

Foreword about associate professor Arturs Aboltins, IEEE Fellow and associate professor at Institute of Radioelectronics, Faculty of Electronics and Telecommunications (FET), Riga Technical University (RTU):

Arturs Aboltins was born in Rezekne, Latvian SSR (Soviet Socialist Republics), USSR (Union of Soviet Socialist Republics) in 1974. He received his Bachelor's (1995), Master's (1998), and doctoral (2013) degrees in electronics and telecommunications engineering from Riga Technical University (RTU), Latvia. He began his career with Lattelekom as an electronics engineer, mainly dealing with programming of digital telephone switches. Later, he became the manager of division responsible for development of network management systems. In the beginning of the 21st century, he moved to software development and served as a software developer for local and international brands, such as Telos Systems and Hypercom.

Currently he is a senior researcher and an associate professor at Riga Technical University (RTU). His research interests are related to use of signal processing and software-defined radio in various fields of electronics and



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telecommunications. He is a co-author of more than 20 publications in conference proceedings and 7 journal publications. His doctoral thesis (2013) was devoted to synchronization and equalization problems in multicarrier communication systems with non-harmonic subcarriers. Currently, he works on exploitation of chaos phenomena for super-robust timing synchronisation in software-defined radio-based modem for secure wireless sensor network.

Arturs Aboltins is member of Institute of Electrical and Electronics Engineers (IEEE) and he is chair of Communications, Microwave Theory and Techniques, and Antennas and Propagation Joint Societies Chapter of IEEE Latvia Section. Among other IEEE activities, he takes part in the chairing of international scientific conference "Advances in Wireless and Optical Communications" (RTUWO), which have been organized since 2015 and "Workshop on Microwave Theory and Techniques in Wireless Communications" (MTTW).

Besides scientific research, Arturs Aboltins works as researcher in European-funded projects devoted to automatization in agriculture and fishery. One of the projects is devoted to the building of seal deterrent device another is aimed to the development of hybrid Intellectual acoustic-optical system for reduction of damage from cormorants and other migratory birds.

Dear readers,

it is great honour and pleasure to have the possibility to address you few words about my vision in field of electronic engineering. First of all, I would like to thank editorial board of the journal for such possibility.

We are lucky to live in age of rapid development of our field, and we have many opportunities to use our knowledge to improve world around us and to be fulfil our ambitions. According to opinions of many modern scientists, we are living in a decade when we teach machines. Thanks to miniaturisation of computers and deployments of sensor networks, we are able to grab and analyse large amounts of data, therefore, providing foundation for creation of fully automated systems which are aimed to improve our lives. I believe we are in eve of next step of our evolution with autonomous transport and smart cities, when, as my colleague once said: "one person in the garage will be able to build a spaceship".

As a main and very short advice, I would like to encourage scientists to look at the opportunities provided by the newest advances in machine learning and big data. For example, in field of signal processing for communications, new very interesting methods of signal processing and waveform generation, based on artificial neural networks, has started to emerge. In global context, I believe that new knowledge, generated by the machines will help humanity to overcome challenges related to safety, health and preserving of our planet.

In conclusion, I would like to wish readers of this journal new interesting scientific findings and ability to use their knowledge to fulfil their passion.