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## Activities in the Atomic Energy Field

by

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Dr. Nordheim joined the Manhattan Project in September, 1943 at the Metallurgical Laboratory of the University of Chicago. He went to the Clinton Laboratories (now the Oak Ridge National Laboratory) at Oak Ridge in January, 1944 as Chief Theoretical Physicist. He became Director of the Physics Division of this Laboratory in June, 1945 until June, 1947. In addition to the handling of the many day to day problems in connection with the Oak Ridge Reactor and the physics program of the Laboratory, he contributed to many fields in basic reactor theory. The best known of these is his work on control rods and on reactor kinetics. He was also a member of the Committee on Reactor Design which developed the basic concepts of the present MTR reactor. He has remained a consultant of the Oak Ridge National Laboratory ever since.

Dr. Nordheim further participated in the Lexington Project of Massachusetts Institute of Technology in the Summer of 1948, and the TAB (Technical Advisory Board) at Oak Ridge in the Summer of 1950. In both of these projects a panel of experts was called together to make studies of the feasibility of nuclear propulsion of air craft.

Dr. Nordheim went first to Los Alamos in the Spring of 1946 as a member of a conference to evaluate the war time work on thermonuclear reactions. He also spent the Summer of 1947 in Los Alamos to continue <sup>in</sup> this work. He resided full time at Los Alamos from August, 1950 until August, 1952 where he took part in the development of thermonuclear weapons. He has been a consultant to the Los Alamos Scientific Laboratory since that time, particularly on problems of neutron diffusion and nuclear physics. He spent the Summer of 1953 at Los Alamos and he also made a trip to the Pacific Proving Grounds during the Spring of 1954 test series.

Dr. Nordheim has also consulted frequently for shorter terms with other atomic energy and nuclear physics laboratories. He spent the Summer of 1955 as consultant to the Radiation Laboratory, Berkeley, California, at Berkeley and Livermore, California chiefly to work on problems of nuclear physics.

Before joining the Manhattan Project in 1943, Dr. Nordheim was also a special investigator of the National Defense Research, Division One, of the OSRD. In this capacity, he developed a complete theory of the thermal effects of the propellant gases in erosion vents and in guns. He received for this work a Citation of Merit from the Armed Forces.