

with first-class honours in physics, and was awarded the Granville scholarship. After taking his degree, he began research on electron diffraction under Prof. E. N. da C. Andrade, who was much impressed by his character and ability.

At the beginning of the Second World War, Jay joined the Air Ministry Telecommunications Research Establishment (later the Royal Radar Establishment). It was here that his abilities as a writer first came to notice, and after a short spell of experimental work he was attached to the chief superintendent, Mr. A. P. Rowe, to prepare the establishment progress report and other documents. Rowe attached great importance to presenting technical information to the layman in an intelligible form, and he would not tolerate jargon; his views undoubtedly left their mark on Jay's future career. When the Telecommunications Research Establishment moved to Malvern, Jay set up an information room, where all forms of graphical presentation were used to bring out the contribution of radar to the successful conduct of the War. During this period Jay did much to strengthen the chain of communication which was so successfully established between the scientists in the Telecommunications Research Establishment and the serving officers in the Royal Air Force.

In 1945 Jay went to the Cabinet Office to work on the *Official History of the War*. There he conducted the researches and composed the narrative relating to the history of radar, which was incorporated in the volume on the *Design and Development of Weapons*.

Three years later, Jay joined the Atomic Energy Research Establishment at Harwell as information officer, and in this post he laid the foundation of the present information service. However, he retained his interest in the more popular presentation of scientific information, and when the declassification of atomic information began to gather momentum in 1951, he put forward a proposal for a book on the work of the Atomic Energy Research Establishment. This was published in 1952 under the title *Harwell, the British Atomic Energy Research Establishment*; it was the first serious description of post-war nuclear research in the United Kingdom, and was an immediate success. This success led to Jay's transfer to a full-time, scientific-writing post, and in the next few years there followed four more books: *Britain's Atomic Factories* (1954), *Atomic Energy at Harwell* (1955), *Calder Hall* (1956) and *Nuclear Power Today and Tomorrow* (1961). Although the visits to distant establishments were a serious physical burden, he perhaps most enjoyed writing the books on the factories and Calder Hall, where an account of the scientific principles involved was combined with a fascinating story of engineering initiative and enterprise.

In addition to these major works, Jay was responsible for many years for writing the chapters dealing with research in the Atomic Energy Authority's annual report, and for a series of progress reports on activities at the Atomic Energy Research Establishment prepared for internal use in the Authority. He also wrote an introductory chapter to the first volume of Mrs. M. Gowing's official history of the United Kingdom atomic energy project, *Britain and Atomic Energy, 1935-45*.

In all his writing Jay took immense pains both to keep in mind the needs of his readers for a clear and simple exposition, and also to preserve scientific accuracy. In this way he was able to achieve the objectives he set himself, and at the same time to retain fully the confidence of the scientists about whose work he wrote: nearly all his writing was based on first-hand discussion with them.

A catalogue of his written work, however, cannot adequately represent the impact which Jay made on Harwell, and the Atomic Energy Authority. He was an excellent lecturer both in the history of atomic energy and on the presentation of scientific information; he was an active worker for standardization of nomenclature, and

was chairman of a British Standard Institution sub-committee which produced their *Glossary of Terms used in Nuclear Science*. But perhaps most important, in the face of physical adversity he showed a cheerfulness and determination which were an example to all, and with his warm personality, he inspired the affection as well as the professional admiration of all who knew him. His award of the M.B.E. in 1956 was universally acclaimed.

Outside his office, as at work, Jay did not allow his disability to limit his activities. He was chairman of the Atomic Energy Research Establishment's Amateur Radio Club, an active worker for his parish church, and a member of the Science Writers' Guild. He was also author of some illustrated children's books on science, including *British Nuclear Reactors* (1960).

Science is becoming more complex, more expensive and more difficult to understand; at the same time, its understanding by laymen in industry and Government must increase if science is to be efficiently applied. Kenneth Jay had an outstanding ability to bridge this gap in communication between scientists and laymen: there is a great need for many more like him.

R. M. FISSENDEN

#### Dr. Duncan A. MacInnes

DR. DUNCAN A. MACINNES, member emeritus of the Rockefeller University, died on September 23, in Hanover, New Hampshire. He was eighty years of age and had been active in scientific research until this past summer.

Dr. MacInnes had been affiliated with the Rockefeller University since 1926 and had been a member emeritus since 1950. During his career, he distinguished himself in teaching and research in several universities and as a civilian with the Office of Scientific Research and Development during the Second World War.

Many honours were conferred on Dr. MacInnes. He received the Nichols Medal in 1942, awarded by the American Chemical Society to stimulate original research. In 1948 he received the Acheson Medal, awarded every two years by the Electrochemical Society. He was also honoured with the Presidential Certificate of Merit in 1948.

Dr. MacInnes's field of research had been largely directed towards the study of electrolytes in aqueous solution. As emeritus member, he had continued to conduct laboratory research.

Born in Salt Lake City, Utah, March 31, 1885, he received his B.S. degree from the University of Utah in 1907. In 1909 he received his M.S. degree from the University of Illinois and his Ph.D. degree in physical chemistry in 1911. During the next six years he was successively an instructor and an associate in chemistry at the University of Illinois. During 1917-26 Dr. MacInnes carried out physical chemistry research at the Massachusetts Institute of Technology, first as an assistant and then as an associate professor. In 1926 he became an associate member of the Rockefeller Institute (now the Rockefeller University), in 1940 a member, and member emeritus in 1950.

He was a member of the National Academy of Sciences, the American Association for the Advancement of Science, the American Chemical Society, the Electrochemical Society (for which he served as president during 1935-37), the American Philosophical Society, and the Harvey Society.

#### Prof. Hermann Staudinger

HERMANN STAUDINGER, whose death occurred on September 8, at the age of eighty-four, was a pioneer in the study of macromolecules and one of the founders of the subject of polymer chemistry. Born at Worms (Rhein) on March 23, 1881, he was educated at Halle, Darmstadt and Munich. In 1907 he became a lecturer in