

In memoriam: Prof. Dr. Anton Pavel Železnikar (1928-2026)



The Editorial Board of *Informatica* and the Slovenian Society INFORMATIKA pay tribute to Prof. Dr. Anton Pavel Železnikar, one of the pioneers of computer science and informatics in Slovenia and the former Yugoslavia, an outstanding researcher, professor, visionary, and founder of this journal.

Prof. Dr. Anton Pavel Železnikar belonged to the generation that laid the foundations of modern computing in Slovenia. After graduating in electrical engineering from the University of Ljubljana, he joined the Jožef Stefan Institute in 1955, where he worked until 1980. In those early decades of digital technology, when research was still closely tied to hardware based on vacuum tubes and transistors, he was already looking far ahead, toward algorithms, formal languages, compilers, information logic, and later parallel computer systems, artificial intelligence, and consciousness. His scientific breadth was exceptional, and his work often anticipated directions that would become central only much later. At the Jožef Stefan Institute he served as Head of the Digital Techniques Section from 1961 to 1978 and as Head of the Department of Electronics from 1968 to 1978. In these roles he made an enduring contribution to the institutional and scientific development of Slovenian computing research. He was also deeply engaged in academic life. He taught at the University of Ljubljana, where he became full professor in 1982, especially in the area of compilers, and he lectured as well at the University of Maribor on philosophy and theory of informatics. Through his teaching and mentorship, he helped shape generations of students and researchers.

In 1980 he moved to Iskra Delta Computers, one of the key high-technology companies in Slovenia at the time. There he continued to connect research, engineering, and development strategy. Among other contributions, he was the author of the concept of parallel processing that led to the innovative Triglav–Trident computer with three processors. He later served as adviser to the general director and as a member of the management responsible for research and development strategy within the Iskra corporation. In this way, he played an important role not only in science and higher education, but also in linking advanced computing ideas with industrial development.

His international and professional engagement was equally important. He represented Yugoslavia in International Federation for Information Processing (IFIP) between 1967 and 1975 and organized the IFIP World Congress in Ljubljana in 1971, a major event that significantly strengthened the international visibility of Slovenian informatics. He also contributed actively to the broader professional community through conferences, societies, and editorial work. In 1976 he co-founded Slovenian Society INFORMATIKA and served the Society as its first president.

For *Informatica*, his contribution was of special and lasting importance. He established the journal *Informatica* in 1977 and served for many years as its Editor-in-Chief, helping shape its identity, standards, and long-term international recognition. Under his guidance, the journal became an important scientific forum for computer science, informatics, cybernetics, artificial intelligence, and related disciplines. His editorial leadership helped define the journal's identity and standards in its formative years, while also contributing more broadly to the development of the Slovenian informatics community. The continued existence and international recognition of *Informatica* remain closely connected to his vision and dedication.

Prof. Dr. Železnikar's scientific work covered a wide spectrum, including switching circuit theory, algebraic logic, automata, algorithms, information logic, parallel computer systems, strategy of the computer industry, and later artificial intelligence and consciousness. In his long and productive career, he published more than one hundred scientific and professional works in several languages, as well as two books and a number of university-level teaching materials. His work was not limited to narrow technical problems; he sought broader conceptual foundations of information, computation, and cognition. This made him not only a scientist and engineer, but also a thinker with rare intellectual reach.

He received numerous recognitions for his work and was associated with several distinguished international academies and professional organizations. Yet perhaps his greatest legacy lies in the institutions, ideas, and communities he helped build: at the Jožef Stefan Institute, in Slovenian computing research and industry, in university education, in professional societies, and in this journal.

Prof. Dr. Anton Pavel Železnikar remains in our memory as a visionary of Slovenian informatics, a scholar of exceptional originality and breadth, and one of the key builders of the field. The journal *Informatica* owes an important part of its history to his initiative, leadership, and long-standing editorial commitment.

We remember him with gratitude, admiration, and respect.

Assoc. Prof. Dr. Slavko Žitnik, President of Slovenian Society INFORMATIKA

Prof. Dr. Matjaž Gams, Editor-in-Chief of *Informatica*