Leonid Kalinichenko

10.06.1937–17.07.2018

In July 2018 we lost a leading visionary scientist in the field of the database theory. Leonid Kalinichenko is known in the scientific community for his pioneering works, the scientific school he established, and the formation of two international scientific conferences run for two decades each.

Leonid Kalinichenko's entire life was devoted to computer science. In 1959 he graduated from Kiev Polytechnic Institute and started his work at the Institute of Cybernetics the Ukraine Academy of Sciences. In 1968 he received his Ph.D. degree from the Institute of Cybernetics the main results of his thesis were devoted to discrete events systems simulation (languages, tools, applications), and in 1969 he moved to the Institute for Electronic Control Machines, Moscow. Later, in 1985, he received his Doctor of Sciences degree from the Lomonosov Moscow State University. The thesis was devoted to methods and tools of heterogeneous databases integration. In the same year he became the head of a department at the Institute of Informatics Problems, Academy of Sciences of the USSR, which is now the Federal Research Center "Computer Science and Control" of the Russian Academy of Sciences (FRC CSC RAS).

In 1978 Leonid joined the faculty of the Lomonosov Moscow State University and in 1990 he became Professor of the Department of Computational Mathematics and Cybernetics. He taught courses on object-oriented databases and distributed object technologies. He is an author of ten books, and more than 200 research papers in journals and conference proceedings. His research interests included interoperable heterogeneous information resource integration and mediation, semantic interoperability, compositional development of information systems, middleware architectures, and digital libraries.

Several significant program systems were developed under his supervision: discrete event system simulation SLANG (1969), embedding of simulation systems into various programming systems SKIF (1977), heterogeneous database integration (1984), compositional development of interoperable information systems (2001), subject mediation middleware for scientific problem solving over distributed information resources

(2010). Investigations on methods and tools for heterogeneous information resources integration applying subject mediation methodology supported by formal specification and verification were embraced by the framework project called SYNTHESIS. In 1986 Leonid Kalinichenko was awarded the USSR State Prize in the Field of Science and Technology for his works on system simulation. In 2010 he became Honored Scientist of the Russian Federation.

For several decades Leonid Kalinichenko took an active part in facilitation of research in the field of databases. From 1974 he was the Deputy Chairman of the Working Group on Software for Data Banks under the USSR State Committee on Science and Technology. He initiated the creation of the Moscow ACM SIGMOD Chapter in 1992 and became the permanent chair of the chapter. The monthly scientific seminar of the chapter has operated since the chapter creation until the present time. The 200 seminar meetings significantly influenced the Russian community on databases and information systems.

He successfully formed several international conferences including the European Conference on Advances in Databases and Information Systems (ADBIS) in 1993 and Russian Conference on Digital Libraries (RCDL) in 1999. Leonid Kalinichenko acted as the permanent chair of the Steering Committees of the conferences as well as chair (co-chair) of the Program Committees of many conferences.

In the last few years his activities and works were devoted to problem solving in data intensive domains. During 2013–2016 he initiated several research projects aimed at conceptual modeling and data integration within distributed computational infrastructures.

In 2015 he initiated the transformation of the RCDL conference into the International Conference on Data Analytics and Management in Data Intensive Domains (DAMDID)—a multidisciplinary forum of researchers and practitioners from various domains of science and research promoting the cooperation and exchange of ideas in the area of data analysis and management in data-intensive domains. The conference became a place for discussions on data access, analysis and management problems in astronomy, neurology, genomics, material science, biology.

In 2015 he also organized a master program entitled "Big data: infrastructures and methods for problem solving" at the Department of Computational Mathematics and Cybernetics, Lomonosov Moscow State University to attract students in the field of multidisciplinary data analysis and management.

Leonid was a great scientist with a surprisingly deep knowledge of the state of the art in his field of science, understanding the urgent directions of the development of science. But he was also a real scientific driver of the research team he led at the Institute of Informatics Problems, a driver of conferences he established and scientific groups he contacted.

Leonid's passing away is a huge loss for the scientific community, his family, his colleagues and his friends.

Igor Sokolov
Yannis Manolopoulos
Vladimir Sukhomin
Victor Zakharov
Nikolay Kolchanov
Arkady Avramenko
Pavel Braslavsky
Vasily Bunakov
Alexander Elizarov
Alexander Fazliev
Alexei Klimentov
Mikhail Kogalovsky
Vladimir Korenkov
Mikhail Kuzminski
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