

ognition of contributions to astronomy, physics and applied mathematics.

Van Vleck Recipient of National Science Medal

John H. Van Vleck, Hollis professor of mathematics and natural philosophy at Harvard University was awarded a national Science Medal for his extensive contributions to the theory of the magnetic and dielectric properties of materials and also for his role in the development of the theory of molecular structure.

U. of Washington Professor Boris A. Jacobsohn Dies

Boris A. Jacobsohn, 48, professor of physics at the University of Washington, Seattle, died 26 December of a heart attack while skiing. Born in New York City, Jacobsohn received his BS and MS degrees from Columbia University in 1938 and 1939 respectively. During the early stages of the atomic bomb project at Columbia, he worked under Enrico Fermi and then moved with him to Chicago. Jacobsohn received his PhD at Chicago in 1947 for a thesis carried out under Edward Teller. In 1948 after an instructorship at Stanford University he joined the faculty of the University of Washington. He was appointed full professor there in 1959.

During periods of leave he was a member of the Institute for Advanced Study, a NATO fellow at CERN and the Institute of Theoretical Physics at Utrecht, and a visiting professor at the University of Vienna. He was the author of theoretical publications in astrophysics, nuclear physics, elementary particles, magnetism and many-body physics. His early contributions to the study of muonic atoms are still of great importance. He was also known for his theoretical studies of tests for time reversal invariance in strong and electromagnetic interactions. He was a fellow of the American Physical Society and a member of the American Association of Physics Teachers.

Jacobsohn found ideas and problems in all kinds of physical situations but to him physics was an endeavor full of human relationships. Teaching was an important part of his life and

his students were devoted to him. He made friendships with physicists throughout the world. He also was willing to be involved in social issues as exemplified in a general way by his membership in the Federation of American Scientists and in a specific instance when he was one of the plaintiffs before the United States Supreme Court in the recently successful challenge to Washington State's loyalty oaths.

Friends will miss Boris Jacobsohn, a fully rounded person who enriched their lives with his great vitality, warmth, humor and dedication.

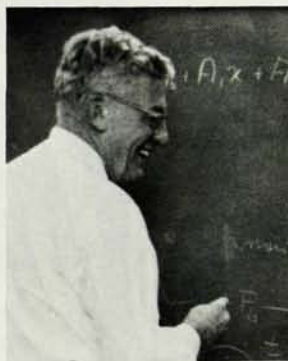
R. Geballe

E. M. Henley

University of Washington

Arthur Lindo Patterson; Crystal-Structure Analyst

The originator of the Patterson function, for many years an essential part of nearly every crystal-structure analysis, Arthur Lindo Patterson, died of a cerebral hemorrhage on 6 Nov. at the age of 64. He was head of the department of molecular structure at the Institute for Cancer Research and also professor of biophysics at the University of Pennsylvania.



PATTERSON

Most of the presently available wealth of information about interatomic arrangements in solids has been obtained through the application of the Patterson method to crystal-structure analyses. This includes our knowledge of complex biological molecules, such as penicillin, DNA and hemoglobin.

Patterson was born in Nelson, New Zealand, on 23 July 1902, and became an American citizen in 1945. He was

educated at Tonbridge School in England. In 1923 he received a BSc and in 1924 an MSc at McGill University in Montreal. He then went to work with Nobel laureate Sir William H. Bragg, at the Royal Institution, London, from 1924 to 1926, under a Moyse traveling fellowship from McGill. From there he went to the Kaiser Wilhelm Institute in Berlin as a National Research Council of Canada fellow, where he met and talked with Max von Laue, Albert Einstein, Max Planck and Walther Nernst. He then went back to McGill where he received his PhD in 1928 and lectured in physics. He was an associate in biophysics at the Rockefeller Institute, New York, from 1929 to 1931 and then worked at the Johnson Foundation, Philadelphia, from 1931 to 1933.

During his time in Germany he developed the idea that something could be learned about molecular-structure analysis from Fourier theory. He was so convinced of this that he spent three years doing private research at MIT from 1933 to 1936. This resulted in his famous paper (*Phys. Rev.*, 1934) on the interpretation of the $|F^2|$ series (so called by him, but generally referred to as the "Patterson function").

In 1936 he became assistant professor of physics at Bryn Mawr College and in 1940 associate professor. Here he wrote a textbook, *The Elements of Modern Physics*, with Walter C. Michels. During World War II in 1944 and 1945 he worked as a physicist at the Naval Ordnance Laboratory in Washington, D. C. In 1949 he left Bryn Mawr to start an x-ray-diffraction group at The Institute for Cancer Research, Philadelphia.

He was a member of the executive committee of the division of physical sciences of the National Research Council and of the executive committee of the International Union of Crystallography. A member of the US national committee for crystallography for several years, he was its chairman in 1948-50. It was in large part through Patterson's patience and tact that the amalgamation of the American Society for X-Ray and Electron Diffraction and the Crystallographic Society of America was achieved with the formation of the American Crystallographic Association.

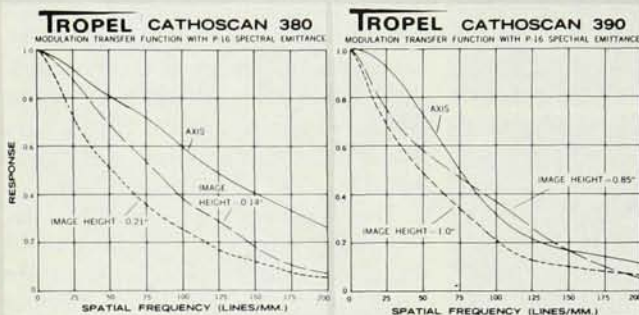
In the course of his research he

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trained many crystallographers who have gone to other laboratories and universities to become valued members of the profession. To his students, his colleagues and scientists throughout the world he was known and loved for his personal charm, his rich sense of humor and firm integrity. Some part of this is felt in rereading his "Experiences . . ." in *Fifty Years of X-ray Diffraction*.

• • •

Dr. Patterson's obituary was contributed by some of his friends and colleagues.

Isaak Ya. Pomeranchuk, Soviet High Energy Theorist

The Soviet physicist Isaak Ya. Pomeranchuk, professor at the Moscow Physics and Engineering-Physics Institute, died recently at the age of 53. He made substantial contributions to the theory of neutron scattering in crystals, the theory of heat conductivity of dielectrics and the interaction of cosmic ray electrons with the earth's magnetic field. For the last two decades, however, his primary concern was high energy physics. His name has been given to the Pomeranchuk theorem which states that particle and antiparticle scattering cross sections will become identical at high enough energies. The Regge trajectory which satisfying this theorem is also commonly referred to as the Pomeranchuk trajectory.

Pomeranchuk graduated from the Leningrad Polytechnic Institute in 1936 and worked in various departments of the USSR Academy of Sciences until 1946 when he joined the faculty of the Moscow Physics and Engineering-Physics Institute. In 1953 he became a corresponding member of the USSR Academy of Sciences, and two years later he became a full member. He was the recipient of a Stalin prize.

George Christos Dousmanis Solid State Physicist at RCA

George Christos Dousmanis died recently of a heart attack. He was 37 years old. A graduate of Columbia University where he obtained his BA in 1951, MA in 1953 and PhD in

1956, he had been a member of the technical staff of the solid-state research laboratories of the Radio Corporation of America since 1956. In 1962 he took a year's leave to be visiting professor at the Democritus Nuclear Research Center in his native Greece. His research interests in solid state physics were concerned with cyclotron resonance studies and more recently with injection lasers.

Dousmanis's life was a success story that started on a simple farm in the Peloponnesus of Greece. When he was ready for college, he left Greece for Columbia University carrying \$50 for his expenses. Arriving in New York with \$49.50 left, he soon realized that the remainder would not see him through a college career and immediately looked for a job. Limited by inadequate knowledge of English, he took one as a dishwasher at Tavern on the Green, a restaurant in New York's Central Park. While he progressed at Columbia through undergraduate and graduate studies leading to his PhD in physics, he progressed at the restaurant from dishwasher to busboy to waiter to head waiter.

He is survived by his widow, two sons and a daughter.

John H. Wadell III, Was Solar Physicist

On 14 Nov. John Henry Waddell III was killed in an automobile collision. Mechanical malfunction was believed to have caused the accident.

Waddell, a Kitt Peak Observatory astronomer, was born in Harrisburg, Pa., in 1928. He received his PhD from the University of Michigan in 1957 and then joined the staff of the Smithsonian Astrophysical Observatory. Before joining Kitt Peak in 1961, he was solar astronomer at Sacramento Peak Observatory.

A leading solar astronomer with special interests in observations of the photosphere and chromosphere, Waddell had recently delivered a paper at an international meeting in Moscow and had just completed a postdoctoral fellowship at the institute of advanced studies of the School of Theoretical Physics in Dublin. He was a member of the American Astronomical Society and a fellow of the Royal Astronomical Society. □

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