

The Story of Dr. George Koval: American-Born Super Spy Whom Gave Secrets of the Atomic Bomb to the Soviet Union



George A. Koval was an American-born Russian scientist who during World War II was an agent of Soviet military intelligence (i.e., the GRU) working within the Manhattan Project and who provided critical technology from the Oak Ridge and Dayton locations that drastically reduced the amount of time it took the Soviet Union to develop and detonate its first nuclear device on August 23, 1949. On November 2, 2007, Russian President Vladimir Putin honored Dr. Koval with the posthumous decoration of the highest state honor, “Hero of the Russian Federation”. Operating under the pseudonym “Delmar”, Koval had been the only known Soviet intelligence officer to penetrate the U.S. secret atomic facilities that were producing the plutonium, enriched uranium and polonium used to create the first atomic bombs during World War II. Koval had supplied very detailed information that helped to speed up considerably the time it took for the Soviet Union to develop and demonstrated its own atomic bomb which resulted in the decades long nuclear arms race during the Cold War with the United States. President Putin signed a presidential decree awarding Dr. Koval the Hero of the Russian Federation decoration (posthumous) for his courage and heroism while carrying out these special missions during the Manhattan Project.

George Abramovich Koval was born on December 25, 1914, in Sioux City, IA, into a Jewish family of immigrants from Belarus (part of the Russian Empire). After George had graduated from Central high school in 1929, he started attending the University of Iowa. In 1932, the Kovals left Sioux City to join family in Birobidzhan the capital of the “Jewish Autonomous Republic” located in Eastern Soviet Union near the Chinese border, In 1934 George moved to Moscow and entered the D.I. Mendeleev Institute (now University) of Chemical Technologies, from which he graduated cum laude in 1939. Although admitted to the Institute’s graduate school, Koval was instead recruited by the Soviet Red Army intelligence and began training for

an American espionage mission. He left for the United States in 1940 initially to gather information on American chemical weapons research.

In April 1943, Koval was drafted into the U.S. Army. With fake documents that he had an Associate Degree in Chemistry, he was selected for a special Army training program at the City College of New York, where he learned about the maintenance of equipment used for monitoring radioactive materials. Following his graduation, the U.S. Army assigned Koval to the Manhattan Project's secret installation in Oak Ridge, Tennessee. Placed in charge of radiation control, Koval had unrestricted access to this installation and observed first-hand the processes utilized in the production of plutonium and polonium, as well as scientific and security procedures and the quantity and quality of the materials produced.

In June 1945, Koval was transferred from Oak Ridge to the Manhattan Project facilities in Dayton, Ohio. Assigned to the Health Physics branch of the Medical Department with even greater access to the top-secret project than he had in Oak Ridge. In December 1945, he reported to Moscow that the Americans were producing polonium for use in their atomic project – and also divulged the monthly volume of polonium production in Oak Ridge. In February 1946, Moscow reportedly received an outline of the process used by the United States for polonium production.

In February 1946, engineer third class George Koval was given an honorary discharge from the Army as part of demobilization. For his service, Koval earned two medals, including one “For Victory in World War II.” In 1948, Koval told his American acquaintances that he had received an invitation to work on a power station construction project in Europe. From there, he made his way to the Soviet Union. Back in Moscow in June 1949, Koval was discharged with the rank of an “untrained” private from the Soviet Armed Forces, which he had joined when he was recruited into Soviet military intelligence. He then resumed his graduate studies at the Mendeleev Institute obtaining a Ph.D. in chemical science. Although he had difficulties obtaining work for several years, Koval finally landed a teaching position at his alma mater – where he would work for the next 40 years and publish some 100 scientific works.

George Koval died in Moscow on January 31, 2006. Cited among his major contributions to the Soviet atomic project was the design of the neutron initiator used in the first Soviet atomic device just as it had been at the Trinity and Nagasaki by the USA during World War II.

Dr. Bob Bowman will be our guest speaker. Bob holds B.S., M.S. and Ph.D. degrees in Chemistry and was employed at the Mound Laboratory from 1969 until he left as a Science Fellow in 1984. After Mound, he worked at three aerospace organizations in southern California. Bob is currently employed by the Oak Ridge National Laboratory and is also a Director on the board of the Mound Science and Energy Museum.

Please plan to attend this interesting, informative and free presentation on March 22, 2017, at the MOUND SCIENCE AND ENERGY MUSEUM starting at 7 pm. For more information please contact the Museum at msem475@gmail.com, or call 937-353-4457. Please remember to “like” the Museum on Facebook/Mound Museum webpage at <https://www.facebook.com/MoundScienceEnergyMuseum/>