

---

## Editorial

---

### František Zbořil

Faculty of Information Technology  
Brno University of Technology, Czech Republic  
E-mail: zboril@fit.vutbr.cz

**Biographical notes:** František Zbořil is an Associate Professor of Computer Science at the Faculty of Information Technology of Brno University of Technology, Czech Republic. He received his MSc in 1968 and PhD in 1978 (both in Computer Science) from the same university. He has started his research activities on analogue and hybrid computers with simulation of continuous systems, namely of systems described by partial differential equations. His next research was focused on classical artificial intelligence, robotics and neural networks. Now, the main objects of his professional interests are the simulation of combined dynamic systems and soft computing problems. He is the author of more than 100 papers and several lecture notes. He has supervised about 200 theses, including doctoral theses. He has prepared 15 different courses and has lectured in three of them: Assembly Languages, Artificial Intelligence and Soft Computing. He is a member of the board of the Czech and Slovak Simulation Society (CSSS) and a member of several other educational, research and academic boards or societies.

---

This special issue consists of nine papers that are centred on the topics of modelling and simulation. All of these papers have been completed at the Faculty of Information Systems of Brno University of Technology by a group of young researchers and doctoral students under supervision of the academic staff. The design of simulation tools, simulation agents and multi-agent systems, a new Java tool for discrete simulation, advances in the simulations of electric circuits, the corresponding analogy in solving partial differential equations, comparisons of a special methodology of an extremely exact solution of solving ordinary differential equations (developed at Brno University of Technology) to well-known word standards (Maple, Matlab) are the main scopes in the presentations of the young researchers. Last but not the least, some practical results in real-time video stabilisation and in the creation of a map of the area where a robot moves are dealt with.