William W. Graessley, a professor of chemical engineering at Princeton University

Arthur H. Heuer, Kyocera Professor of Ceramics at Case Western Reserve University

John C. Houbolt, an associate at Eagle Engineering Inc in Hampton, Virginia

Daniel D. Joseph, a professor in the department of aerospace engineering and mechanics at the University of Minnesota, Minneapolis

Charles K. Kao, vice chancellor of the Chinese University of Hong Kong Robert H. Kingston, a senior lecturer of electrical engineering at MIT

Edwin E. Kintner, executive vice president of GPU Nuclear Corporation in Parsippany, New Jersey

Tung-Hua Lin, a professor emeritus of civil engineering at the University of California, Los Angeles

Franklin F. Offner, a professor emeritus of biomedical engineering and biophysics at the Robert McCormick School of Engineering and Applied Science of Northwestern University

Bradford W. Parkinson, a professor in the aeronautical and astronautical department and at the High Energy Physics Laboratory of Stanford University

Arno A. Penzias, vice president for research at AT&T Bell Laboratories in Murray Hill, New Jersey

William R. Prindle, associate director of research, development and engineering at Corning Glass Works in Corning, New York

Murray W. Rosenthal, deputy director of Oak Ridge National Laboratory in Oak Ridge, Tennessee

T. W. Fraser Russell, Allan P. Colburn Professor of Chemical Engineering, chairman of the chemical engineering department and director of the Institute of Energy Conversion at the University of Delaware, Newark

Charles E. Treanor, retired vice president and chief scientist of Calspan Corporation and director of Calspan-UB Research Center in Buffalo, New York

Walter K. Victor, retired assistant director of the Jet Propulsion Laboratory in Pasadena, California

David A. Woolhiser, a research hydraulic engineer at the US Department of Agriculture Research Service in Tucson, Arizona.

The new foreign associates of the engineering academy include Zhores I. Alferov (mentioned above) and Michael F. Ashby, Royal Society Research Professor at Cambridge University in England.

## IN BRIEF

The University of Iowa is forming a new high-energy theory group, consisting of the newly appointed faculty members Vincent G. J. Rogers, Mary Hall Reno and Yannick Meurice. Rogers, who had most recently been a postdoctoral research associate at the Institute for Theoretical Physics of the State University of New York at Stony Brook, became an assistant professor at Iowa last fall. Reno and Meurice, both visiting professors of physics at the Centro de Investigación y Estudios Avanzados del IPN in Mexico City, will join Rogers as assistant professors at Iowa in the fall.

K. V. Rao has been appointed to a newly created chair of condensed matter physics at the Royal Institute of Technology in Stockholm, Sweden. Most recently Rao was a senior scientist at the 3M Corporation in St. Paul, Minnesota, and before that he was an associate professor of physics at the University of Illinois at Urbana-Champaign.

## **OBITUARIES**

## Richard C. Lord

Richard Collins Lord, professor emeritus of chemistry and former director of the spectroscopy laboratory at MIT, died peacefully at home on 29 April 1989 at the age of 78. Lord was well known to the physics community, having served as president of the Optical Society of America in 1964.

Lord was born in Louisville, Kentucky, on 10 October 1910, and was educated at Kenyon College in Gambier, Ohio (BS 1931), and the Johns Hopkins University (PhD 1936).

Richard C. Lord



After two years as a postdoctoral fellow in chemistry, he returned to Johns Hopkins in 1938 to begin his teaching career. In 1942 the National Defense Research Committee called Lord to MIT, where he served as a technical aide and later as deputy chief of the committee's optics division. In 1946 Lord accepted a position at MIT as associate professor of chemistry and director of the spectroscopy laboratory. He became a full professor in 1954.

Lord had a distinguished career. A pioneer in many areas of vibrational spectroscopy, he did notable work in the use of infrared spectra to study the structure of molecules and was one of the first to use the far-infrared region for that purpose. Later he was a leader in using lasers to obtain Raman spectra of proteins and other biologically important substances. In his 30 years as director of the MIT spectroscopy laboratory, he guided the facility with distinction and maintained it as one of the world's great centers for spectroscopy research. He was also an exemplary teacher, earning the admiration and affection of his many students.

In 1948 Lord coauthored with the late George R. Harrison and John R. Loofbourow the widely used text *Practical Spectroscopy*. He wrote one other book, was the optics editor for the *McGraw-Hill Encyclopedia of Science and Technology*, and published 150 technical papers and several individual book chapters.

In 1950 Lord established the MIT summer infrared course, the first postgraduate training course in infrared spectroscopy. In its 22 years at MIT the course trained over 2000 industrial and academic research scientists from many parts of the world. In 1972 the course was moved to Bowdoin College in Brunswick, Maine, where it is still being given today. Lord was also a cofounder (with Elkan Blout) of the Gordon Research Conferences on infrared spectroscopy, and he organized the first of these in 1954. He was an officer of several international organizations that supported optics, spectroscopy and chemistry. Lord was also on the editorial boards of five journals and served as spectroscopic consultant to the Du Pont Company for 32 years (1948-80). When he retired from MIT in 1976, a more complete biography and description of his contributions appeared in the Journal of Physical Chemistry (80, 1A, 1976).

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