



## Victor A. Vedernikov (1940 – 2022)



Victor A. Vedernikov passed away at the age of 82 on February 21st, 2022. We will remember him as a world-class mathematician in the field of the theory of finite groups and their classes, a graduate of Gomel Algebraic School founded by Sergey A. Chumikhin, an educator and supervisor of many generations of students, undergraduates, graduate students and doctoral students, a Professor at Bryansk State University (1976–1998) and Moscow City Pedagogical University (1998–2022).

Victor A. Vedernikov was born on January 14th, 1940, in Poim, Orenburg region, Russia. After graduating from Orsk State Pedagogical Institute named after Taras G. Shevchenko, in 1965, V.A. Vedernikov was a postgraduate student at the Gomel Laboratory of Finite Group Theory of the Institute of Mathematics of the Academy of Sciences of the BSSR (1965–1969) under the guidance of Academician S.A. Chumikhin. Victor A. Vedernikov published his first scientific works in 1967. In “Tests for solvability and supersolvability of finite groups” (*Sibirsk. Mat. Zh.* 8 (1967), 1236–1244), he studied properties of a finite group depending on the greatest common divisor of the orders of classes of conjugate subgroups; in particular, he proved the solvability of a group in which an order of each class of conjugate Sylow subgroups is a power of a prime. This and other articles

were included in his PhD thesis “Characterization of Finite Groups by Subgroups”, which he successfully defended in 1968.

One of the most important Vedernikov’s works is the article “Subdirect products and formations of finite groups” (see *Algebra Logika* 29 (1990), 523–548), which is connected with a deep study of subdirect products of groups that led to the solution of the well-known problem of A.G. Kurosh about the description of subdirect products of groups. The results of this work are considered the most important achievements of Vedernikov’s doctoral dissertation “Finite Subdirect Products of Groups”, which he successfully defended in 1994.

Victor A. Vedernikov published more than 130 scientific papers. Many of these continue to influence contemporary research in finite group theory. Among such works is the article “Finite groups with subnormal Schmidt subgroups” (see *Algebra Logic* 46 (2007), 363–372), in which he described the structure of finite groups, all Schmidt subgroups of whose are subnormal. The results of this work inspired many mathematicians to study finite groups with generalized subnormal Schmidt subgroups and (generally) abnormal Schmidt subgroups. Vedernikov’s achievements include a number of other substantive theories he created, which made it possible to answer many open questions of modern group theory. In the last years of his life, Victor A. Vedernikov paid much attention to the study of simple non-Abelian groups. He established the structure of finite simple non-Abelian groups each maximal subgroup of whose is soluble or Hall (see “Finite groups in which every nonsolvable maximal subgroup is a Hall subgroup”, *Proc. Steklov Inst. Math. (Suppl.)* 285 (2014), 191–202), obtained a description of finite simple non-Abelian groups in which every local non-solvable maximal subgroup is Hall (see “Nonsolvable finite groups whose all nonsolvable superlocals are hall subgroups”, *Siberian Math. J.* 61 (2020), 778–794).

For many years, Victor A. Vedernikov supervised the algebraic research of students, graduate students and teachers of the Bryansk State University. Under his leadership, graduates of the university defended 12 candidate dissertations and 1 doctoral dissertation. Victor A. Vedernikov was distinguished by high professionalism, responsibility and diligence. He had a deep scientific intuition. At the same time, he did not hide his ideas, generously shared them with students and colleagues. He was an energetic, cheerful, sympathetic, benevolent, strong-willed person, always full of new scientific ideas, able to think creatively. He passionately involve students and young mathematicians in scientific activities, and all of them treated Profes-

sor Vedernikov with boundless respect and love.

Victor A. Vedernikov was an excellent family man. He had a wonderful wife and two daughters and two grandchildren.

Victor A. Vedernikov made a significant contribution to the modern theory of groups and their classes. He provided a number of remarkable scientific ideas that work effectively and are further developed. It is safe to say that his ideas will find a response in the minds of many generations of algebraists.

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