

In memory of Vyacheslav Petrovich Makarov

(14 February 1938–6 August 2019)



Vyacheslav Petrovich Makarov, a leading researcher at the Prokhorov General Physics Institute, Russian Academy of Sciences, and a permanent member of the Editorial Board of the journal 'Quantum Electronics', passed away.

V.P. Makarov was born on 14 February 1938 in Leningrad. A child of War, he survived the Blockade. After graduating from the Faculty of Physics of A.A. Zhdanov Leningrad State University, in 1964 he defended his thesis "Magneto-optical effects in cubic crystals". In 1966, Vyacheslav Petrovich began working at the Laboratory of Oscillations at the Lebedev Physical Institute, headed by A.M. Prokhorov, and then, together with his colleagues, he started working at the General Physics Institute of the Academy of Sciences of the USSR.

Vyacheslav Petrovich belonged to the famous Leningrad school of theoretical physics. For fun, he called himself the last student of V.A. Fok. Brilliantly educated, with encyclopedic knowledge in many fields of physics, Vyacheslav Petrovich was a highly qualified theoretical physicist. The versatility of his scientific interests was striking: the theory of excitons in semiconductors, two-photon absorption of laser radiation in crystals, Landau level lasers in semiconductors, atomic and molecular spectroscopy, changes of atomic and molecular spectra in the laser field, Fermi and Bose gases in the framework of the canonical distribution with a precisely fixed number of particles. And no matter what scientific pro-

blem Vyacheslav Petrovich was involved in, he was always characterised by deep elaboration and great thoroughness both in calculations and in understanding the results.

V.P. Makarov was for many years the scientific secretary of the Dissertation Council of the General Physics Institute, lending effective help to each author of the dissertation in preparing the thesis to the defence.

For a long time Vyacheslav Petrovich was a lecturer at the N.E. Bauman Moscow State Technical University and at the Moscow Institute of Physics and Technology, training new cadres for physical science. Many generations of students appreciated his charm, sense of humour, erudition and the ability to simply explain complex things.

Being a member of the Editorial Board of 'Quantum Electronics' from the moment of its foundation, V.P. Makarov not only carefully reviewed manuscripts, but also took to the heart the problems of the journal and actively participated in their solution.

In recent years, Vyacheslav Petrovich devoted much time to articles on physics for the New Russian Encyclopaedia; his scientific interests were focused on the fundamental problems of electrodynamics of material media. He published a number of fundamental works on linear and nonlinear electrodynamics of media with dispersion in external high-frequency fields.

Vyacheslav Petrovich often published acutely polemical articles, actively defending priority issues and criticising erroneous statements. Nowadays, one can rarely meet a person who is so firm in his position, principled and at the same time very modest, reliable, kind and extremely intelligent. This is a huge loss both for Russian science and for everyone who knew him. Vyacheslav Petrovich made a significant contribution to science and left a grateful memory of himself.

O.N. Krokhin, I.A. Shcherbakov, V.V. Osiko, V.I. Konov, S.V. Garnov, P.P. Pashinin, N.G. Gusein-zade, A.K. Zvezdin, A.M. Ignatov, S.A. Maiorov, A.A. Samokhin, V.A. Ivanov, I.K. Krasnyuk, N.N. Il'ichev, V.V. Smirnov, V.V. Apollonov, M.V. Fedorov, S.N. Andreev, V.P. Bystrov, K.K. Pukhov, I.B. Kovsh, A.S. Semenov