



9. ANNIVERSARIES

YU.M. OSTANEVICH

Yu.M. Oostanevich would celebrate his 75th birthday in 2011. His colleagues remember him as a remarkable person “with a unique ability of being himself and expressing his individuality in any situation, whether ordinary or unusual” – they wrote in the book of memoirs “Yu.M. Oostanevich: Scientist. Teacher. Friend.” published in 2002. An example of lifetime recognition and high appreciation of his work was the speech of the Corresponding Member of the USSR Academy of Sciences F.L. Shapiro, the first Deputy Director of the Laboratory of Neutron Physics and one of its founders made at the Doctor Thesis defense of Yu.M. Oostanevich:

“I would like to tell a few words about Yu.M. Oostanevich as a physicist of our Laboratory. He is one of our greatest physicists. His distinctive feature is that it is difficult to find a research field where he would not be an expert, no matter whether it is in the application of computers or in cryogenic equipment. He is not afraid of excursions into the theory plunging himself into the theory of relativity, nuclear physics or condensed matter theory. He devises challenges for himself and then successfully solves them. The fact that he defends his thesis after 12 years of work tells us that he is deeply preoccupied with various ideas and problems. His dissertation is a very interesting study on the liquid-gas critical state and he is an excellent specialist in neutron techniques. I believe that Yu.M. Oostanevich is not just a Doctor of Science according to his qualification, but an outstanding Doctor of Science.”

The results of the voting supported this high appraisal. He was awarded with the degree of Doctor of Science omitting the PhD degree.

Key events in his research activity:

1953-1959	student of the Physics Department of the Moscow State University
1957-1959	engineer of the Institute of Nuclear Physics of MSU
1959-1960	senior laboratory assistant in the Laboratory of Neutron Physics
1960-1966	junior researcher
1966-1970	researcher
1970-1992	head of the Department of Neutron Measurements (later the Department for Neutron Investigations of Condensed Matter)
1971	Doctor of Science in Physics and Mathematics
1990	Professor of the Moscow Engineering Physics Institute (MEPhI)
2000	Laureate of the RF State Prize for the development and realization of new methods in time-of-flight neutron diffraction studies at pulsed and steady-state nuclear reactors (posthumously) (together with V.L. Aksenov, A.M. Balagurov, V.P. Glazkov, V.A. Kudryashov, V.V. Nietz, V.A. Somenkov, V.A. Trunov)

Inventions:

1970	Method for determination of the ratio of low currents. Authors: V.N. Zamrii, V.I. Lazin, Yu.M. Oostanevich
1977	Wire detector of slow neutrons. Authors: B.N. Ananiev, Y.M. Oostanevich, Ye.Ya. Pikelner
1980	Method of studying holograms without a reference beam. Authors: V.K. Ignatovich, Yu.M. Oostanevich, M.I. Podgoretskii



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YE.P. SHABALIN

To the 75th birthday jubilee of, a leading scientist of the Frank Laboratory of Neutron Physics.
Fragment from the article by A.V. Strelkov.

In the middle of 1959 a young promising specialist Zhenya Shabalin came to the Laboratory of Neutron Physics (LNP). After graduation from school with a gold medal for academic excellence, he was uncertain about his future profession. He was fascinated with the arts and even thought of becoming a film director. But on further consideration he entered the Moscow Engineering Physics Institute (MEPhI). After graduation he came to Dubna. At that time in LNP the construction of the world's first pulsed reactor IBR-2 was nearing completion and a young specialist Zhenya Shabalin took an active part in the start-up of the reactor. The start-up group was relatively small and Zhenya had the chance to contact closely with legendary by that time physicists D.I. Blokhintsev, I.M. Frank, F.L. Shapiro, Yu.Ya. Stavitsky. This helped him to quickly grasp the principle of operation and design of the reactor, so that Zhenya, despite his young age, became a leading physicist and an authority for the reactor staff as soon as the IBR started its operation. An outstanding physicist and Deputy Director of LNP F.L. Shapiro knew for sure who he should ask to evaluate the possibility in principle of creating a new IBR that would be 1000 times more powerful than the old one and invited Shabalin to do it. Zhenya and his colleagues performed some calculations and showed that Shapiro's idea could be realized. Later on, the possibility of practical realization of construction of a more powerful reactor (IBR-2) was supported by D.I. Blokhintsev's enthusiasm. During the construction of IBR-2 Ye.P. Shabalin became close with D.I. Blokhintsev discussing with him not only some technical problems connected with the creation of a new IBR, but also some questions of science, history and arts. By then having become a mature engineer-physicist, he did not give up his youth's passion for the arts. He tried to make movies and cartoons at the film studio "Dubfilm", took part in the stage direction process and successfully played roles in the amateur satirical performances.

Meanwhile the old IBR was shut down for reconstruction into IBR-30 and Ye.P. Shabalin took an active participation in the work. In 1971 Ye.P. Shabalin was among the group of authors awarded with the USSR State Prize for the creation of a pulsed reactor with an electron accelerator. Ye.P. Shabalin played a special role at the final stage of the construction of IBR-2. The initial rated power of IBR-2 was 4 MW, however because of overcautiousness for the State Acceptance Committee the reactor was decided to be commissioned at a power of only 1 MW, which in the opinion of the project leaders would significantly enhance the safety of the reactor operation. But then, at the crucial moment a chief physicist of the project Ye.P. Shabalin appeared uninvited at the Committee meeting and proved and convinced its members that IBR-2 could operate at a power of 2 MW. Later on he received a severe reprimand from the security authorities who had overlooked the appearance of Ye.P. Shabalin at the meeting. The IBR-2 had operated for 20 years without any serious troubles and was successfully modernized. During this time Ye.P. Shabalin wrote a monograph on pulsed reactors, discovered a stochastic instability of the pulsed reactor behavior, suggested a number of devices, which improve the efficiency of the operation of a reactor as a neutron source. One of these devices is the so-called "cold" moderator, which makes it possible to increase many times the portion of slow neutrons that are the most useful in the majority of the experiments carried out at the reactor. At present, the installation of the cold moderator suggested by Ye.P. Shabalin is in progress.

Advancing in years Ye.P. Shabalin is not fond of some youth hobbies any more: football, photography, boat trips, but he has not lost his interest in literature yet. He wrote and published two adventure novels and a book of poems. And at present Ye.P. Shabalin is the chairman of the JINR Museum Council.