

## **Foreword**

### **Twenty years of Baltic Electronics Conferences in Tallinn**

In 1985, just after finishing my duties as a Dean of the Faculty of Automation, I started to discuss with my colleagues Prof. Enn Velmre and Prof. Vello Kukk over initiating All-Union scientific conferences (Estonia belonged to the Soviet Union this time) in the field of semiconductor devices, circuits and systems. As a result, the first All-Union conference “Numerical Test and Design Methods of Radio-electronics Devices” took place in Tallinn in 1987. About 40 scientists from Riga, Moscow, Minsk, Kiev, Leningrad and other places of the former USSR participated. A conference titled “Numerical Methods and Means for the Design and Testing of Solid State Electronic Devices” was held in 1989 with the number of participants increased to 50. The last “rouble time” conference took place in 1991. Professor Mart Min joined with a new section “Measurement and Signal Processing”. This conference, titled “Automation, Simulation and Measurement” (ASM’91), was a really international one, we had participants from Finland, Sweden, Latvia, Lithuania, Netherlands, Italy, Germany, Hungary, Russia, Ukraine and Belarus. The number of participants increased to 65. Unfortunately, due to a confused financial situation in Estonia we decided not to organize the next conference in 1993.

The first biennial conference, titled “Baltic Electronics Conference” (BEC’94) as nowadays, was organized in 1994. A new section, “Digital Test and Design”, chaired by Prof. Raimund Ubar, was introduced. The scientists from all the Baltic States and from the universities of Budapest, Helsinki, Stockholm, Darmstadt, Saarbrücken, Grenoble and St.-Petersburg participated. Also researchers from Italy, Germany, Denmark, Poland, Russia, Romania, Ukraine and Belarus took part. Altogether 87 papers were presented and over 150 guests took part in the conference, still the largest number of participants in the history of our conferences. In 1996, a new section, “Communication Technology”, was chaired by Prof. Ilmar Arro. The conference papers were referred to in the international database INSPEC, for the first time in the whole history of Estonian scientific publications. In 1998 the 6th conference took place. We included a section “Power Electronics”, chaired by Prof. Juhan Laugis, in the conference programme. Among the authors we had researchers from 23 countries, mostly from the Baltic Sea area, but also from Great Britain, France, Portugal and even from the Republic of Korea.

In 2000 I lost my colleague and good friend Prof. Kálmán Tarnay from Budapest, who had personally supported the development of the Baltic Electronics Conferences into really international events. We dedicated this conference to his memory. We received more than 115 papers from 20 countries, even from Brazil, China and Oman. The User's Forum, sponsored by the European JEP VILAB project, was organized by Prof. Raimund Ubar. The next conference took place in 2002, when the Department of Electronics celebrated its 40th birthday. The International Programme Committee received more than 125 papers from 17 countries. The 9th Baltic Electronics Conference was organized in 2004. The number of participants has stabilized at about 100 persons from 14 countries. We introduced a student session, chaired by Prof. Peeter Ellervee, where the graduate students can report their latest research results. The year 2004 was exclusively important to Estonian electronics: our government launched the State Programme of Centres of Competence to bring closer the university research and industry. Our Faculty of Information Technology succeeded in the competition under the leadership of Department of Electronics. The Centre of Competence in Electronics, Information and Communication Technologies ELIKO was established the next year.

In 2006 the 10th Jubilee Conference takes place. The IEEE Circuits and Systems Society gave its technical sponsorship to the conference. Again about 100 participants from 12 European countries (no scientists from Russia and Ukraine) take part in the conference. We succeeded to negotiate with IEEE authorities to include the conference papers into the IEEE Xplore Database, which means that papers will be referred to by the ISI Web of Proceedings. The year 2006 is again important to Estonian electronics – the Departments of Electronics and Computer Engineering were successful in applying for the EU financial support to the development of Estonian R&D infrastructure.

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