PREFACE

DOI: 10.1134/S008154381002001X

This collection of papers marks the 105th birthday of Academician Sergei Mikhailovich Nikol'skii, an outstanding Russian mathematician.

Nicol'skii is one of the greatest specialists in mathematical analysis and its applications. He has made an invaluable contribution to approximation theory and to the study of classes of differentiable functions of several variables, as well as to partial differential equations, functional analysis, and numerical methods.

In all these fields, the studies by Nicol'skii left a profound mark and largely predetermined the further development.

In 2006–2009, three volumes of selected works by Nicol'skii were published in the series “Monuments of Russian Science.” These volumes included the main works of Nicol'skii on approximation theory, function spaces, and equations in function spaces.

For many years, Nicol'skii was deputy director of the Steklov Mathematical Institute, Russian Academy of Sciences, and then head of the Department of Function Theory at this institute.

For a few decades, Nicol'skii was, first, deputy editor-in-chief and then editor-in-chief of *Proceedings of the Steklov Institute of Mathematics, USSR Academy of Sciences*. The high academic level and international recognition of the *Proceedings* are largely due to Nicol'skii. He was the initiator and the first editor-in-chief of the *Mathematics* review journal. Nicol'skii has been the editor-in-chief of the Russian section of the editorial board of the Russian–Hungarian journal *Analysis Mathematica* since the time of its establishment.

Three times Nicol'skii was awarded the USSR State Prize, twice, a prize of the Government of the Russian Federation, as well as the State Prize of Ukraine. He received the Chebyshev Prize of the USSR Academy of Sciences, the Kolmogorov Prize and the Vinogradov gold medal of the Russian Academy of Sciences, the Bolzano medal (Czechoslovakia), the Copernicus Prize (Poland), and the Ostrogradskii Prize (Ukraine). Nicol'skii was also presented with high Soviet and Russian government awards.

For many years Nicol'skii delivered various mathematics courses at the Dnepropetrovsk and Moscow State Universities and at the Moscow Institute of Physics and Technology. He is the author of many recognized university and secondary school textbooks.

The wide range of scientific interests, attentiveness to people, and extreme friendliness of Nicol'skii attract both mature and young mathematicians, who appreciate his care and support. The seminar on function theory and its applications that he has led for over half a century has won wide acclaim both at home and abroad.

The authors of the contributions to this collection—Nicol'skii's colleagues and students—dedicate their papers to Sergei Mikhailovich and wholeheartedly wish him good health, vigor, and energy for fruitful activity.

Translated by I. Nikitin