

The Jubilee of Professor *Laimutis TELKSNSYS*

On November 24, 2000, the academic world of Lithuania will celebrate the 70th birthday of a member of the Lithuanian Academy of Sciences, an habilitated doctor of informatics, an doctor honoris causa of Kaunas University of Technology, and a scientist known not only in Lithuania but also throughout the world – Professor Laimutis Telksnys. He created an original theory and constructive methods to recognize changes in the properties of random processes. Currently, he is investigating the analysis and recognition of random processes as well as solving problems concerned with the creation of computerized multimedia systems and the development of computer networks in order to preserve and propagate the cultural heritage of Lithuania.

Because Professor Telksnys has never been content with narrowly professional activities, he is well known outside of his field in Lithuania. By nature a research engineer with wide interests, he has successfully applied the latest mathematical methods for researching random processes to various sorts of signals and phenomena, e.g., rhythmograms, which reflect the activity and disorders of the human heart, and electromagnetic and acoustic signals. Using these methods it is possible to recognize objects in space or water. Professor Telksnys encourages and supports efforts to preserve the cultural heritage of Lithuania: thanks to his care and constant attention the capabilities of modern computers are being applied to create an audio archive of Lithuanian dialects, whose original recordings were made after World War II using equipment and materials of poor quality. He is actively involved in the creation of an information society in Lithuania and in the use of the Lithuanian language in computer systems.

Laimutis Telksnys is constantly surrounded by a large crowd of colleagues and students. Bold in his acceptance of new ideas and unafraid of untraditional thinking, he has encouraged and accompanied on the road of learning many a famous scientist and social activist. It would be difficult to name all of his former students and colleagues: in addition to engineers and mathematicians we would also find among them physicians, musicians, architects, linguists, and economists. Each of them will attest that he does not remember a single instance when Professor Telksnys – despite important meetings, consultations, and visits or scientific articles and dissertations awaiting his evaluation and comments – begrudged him the time for a learned conversation.

Although it is impossible for this brief essay to cover all of Professor Telksnys' multifaceted activities and convey the charm of his personality, let us nevertheless summarize some of the facts of his life.

Laimutis Telksnys was born in 1930 in the district of Molėtai, in the village of Runionys, in a family of teachers Ona and Adolfas Telksniai. He grew up together with two younger brothers, who are also well known in Lithuanian society: the older one, Vygantas, was a talented composer of popular songs, and the younger, Gintautas, is an architect. An artistic environment surrounded Professor Telksnys in his own family, too: his wife Jura was a musician, his daughter Audra – a pianist and organist.

In 1953, at the then Kaunas Polytechnic Institute (now Kaunas University of Technology), Laimutis Telksnys acquired a specialty in electrical engineering. He pursued his graduate studies in Moscow under the academician V. S. Pugachev at the Institute for Automatics and Telemechanics of the USSR Academy of Sciences, where he earned a technical science candidate degree in 1960. In Lithuania the electronic computer industry had just begun to develop, and from 1959 to 1965 he worked as senior engineer at the special construction bureau of the Vilnius computer plant. Laimutis Telksnys already revealed a gift for innovation at that time: his initiative led to the creation and manufacture of EASP, the first specialized Lithuanian computer intended for the correlative and spectral analysis of random processes, as well as SILUET, a device for automatically recognizing graphic information and transmitting it to computers, and the first massive efforts in Lithuania were undertaken to research and construct systems to recognize written symbols and speech signals. Those efforts were crowned by an automatic machine to recognize printed and handwritten symbols: Ruta-701, which was a great novelty – the first such machine to be industrially produced in Europe. We can see that even then Professor Telksnys understood that good practice is impossible without good theory; thus, in 1965, when he was invited to work at the Institute for Physics and Mathematics of the Lithuanian Academy of Sciences, he established the Department of Recognition Processes. In 1967, with the formation of the Institute for Mathematics and Cybernetics (the present Institute for Mathematics and Informatics), he became assistant director of this institute and manager of its computing center. Under his leadership the general-purpose computing system “Mokslas” of the Lithuanian Academy of Sciences was created here.

He wrote his doctoral dissertation in technical sciences at the Institute for Mathematics and Cybernetics of the Lithuanian Academy of Sciences and defended it in 1971 at the Council for Physics, Technology, and Mathematics of the Estonian Academy of Sciences. He became a professor in 1977, and in 1980 Professor Laimutis Telksnys was accepted into the Lithuanian Academy of Sciences as a corresponding member. Since 1994 he has been a full member of the Lithuanian Academy of Sciences.

Now he is an academician, a professor of informatics, an habilitated doctor specializing in informatics engineering in the field of OTT technological sciences, head of the Department of Recognition Processes, and chairman of the UNESCO Chair in Informatics for the Humanities at the Institute for Mathematics and Informatics. Of his various and multifaceted activities – as scientist, teacher, organizer, and popularizer – he devotes the most attention and care to his work in the Department of Recognition Processes.

Laimutis Telksnys is popular with his students and supervises various scientific work: he directs the projects of students on the doctor’s, master’s, and bachelor’s levels and is a member of doctoral committees. He gives courses in *Process Analysis and Recognition* and *Random Signal Recognition* at Vytautas Magnus University and Kaunas University of Technology.

He has read papers at international scientific conferences, symposia, and seminars in Belgium, Czech Republic, Germany, Finland, France, the Netherlands, Norway, the Slovakia, Slovenia, Sweden, and Lithuania as well as the United States and Japan. He has published 144 scientific articles and created six inventions.

He actively participates in organizations that evaluate scientific work and provide scientific expertise. He is chairman or a member of many councils, commissions, and boards connected with informatics. His organizational activities are very wideranging. These duties are the most important:

- Chairman of the Electronics and Informatics Section at the Lithuanian Academy of Sciences;
- Member of the Lithuanian Science Council;
- Chairman of the Permanent Commission for an Information Society at the Government of the Republic of Lithuania;
- Board Chairman of LITNET, the Lithuanian computer network for science and studies;
- Member of the editorial boards of the scientific journals *Informatica*, *Informacinės technologijos ir valdymas*, and *Elektronika ir elektrotechnika*;
- Member of the scientific editorial board of the Universal Lithuanian Encyclopedia;
- Board Member of Lithuanian National Radio and Television;
- Member of the senates of Vytautas Magnus University, Kaunas University of Technology, and the Institute for Mathematics and Informatics;
- Member of the Theoretical and Physical Modeling Group WG 7.1 of the International Federation of Information Processing (IFIP);
- Member of the expert groups of the European Commission on the Scientific, Technological, and Innovation Problems of the Spread of the European Union and on the Perspectives of Education and Teaching.

For his scientific work Professor Telksnys has received two awards (in 1963 and 1968) from the Scientific and Technical Association of the Instrument Industry – for creating computer hardware instruments to automate scientific research – and two awards (in 1968 and 1980) from the Lithuanian state – for creating an apparatus to recognize written symbols and for devising the theory and methods to recognize nonstationary random processes.

It seems that this 70th jubilee is more necessary for the people around him than for Professor Telksnys himself, on whose energy, undertakings, and achievements the passing years do not appear to have any influence at all.

New information technologies, which have always been and are at the center of Professor Telksnys' interests, are changing our lives so profoundly that this process is often called the digital revolution. We hope that this digital revolution as well as other 21st-century revolutions in knowledge and informatics will bring Professor Telksnys yet more energy to implement his vision of an information society in Lithuania.

From colleagues at the Institute for Mathematics and Informatics and from the editorial board of "Informatica":

Valentinas Černiauskas, Vilma Dragūnienė, Jonas Gikys, Kęstutis Juškevičius, Nerutė Kligienė, Joana Lipeikienė, Antanas Lipeika, Algirdas Montvila, Evaldas Ožeraitis, Ramutė Pajedienė, Šarūnas Raudys, Mifodijus Sapagovas, Eduardas Špilevskis, Daiva Šveikauskienė, Jonas Zdanevičius

Translated by Jonas Steponaitis