

Memoriam: Stanislav Nikolaevich Rodionov (1929–2014)

Oleg Prilutsky and Frank von Hippel

Stanislav Rodionov was a member of the first post-World War II generation of Soviet physicists. He began his scientific career in 1953 in what is now known as the National Research Center “Kurchatov Institute” where he carried out an experiment in which, for the first time in the Soviet Union, he captured electrons from tritium decay in a magnetic mirror adiabatic trap.

From 1958 to 1973, he worked in the Nuclear Physics Institute of the Siberian Division of USSR Academy of Sciences in Akademgorodok near Novosibirsk. During the 1960s, while Rodionov was there, this institute, directed by Academician Budker, built one of the first electron-positron colliders in the world (VEPP-2). Rodionov played a very important scientific-organizational role as the Secretary of the institute’s Scientific Council—its “Round Table.”

In 1974, Rodionov returned to Moscow to join the staff of the Soviet Academy of Sciences’ Space Research Institute (IKI) directed by Roald Sagdeev. There he participated in the organization of international collaborations in space research programs, which was a pioneering contribution to opening up Soviet science to the world.

Rodionov also supported Sagdeev in doing arms-control research under the auspices of the Committee of Soviet Scientists for Peace and Against the Nuclear Threat. This Committee was established during a 17–19 May 1983 All-Union conference of scientists within the Soviet Academy called in response to President Reagan’s 23 March speech asking American scientists to join in a Strategic Defense Initiative to make nuclear-armed ballistic missiles “impotent and obsolete.” Evgeny Velikhov was the first chairman with Sagdeev, Sergei Kapitza and Andrei Kokoshin as his Vice Chairmen. A few years later, Sagdeev took over as chairman.

The Committee’s first study was of the scientific, technological, military-strategic and international policy aspects of the creation of a large-scale U.S. missile defense system with space-based elements such as those emphasized in the Reagan Administration’s proposal. A large portion of this work was done at the Space Research Institute with Rodionov’s active participation.

Rodionov also worked on two joint projects with the Federation of American Scientists: the technical basis for nuclear warhead detection and for a ban on nuclear reactors from earth orbit. Chapters from these studies made up the bulk of the first volume of *Science & Global Security*. Three were co-authored by Rodionov.

^aStan (Stanislav Nikolaevich) Rodionov was Russian co-editor of *Science & Global Security* from the second volume in 1991 until his death in 2014. In partnership with his colleague and friend, Oleg Prilutsky, he also translated the journal into Russian, <http://scienceandglobalsecurity.org/ru/>.

Discussions of *Science & Global Security* began in September 1984 between Roald Sagdeev, Vitali Goldanski, and Sergei Kapitza on the Soviet side and Harold Feiveson and Frank von Hippel on the U.S. side. The Soviet scientists were there to get the journal going. Rodionov and Prilutsky, also a physicist on the staff of IKI, took over from Sagdeev when the journal finally was launched in 1989.

After 2000, as the intensity of discussions of new initiatives between the Russian and U.S. arms control scientists waned, opportunities for personal meetings between those responsible for editing *Science & Global Security* in the United States and Russia became more infrequent and communications shifted more to e-mail. Rodionov suffered increasingly from severe arthritis but his gentle and friendly personality never changed and he and Prilutsky never flagged in producing high-quality translations of *Science & Global Security*. The American editors are grateful for Oleg Prilutsky's willingness to carry on this work alone.

In 2006, Rodionov was inspired by the death of Theodore B. Taylor to write a special article about him. Taylor was an American physicist who became famous in his twenties as a nuclear-weapons designer at Los Alamos but became a passionate and outspoken advocate of nuclear disarmament by the time he was forty. Rodionov's article, "A Few Words About Ted Taylor," <http://scienceandglobalsecurity.org/archive/sgs14rodionov.pdf>, was heartfelt and said as much about what Rodionov stood for as it did about Taylor.

Rodionov's son, Danila, followed in his father's footsteps and became a space physicist in Space Research Institute. (Oleg Prilutsky now works in Danila's laboratory.)

Stan Rodionov was extraordinarily intelligent, knowledgeable, and benevolent. All who knew him remember him fondly and miss him deeply.