



W. Bennett Lewis

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1908–1987

By Floyd L. Culler

In each generation there are men of skill and foresight who are recognized as founders, and W. Bennett Lewis most certainly is one of the founders of the nuclear era. All who have worked in nuclear power anywhere in the world are aware of the contributions to nuclear science and technology made by W. Bennett Lewis. During his lifetime, atomic science evolved to a major technology and became a major force in our society.

There are so many things to be remembered about Dr. Lewis. He deserves the highest honors for directing the Canadian nuclear program, which produced the CANDU heavy water reactor, one of the world's few commercially successful power reactor types. Dr. Lewis's personal persistence in pursuing this reactor type, and in developing several generations of outstanding engineers and scientists to support it, resulted in the centerpiece of Canadian technological achievements and of his distinguished career.

He recognized the importance of abundant and available energy as a resource and a catalyst to improve the well-being of people in the underdeveloped nations. He recognized that the underdeveloped world might escape from the misery of bare subsistence, in his words, "from survival to super living," if adequate energy were available to provide water for agriculture and the bare necessities of shelter and transport. These thoughts were extended in his writings and in the International Atomic

Energy Agency (IAEA), on whose Scientific Advisory Committee he served for more than twenty years.

In addition to his advocacy of the CANDU reactor, he was the most constant supporter of a special accelerator to generate intense, high-energy neutrons by spallation, with which to produce fissionable isotopes without a basic dependence on the natural uranium.

His long-term interests in the production of radioisotopes for research and treatment in human disease were reflected in the major role that Chalk River played in isotope production and research. As a member and long-time chairman of IAEA's Scientific Advisory Committee, he encouraged the establishment of effective programs in the use and application of radioactive materials for the improvement of human health worldwide.

Early on he recognized the desirability of substituting clean energy forms—his clean energy was nuclear power—for carbon-based fuels to reduce dependence on depletable resources and to cut back on the atmospheric burden of deleterious products of combustion, including carbon dioxide.

With his election as a foreign associate of the National Academy of Engineering of the United States in 1976, Dr. Lewis was recognized by his colleagues as a pioneer and visionary. We shall be as influenced by his legacy as we were by his presence during his very productive life.

