In memoriam Sergey P. Maschenkov

Obituary

Marine geophysicist Sergey Maschenkov of St. Petersburg, Russia, succumbed to leukemia on January 29, 2001. He was 43 years old. Born in Pskov in 1958, he graduated in 1980 from the Geoscience Department of the State University of Leningrad, majoring in geophysical methods for the exploration and prospecting of mineral deposits. He then joined the All-Russia Research Institute for Geology and Mineral Resources of the World Ocean (VNIIOkeangeologia), where he remained for his entire career. Early on, he initiated research into the geopotential fields of the Atlantic Ocean, examining density irregularities in the oceanic crust and upper mantle. In 1987, he defended his PhD dissertation, entitled "Density Structure of the Central Atlantic Lithosphere", in which he described the bilateral symmetry of the gravity anomalies of the Central Atlantic as manifestations of paleo-rearrangements of regional seafloor spreading geometries. These results were widely recognized as a significant contribution to Russian thinking about tectonic mid-ocean processes.

In the mid-1980s, Sergey assumed a leadership role in his institute’s Ocean Geotransect program, concentrating on the Canary-Bahamas geotransect located between the Cane and Atlantis Fracture Zones in the Central Atlantic. In this capacity, he supervised, among other things, the interpretation of the data and the documentation of the findings. He summarized these in a dissertation entitled "Accretion of the Oceanic Crust under Slow Spreading", which he defended in 1994 for his advanced Doctoral degree.

By promoting the development and use of digital techniques for processing and interpreting geophysical data, Sergey was an early champion of advanced computer methods in marine geoscientific investigations in Russia. In recent years, he turned his attention to the Arctic region, leading a project for compiling and reprocessing geophysical data obtained by Russian expeditions over the past several decades. This work resulted in several innovative conclusions concerning the structural and evolutionary features of oceanic crust in the Arctic.

Sergey wrote or co-authored more than 130 papers, including seven monographs. In 1997, he was elected to the Russian Academy of Natural Science as a corresponding member. He also participated actively in international cooperation projects for science and technology. In 1992, he became a member of the American Geophysical Union (AGU), and was elected as the Chairman of Working Group V-9, Magnetic Anomalies (Land and Sea) of the International Association of Geomagnetism and Aeronomy (IAGA). He was a member of Working Groups that dealt with the compilation of geophysical and bathymetric data from the Arctic under the auspices of the International Arctic Scientific Committee (IASC), and with the preparation of digital information for geotransect construction under the auspices of the Inter-Union Commission on the Lithosphere (ICL). He also participated in a Working Group of the InterRidge Program. In 1998 he attended the ICAM III conference in Celle, Germany. He was much interested in the developments in Arctic science, but already then was under the impact of bad news on his health.

Sergey succeeded both as a researcher and as a teacher. In 1995, he became a Professor in the Geoscience Department of the State University of St Petersburg. While at the university, he trained several specialists in marine geophysics, including three PhD candidates. As an enthusiastic, goal-oriented worker with broad scientific views, Sergey earned profound respect from Russian and western colleagues, students and young specialists. The memory of this kind and sincere man will always stay in our hearts.

His colleagues from St. Petersburg