Serdica Math. J. **39** (2013), i–iv

Serdica Mathematical Journal

Bulgarian Academy of Sciences Institute of Mathematics and Informatics

LJUBOMIR ILIEV – LEADER OF THE BULGARIAN MATHEMATICAL COMMUNITY

In the occasion of his centenary

Bl. Sendov

As his student and close collaborator for many years, I have had the opportunity on many occasions to speak and write about the rich and fruitful activities of academician Ljubomir Iliev, a leading Bulgarian mathematician and a leader of the Bulgarian mathematical community, see for example [1]-[4].

On the occasion of his centenary, it is natural to try to evaluate his achievements in perspective. Among the Bulgarian mathematicians, active during the middle of the last century, Ljubomir Iliev takes the place after Nikola Obreshkoff and Ljubomir Tschakaloff. His results in complex analysis, namely schlicht functions, analytic inextensibility and overconvergence of series, distributions of the zeros of polynomials and entire functions, having integral representation, inequality of Poul Turan and others are part of contemporary mathematics and are cited by today's researchers. All this is enough to call academician Ljubomir Iliev one of the leading Bulgarian mathematicians in all history.

This is really true and is a generally accepted fact, but Ljubomir Iliev was not only a leading Bulgarian mathematician, we may name many others. What is very important and specific is, that academician Ljubomir Iliev was an outstanding leader of the Bulgarian mathematical community. He had the vision and the ambition to work and organize, during his long active live, all avenues of the mathematical developments in Bulgaria. Today, after the radical political and economic changes in our country, not everything achieved in the past is evaluated without personal emotions. We shall try to present several things connected with the name of Ljubomir Iliev, which are not disputable.

His first important contribution is in the development of Bulgarian mathematical education at all levels. As a Vice Rector of the University of Sofia "St. Kliment Ohridski", Ljubomir Iliev made a very important step for improving the quality of higher education in mathematics for preparing professional mathematicians and researchers. In 1950, in the Physics and Mathematics Faculty of the University were formed special groups for professional mathematicians, which were in fact a magistrature. In addition, with the decisive help of Ljubomir Iliev, 30 secondary schools specializing in mathematics were opened all over the country and one National mathematical gymnasium was opened in Sofia. Up to now, these specialized mathematical schools have played an extremely important role in maintaining the quality of secondary education. There have been many attempts to close these elite schools, or transform them but, they always manage to survive.

A very fruitful activity of Ljubomir Iliev is associated with the Bulgarian Mathematical Union. He helped, together with many other mathematicians and physicists, with the re-establishment of the Bulgarian Physics and Mathematics Society and the separation, afterwards into two unions. A unique characteristic of the Bulgarian Mathematical Union, inspired by tradition and the leadership of Ljubomir Iliev is the unity of all Bulgarian mathematicians in a single professional organization, combining teachers in secondary schools and those working in the universities and in the Bulgarian Academy of Sciences. A demonstration of this unity is shown in the traditional Spring Mathematical Conference, where students, teachers and researchers meet together every year.

Academician Ljubomir Iliev was the initiator and supporter of the development of informatics and computer science in Bulgaria. He started by proposing in 1959 the creation of the first course in numerical analysis, and after 1961, many other courses, which prepared the first specialists in applied mathematics and programming in Bulgaria.

One of the main projects of Ljubomir Iliev was the establishment of the First Bulgarian computer centre, created in 1962 jointly under the Bulgarian Academy of Sciences and the University of Sofia "St. Kliment Ohridski". It took a tremendous effort and organizational talent to select a group of engineers, mathematicians an technicians to build the first Bulgarian digital electronic computer, which became operational in 1963. These pioneering efforts turned out to be the basis for the development of the Bulgarian electronics and computer in-

iii

dustry. It is mostly forgotten today, that in the First Bulgarian computer centre was designed and built one of the first electronic calculators in the world called "Elka". This electronic calculator was advertised in The Financial Times and sold in Great Brittan in 1968. "Elka" was the step to the popular in the former communist countries electronic computer "Pravetz", produced in the electronic factories in the Bulgarian town Pravetz.

As a pioneer in the development of information processing, Ljubomir Iliev believed that eventually, Informatics will become a natural part of Mathematics. He was very active in international cooperation and became Vice President of the International Federation for Information Processing (IFIP). The Bulgarian membership in IFIP was a very good opportunity for many Bulgarian specialists to be in contact with the world leaders in the field.

As the General scientific secretary of the Bulgarian Academy of Sciences and for long time the Vice President of the Academy and Director of the Mathematical institute, Ljubomir Iliev used all his influence for the benefit of the Bulgarian mathematical community. First of all, he introduced a concrete plan for the structure of the Mathematical institute based on a theory for the structure of mathematical science itself. His ambition was to open opportunities in our country for the development of all branches of contemporary mathematics. Ljubomir Iliev defended the necessity to build a separate building for a big Institute of Mathematics and Informatics and succeeded in finishing this building. It is a just recognition of these efforts, that on the occasion of his centenary, a memorial relief of Ljubomir Iliev is on the front wall of this building.

Academician Ljubomir Iliev was a devoted patriot. In the centre of the motivation for every one of his projects was the benefit for his country. He used every opportunity to show that Bulgaria is a country with a rich culture, long history, talented people and a prosperous future. He cared especially for young mathematicians, who show capacity for research and leadership. One of his popular formulas was "For the new fields of research – new young people". Even in the period of the Cold War, Lubomir Iliev was trying to fulfill his principle about the specialization of young scientists in Bulgaria: "Every young scientists has to have at least one specialization in the East and one in the West". A leader is a leader, not because he is on top, but because he cares for the people he leads.

All the activities of Ljubomir Iliev as the leader of the Bulgarian mathematical community took place during the so called totalitarian period. The big political and economic changes and the complete democratization of the country is accompanied by emotional criticism of almost everything created during the totalitarian period. Nevertheless, everything done by Ljubomir Iliev as the leader of the Bulgarian mathematical community is for the benefit of Bulgaria and its value is invariant under every political transformation.

$\mathbf{R} \to \mathbf{F} \to \mathbf{R} \to \mathbf{N} \to \mathbf{C} \to \mathbf{S}$

- BL. SENDOV. The 60-th Anniversary of Professor L. Iliev. Math. Structures, Comp. Math., Math. Modeling., BAS, Sofia, 1975, 17–27.
- [2] BL. SENDOV. Academician Ljubomir Iliev in the occasion of his 70 years. *Fiz.-Mat. Spis.*, Sofia. 29, 3 (1973), 169–171 (in Bulgarian).
- [3] BL. SENDOV. The 80th Anniversary of Academician Ljubomir Iliev. Serdica Bulg. Math. Publ. 19, 2–3 (1993), 91–97.
- [4] BL. SENDOV. Acad. Ljubomir Iliev 1913–2000. Bibliography of the works of Academician L. Iliev. Serdica Math. J., 26, 2 (2000), iii–viii, ix–xxviii.

5, Plachkoviza Str. 1126 Sofia, Bulgaria e-mail: sendov2003@yahoo.com