

On the Eightieth Birthday of Valentin Georgievich Dmitriev

November 15, 2016 marks the 80th birthday of Valentin Georgievich Dmitriev, a prominent Russian scientist, whose entire life in science was devoted to nonlinear optics and laser gyroscopy.

Valentin Georgievich was born in Moscow. He early lost his father, a test pilot, who died of wounds in 1945.

Having graduated from the secondary school with a silver medal, Valentin Georgievich entered the Faculty of Physics of M.V. Lomonosov Moscow State University in 1954. After graduating from the University with honours in 1960, he became a postgraduate. His candidate's dissertation was devoted to the nonlinear processes in the microwave range. However, rather soon (in the end of the training course) he was proposed to study nonlinear processes in the optical range, because a great potential of nonlinear optics was foreseen by that time. Thus his fruitful cooperation with R.V. Khokhlov and S.A. Akhmanov began. His candidate's dissertation, defended in 1964, became the first one in the field of nonlinear optics. In 1983, Valentin Georgievich became a doctor of sciences.

Even from the first years of the development of frequency conversion theory, great interest was shown in it, because it opened radically new possibilities for various applications. Since it was necessary to perform investigations practically from 'zero', there was a need for highly qualified experts. On the request of R.V. Khokhlov, Valentin Georgievich came to work at the Polyus Scientific Research Institute (headed by M.F. Stel'makh), which was being organised at that time. All his further life was connected with this institute. The work at Polyus allowed him to solve not only fundamental but also applied problems of nonlinear optics.

In 1983, a Department of Gyroscopes was organised at Polyus in view of the importance of this subject area; it was headed by Valentin Georgievich. Nevertheless, nonlinear optics studies continued to be a part of his life. His scientific activity was always characterised by a spirit of competition, and publications of colleagues only stimulated further development of the research of his team. The scientific level of his studies can be characterised by four words: "For the first time...". Valentin Georgievich was an absolute unconditional authority in the field of nonlinear optics and gyroscopy. He published more than 300 papers and 8 books on nonlinear optics and quantum electronics and had 15 inventor's certificates and 3 RF patents.

In 1964, V.G. Dmitriev, jointly with R.V. Khokhlov and S.A. Akhmanov, was awarded the Lomonosov Prize of Moscow State University for the cycle of studies in the field of nonlinear optics. In 1984, he and a group of colleagues were awarded the State Prize of the Soviet Union. Valentin Georgievich was also awarded the Order of the Badge of Honour and the M.V. Keldysh Gold Medal.

Valentin Georgievich was a lecturer for many years at the Moscow Institute of Physics and Technology. More than



30 researchers became candidates and doctors of sciences under his guidance. He actively participated in the scientific and public life, was an organiser of many conferences on coherent and nonlinear optics, laser optics, etc.

A great talent is generally many-sided. The whole life of Valentin Georgievich is a bright confirmation of this statement. Having graduated from two courses of the Gnessins Musical College in 1955 (in viola class), he played during 50 years in string quartets of Moscow State University and the Central House of Workers in the Arts. Music was his second life. In 1957, the quartet of Moscow State University won a silver medal at the 1st International Festival of Youth and Students. In 1973, the quartet became a winner of the 2nd Moscow Contest of Musicians (silver medal). Valentin Georgievich wrote poems and prose, was engaged in several sports.

Valentin Georgievich Dmitriev was kindly remembered not only as a talented scientist and educator. He was a person of high culture, honest, decent, tactful, civilised, and respectful of people. He appreciated subtle humour, loved good jokes and funny stories, was ironical and witty. Those who were privileged to know him, will never forget this remarkable man.

Paraphrasing the words by Vasilii Andreevich Zhukovsky, we would like to say about Valentin Georgievich: "Say not in grief 'he is no more' but live in thankfulness that he was".

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