Petro Mykhailovych Gudivok

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Abstract. We present a brief scientific biography of Professor Petro M. Gudivok.

Petro M. Gudivok was born in the small village of Lavky, near Mukachevo (Czechoslovakia, now Ukraine) in a large peasant family. His childhood coincided with the difficult war period and the early postwar years, making him accustomed from an early age to the hard peasant labor and responsibility for himself and his family. He has graduated from the Mukachevo Secondary School No. 2, having studied there with great and talented teachers. They have developed the boy's remarkable abilities, wit and inquiring mind, as well as nurtured his love for the Queen of Sciences, Mathematics, that would become his life calling.

Petro M. Gudivok
(April 12, 1936 – June 11, 2012)

In 1953, having graduated from the Secondary School with high honors, Petro M. Gudivok has started his undergraduate studies at the Mathematics Department of Uzhhorod State University, where he has achieved his first scientific results under the guidance of Samuil D. Berman. In 1958, after graduating with honors from Uzhhorod State University, he has worked for one year as an assistant at the

Chair of General Mathematics and in 1959 he started his graduate studies under the supervision of the young and extremely talented algebraist Samuil D. Berman. The range of research interests of Samuil D. Berman during this period included one of the most promising parts of algebra — group representation theory. Petro M. Gudivok has made a significant contribution to this theory.

Starting in September of 1962, Petro M. Gudivok has occupied various teaching positions at the Uzhhorod State University while at the same time continuing with active research work. In 1963 he has defended his Candidate Thesis "Representations of finite groups over some local rings" at the Leningrad State Pedagogical Institute, followed by the defence of his Doctoral Thesis "Representations of finite groups over local rings" at the Leningrad State University in 1975. From 1980 until the last days of his life Petro M. Gudivok was the Head of the Chair of Algebra of the Uzhhorod National University. From 1986 till 1992 he occupied the position of the Dean of the Department of Mathematics at the Uzhhorod State University. Petro M. Gudivok died on June 11, 2012, after a long-lasting illness.

Petro M. Gudivok has developed the theory of representations of finite groups over commutative local rings, created effective methods for the study of the representations of finite groups over discrete valuation rings, resolved a number of known problems on the number and degrees of nonequivalent irreducible and indecomposable matrix representations of finite groups over commutative local rings, on the wildness of the problem of description of nonequivalent matrix representations of finite groups over complete discrete valuation rings, on the reasonableness of the Krull-Schmidt theorem for representations of finite groups over discrete valuation rings.

Together with Vyacheslav P. Rud'ko he has obtained fundamental results on tensor products of representations of finite groups over commutative rings. They have also solved the problem on semisimplicity of the algebra of representations of finite groups over P-adic integers over an arbitrary field.

Petro M. Gudivok has successfully applied his methods from the theory of representations of finite groups over commutative rings to the study of linear groups over principal ideal domains, multi-dimensional crystallographic groups and Chernikov groups. He has solved the problem of conjugation of Sylov p-subgroups of the general linear group over the ring of integers, showed that the problem of describing up to an isomorphism the n-dimensional crystallographic groups for an arbitrary natural n is wild. He has presented numerous reports at international congresses of

mathematicians and at international and national conferences. He was one of the leaders of research projects on the theory of representations of groups and their applications that were carried out jointly between the V. M. Glushkov Institute of Cybernetics and the Institute of Mathematics of the National Academy of Sciences of Ukraine. Petro M. Gudivok published more than 170 scientific papers and four monographs [1, 2, 3, 4] on the theory of representations of finite groups over commutative rings and their applications.

In addition to his prolific research work, the scientist was also actively engaged in teaching and especially in finding and engaging talented students in research. Professor Petro M. Gudivok has served as an advisor on twelve Candidate of Science theses, while three of his students became Doctors of Science.

Petro M. Gudivok has put a lot of effort and energy into his scientific and organizational work: he was a member of the Scientific Council on thesis defence at the Institute of Mathematics of the National Academy of Sciences of Ukraine, as well as serving as an opponent and reviewer of many Candidate and Doctoral theses in algebra, organizing a number of conferences and seminars on algebra at the Uzhhorod National University and serving as the chief editor of the "Scientific Bulletin of the Uzhhorod University. Series Mathematics and Informatics" journal.

Scientific achievements of Professor Petro M. Gudivok have received a high public and social recognition. He was awarded the title of Honorary Worker of Education of Ukraine (1991), was elected Academician of the Higher School of Ukraine (1992), received the title of Soros Professor (1997). In 2005 for his many years of productive scientific and educational work Petro M. Gudivok was awarded the title of Honored Professor of the Uzhhorod National University.

The cherished memory of Petro M. Gudivok will forever remain in the minds and hearts of his colleagues, students, family and friends. May he rest in peace on his native Transcarpathian land.

List of Petro M. Gudivok's key publications

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