characterized all of his work. During the completion of his thesis project on neutral pion photoproduction using po-

obituaries

larized gamma rays he branched out on his own to perform an experiment measuring the neutron charge radius to a precision previously unattained and still quoted in the literature.

After completing his thesis Drickey spent a year at the linear accelerator in Orsay, France, continuing his electron-scattering experiments. He mastered French and was able to develop the same rapport with the French technicians and physicists that had characterized his work at Stanford.

He returned the next year to the Stanford Linear Accelerator Center as a research associate in the group developing a large streamer chamber for photoproduction studies. He helped in this work particularly in the first operation of the chamber. During his stay at Stanford Drickey also commuted to Brookhaven to work on a muon-pair experiment and started a program using the high-quality SLAC K° beam.

In 1968 he left SLAC to accept a professorship at UCLA. Here he combined teaching with physics research both at SLAC and Brookhaven and characteristically involved students at all levels in his research projects.

In 1970 Drickey became the leader of the first joint Soviet–American collaboration (sponsored by the USSR State Committee on Atomic Energy and the US Atomic Energy Commission) working at the 77-GeV proton accelerator at Serpukhov in the Soviet Union, at that time the highest energy accelerator in the world. The group of American and Soviet scientists led by Drickey made the first measurement of the size of the pi-meson.

His last job brought him to the Fermi National Accelerator Laboratory in Batavia, Illinois, on a year's leave from UCLA to work on the energy doubler, a plan to double the energy of the Fermi Lab accelerator to 1000 GeV using superconducting magnets. Although he worked on the project only a few months, during which time he also became head of the Fermi Lab users' executive committee, he was extremely effective in finding simple solutions to complex problems. The project was beginning to gain coherence and momentum.

Drickey was a superb experimental physicist, able to improvise with real genius during the frequently tense conditions that prevail at large accelerators. He inspired the best performances of those who worked with him. His interests were very broad, ranging far outside his own speciality in physics; he was an expert outdoorsman enjoying hunting, fishing, and camping with the same enthusiasm he approached his scientific work. He was proud of giving

seminars in French and had a deep interest in old Russian ikons. He loved and understood people of all types.

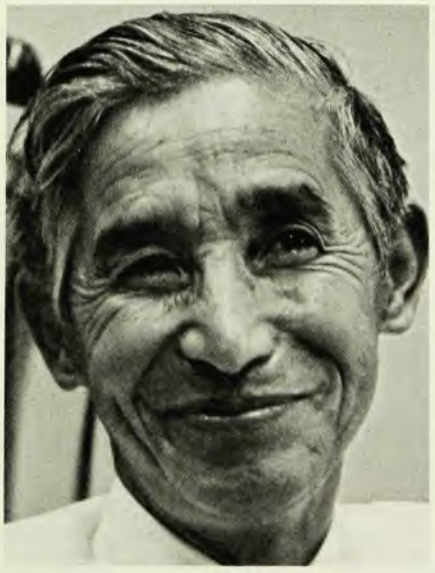
LOUIS N. HAND
Cornell University
Ithaca, New York
ROBERT F. MOZLEY
Stanford University
Stanford, California

Masaru Ogawa

Masaru Ogawa, professor of physics at the University of Southern California, died unexpectedly on 23 December at the age of 55. Although he received his formal education in Japan, culminating in his doctoral degree on the analysis of NO emission bands, he did nearly all of his extensive research in vacuum uv spectroscopy after he came to the US in 1956, at the Air Force Cambridge Research Laboratory in Bedford, Mass. and the Aerospace Corp in Los Angeles.

He will be remembered best for his careful work on the absorption cross sections of many gases, and especially for his fairly recent ingenious absorption measurements on O_2 in its metastable state. In addition, he made particularly valuable contributions to the early work on mass spectrometric analysis of photoionization products, on fluorescence from ions produced by photon absorption and on the analysis of absorption spectra of many molecules, including their vibrational and rotational band structures. In this latter connection, Ogawa's most recent work led to a better understanding of the energy states of oxygen and other molecules of the atmospheric gases.

His students, ranging from doctoral candidates to freshmen, as well as his



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