Sergei Rogosin: Achievements so Far and Further Plans

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Dedicated to Prof. Rogosin's 60th anniversary.

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Professor Sergei Rogosin is an international expert in the field of mathematical analysis, complex variables and their applications. His main research interests are: boundary value problems for analytic functions, integral equations, wavelet analysis, nonlinear analysis, free boundary value problems, geometric functions theory, approximation theory, mechanics of continuum media, Hele-Show flows, fluid dynamics, theory of composite materials, fractional analysis, special functions and differential equations of fractional order. Sergei Rogosin is an author of many research publications including three monographs (one published jointly with V. Mityushev, another with F. Mainardi and the third one with R. Gorenflo, A. Kilbas, F. Mainardi). Clearly, his active international cooperation has contributed significantly to broadening his scientific interests. He is also known as an author of the history of mathematical study in the area of probability theory and rheology.

Sergei Rogosin is an outstanding representative of the scientific school created by academician F.D. Gakhov in the Former Soviet Union. The schools impact on the development of analytical methods for analyzing various boundary value problems has been widely recognized. As a pupil of F.D. Gakhov, Sergei Rogosin has made essential contributions to the schools achievements.

Since 2001, Sergei Rogosin has been an active participant in ISAAC Congresses. In 2009 he became a Member of the ISAAC International Advisory Board. He has organised special sessions at the 5th (July 25–30, 2005, Catania, Italy), 6th (August 13–18, 2007, Ankara, Turkey), 7th (July 12–19, 2009, London, UK), 8th (August 22–27, 2011, Moscow, Russia) and 9th (August 5–10, 2013, Krakow, Poland) ISAAC Congresses. Sergei Rogosin contributed extensively to form the scientific programs of these Congresses, to recruit new ISAAC members and to promote the Societies activities. He was an editor of the collection of scientific papers from participants of the 9th ISAAC Congress, accepted for publication at the publishing house Cambridge Scientific Publishers.

Another important activity by Professor Rogosin has been the organization of a series of AMADE international conferences in Minsk. It started in 1996, when professor Anatoly Kilbas brought forward the idea of holding a conference dedicated to the memory of academician F.D. Gakhov. Sergei Rogosin became a scientific secretary of the organizing committee for the international conference "Boundary Value problems, Special Functions and Fraction Calculus".

Following the success of the previous conference, in 1999 the next conference was organised with the title "Analytic Methods of Analysis and Differential Equations" (AMADE) proposed by Prof. A.P. Prudnikov. Since then the title has remained the same while AMADE subject areas have consistently been extended at the conferences held in Minsk in 2001, 2003, 2006, 2009, 2011, 2012.

After the untimely demise of professor Anatoly Kilbas in 2010, Sergei undertook the main duties of organizing the conferences. AMADE-2011 was dedicated to the memory of professor A. Kilbas. The next conference AMADE-2015 will be organized in 2015 (September, 14–19) in Minsk as usual. All AMADE conferences were held under the guidance of ISAAC.

Along with his scientific activity, professor Rogosin has also been a dedicated teacher. He is an author of programs for courses in Real and Complex Analysis and

has published several textbooks and lecture notes. His teaching experience includes a broad spectrum of problems and methodologies following from his scientific interests and lecturing activities in his own country and abroad. Over a long career at the Belarusian State University, Sergei Rogosin delivered lectures on Real and Complex Analysis, Optimization Methods, Optimal Control Theory, Mathematical and Economical Statistics, Econometrics as well as various aspects of teaching methodologies.

In 2009, Sergei Rogosin prepared and delivered lectures on modern problems of analysis and their applications for graduate and post-graduate students in Druskininkai, Lithuania (organized by the Institute of Mathematics and Informatics, Vilnius University). In January 2010, he became one of the organizers of the International Winter School "Modern problems of Mathematics and Mechanics" for young researchers and postgraduate students. Cycles of lectures were presented by international experts in the area from the UK, Germany, Lithuania, Poland, Belarus and Ukraine. The success of the school was confirmed by the publication of the lecture notes "Advances in Applied Analysis" in Birkhäuser Verlag.

Sergei Rogosin has a passion for working with the younger generation. He spares no efforts to help earlier stage researchers in formulating new problems, discussing their progress, and preparing their first research papers. His most successful postgraduate students were: M. Dubatovskaya (Minsk, BSU, 1997), S. Makaruk (Minsk, BSU, 2004), E. Pesetskaya (Minsk, BSU, 2006) and T. Vaitekhovich (Berlin, FU, 2008).

Professor Rogosin has created his own research groups in Belarusian State University and leads a number of projects within the framework of State Research Programs and the Belarusian Fund for Fundamental Research. He is also a coordinator of European international scientific programs at the Belarusian State University.

Sergei Rogosin is a member of the Editorial Board of the international journals: Mathematical Modelling and Analysis (Vilnius, Lithuania), Analysis (München, Germany), Mathematics in Engineering, Science and Aerospace (Cambridge, UK), Fractional Calculus and Applied Analysis (Sofia, Bulgaria) and the Siauliai Mathematical Seminar (Siauliai, Lithuania). His expertise and enormous scientific erudition is highly demanded by the colleagues asking him for proofreading, reviewing their books and papers.

And, yet, there are still so many exciting things for Sergei to do: he is intensively developing several new scientific ideas and awaiting the further papers, books and conference presentations to come. He is looking forward to meeting and communicating with his old and new colleagues, helping his new and previous pupils. Without a doubt, he will continue contributing to new and exciting directions of research and teaching.

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