

cal transfer function, interferometry, coherent light and the performance of the eye.

Gary K. Loda, formerly with Physics International Co, San Leandro, California, has joined the newly formed San Francisco division of Systems, Science and Software as a senior staff scientist.

At Battelle Memorial Institute in Columbus, Ohio, **Ronald S. Paul**, formerly director of the pacific northwest division, has been appointed vice-president of operations. **John M. Batch**, the former associate director of the pacific northwest laboratories at Richland, Washington, is now director of Battelle's Columbus division. **Donald L. Keller** has been promoted to manager of the newly created nuclear-technology section at the Columbus laboratories.

Victor Fargo, of Lockheed Missiles and Space Co, has been appointed manager of research and development projects at Maxwell Laboratories, Inc in San Diego, California.

The new head of the RCA solid-state division is **Bernard V. Vonderschmitt**, who was formerly vice-president of the solid-state integrated circuits division.

The American Telephone and Telegraph Company has announced extensive executive changes at Bell Labora-

tories. **James B. Fisk**, the former president of Bell Labs, has been elected chairman of the Board of Directors. **William O. Baker**, vice-president, Research and Patents, succeeds Fisk as president and also becomes a member of the Board of Directors. Continuing as a member of the Board of Directors, **Kenneth G. McKay** has moved from vice-president, Engineering Department, AT&T, to executive vice-president of Bell Labs. **Jack A. Baird**, former vice-president of Network Planning and Customer Services, succeeds McKay as vice-president of the Engineering Department at AT&T and has been elected a member of the Board of Directors.

Previously executive director of the Research Materials Science and Engineering Division at Bell Labs, **N. Bruce Hannay** is the new vice-president of Research and Patents. **Ian M. Ross**, executive director, Network Planning Division, becomes vice-president, Network Planning and Customer Services. The former Chemical Director, **William P. Slichter**, has become executive director, Research, Materials Science and Engineering Division. **Irwin Dorros**, director of the Facilities Network Planning Center, has been named executive director of the Network Planning Division.

Robert Alan Frosch, a theoretical physicist formerly with the Navy Department, has been appointed assistant executive director of the United Nations Environmental Program.

obituaries

Walter C. Hamilton

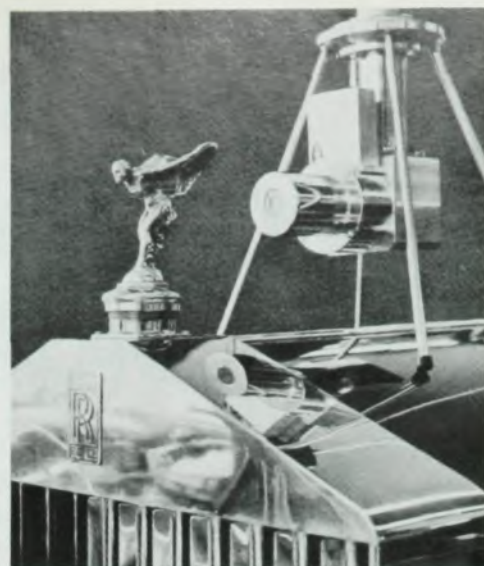
Walter C. Hamilton, a senior chemist and deputy chairman of the chemistry department at Brookhaven National Laboratory, died on 23 January at the age of 41. He was internationally known for his work in mathematical crystallography and for the applications of diffraction techniques to problems in chemistry and biology.

Hamilton, who was born in Austin, Texas and reared in Stillwater, Oklahoma, received his BS in chemistry from Oklahoma A&M in 1950. The following year he attended the Eidgenössische Technische Hochschule in Zurich as a Swiss Government Fellow. Upon his return to the US in 1951 he entered graduate school at the California Institute of Technology where he received his PhD in chemistry in 1954, working under the direction of Verner Schomaker. During the 1954-55 academic year he was a National Science Foundation postdoctoral fellow, work-



HAMILTON

ing in the Mathematical Institute at Oxford University with Charles Coulson. In September, 1955 Hamilton



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joined Brookhaven National Laboratory as a research associate. He subsequently was named associate chemist, chemist, and senior chemist. He was appointed deputy chairman of the chemistry department in 1968.

During his years at Brookhaven Hamilton was responsible for developing a group that was one of the foremost in the world in the applications of neutron diffraction techniques to the solution of important problems in chemistry and biology. His classic work on hydrogen-bonded systems has been of utmost importance to modern chemistry and biochemistry. At the time of his death he had nearly completed a systematic study of the precise molecular and crystal structures of the naturally occurring amino acids, the building blocks of proteins.

Hamilton's mathematical abilities were unusual. Though trained as a chemist, the first of his three books, *Statistics in Physical Science* (1964), is purely mathematical in content. It displays his unusual talents for making mathematics intelligible and usable for those less gifted than he. Concomitant with his mathematical abilities were his considerable program talents. During Hamilton's career at Brookhaven he wrote a number of computer programs that are in general use within the scientific community. He was instrumental in developing the computer-controlled diffractometer system at the High Flux Beam Reactor at Brookhaven, wherein several diffractometers are controlled by a time-sharing computer. At the time of his death Hamilton was actively engaged in the problems of remote computing and display, attempting to develop the Brookhaven computer as the center of a network that would serve the crystallographic community.

Hamilton was both a superb scientist and a superb administrator. Included in his many administrative contributions to crystallography were his presidency of the American Crystallographic Association in 1969 and his long-term position as co-editor of *Acta Crystallographica*. In 1969 he was local chairman for the Eighth General Assembly and Congress of the International Union of Crystallography held at SUNY, Stony Brook.

These basic facts do not provide a true measure of the important role that Hamilton served within the scientific community. He was ever enthusiastic and generous. He gave freely of his time to help others in their scientific work. His skills were always evident when difficult scientific problems arose in private discussions or at meetings. But more important than being a

highly esteemed colleague to those of his age and experience, he was a continual source of inspiration to aspiring young scientists, primarily because of his enthusiasm and his gentle nature. He was that rare type of individual who could communicate with young and old alike and infect them with his enthusiasm for work well done.

JAMES A. IBERS
Northwestern University

Howard Jerry Foster

Howard Jerry Foster, chairman of the department of physics and mathematics at Alabama A&M University, died on 23 January 1973. At the time of his death Foster was on the advisory board of the Danforth Foundation, Trustee for the Roxbury Medical-Technical Institute of Boston, Massachusetts, and a member of the American Physical Society's Committee on Minorities in Physics.

Howard was a school "dropout." After serving in the Armed Forces, he returned to earning a living and then entered high school, earned some support as a gospel singer, and attended college at Fisk University, Nashville Tennessee, where he earned the BA (*magna cum laude*) and MS degrees (straight "A" average) in physics. In 1964 he received a PhD in physics from



FOSTER

the Catholic University of America, with special citation for outstanding academic performance. Prior to joining the staff at Alabama A&M University in 1965, Foster held a position as solid-state physicist in the Institute for Materials Research at the US National Bureau of Standards. He also held many consulting and part-time professional positions, including among them



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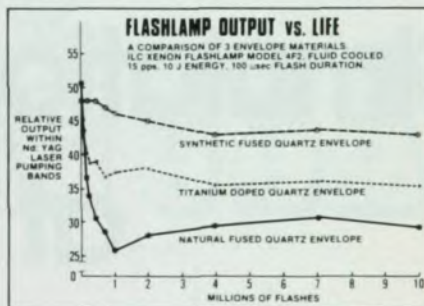
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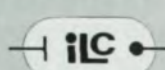
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