

## **BULGARIAN BIOCHEMICAL SOCIETY**

President:

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Short history

The first organization of Bulgarian biochemists was registered in 1956 as a Section of Biochemistry of the Union of Scientists in Bulgaria. It emerges as a successor to the traditions and active activities of the Biochemistry Circle at the Department of Biochemistry at the Faculty of Medicine. The initiative for this was a group of enthusiastic scientists, postgraduates and students among whom the names of B. Koichev, D. Bakalov, Dg. Pashkov, G. Saev, A. Hadzhiolov, R. Tsanev, T. Nikolov and others had to be mentioned. The first chairman, who was extremely active in organizing the work in the Section, is Assoc. Prof. Dosyu Bakalov. He chaired the Section from 1956 to 1963. From 1963 to 1981, the chairman of the Section was Prof. T. Nikolov, and after that, Prof. A.A. Hadzhiolov (1981-1990), Assoc. Prof. M. Stambolova (1990-1994), Prof. Ilya Pashev (1994-2001), Prof. Ivan Ivanov (2001 - 2006) and Prof. Diana Petkova (since 2006)

### **Scientific activity**

Even when it was created, there was a casual and creative communication between the members of the Section. Biochemistry teachers, students, graduate students and research assistants were equally involved in the meetings. They were very diverse and predominantly debatable. Meetings were held every Tuesday from 6 pm in a small apartment on Kliment Ohridski Str., on the back of main building of Sofia University, where the USB was housed. Gradually the activity of the section was expanded and deepened. In the 1970s, a large part of Sofia's biophysicists joined it. In 1991, it brought together those working in the field of Molecular Biology and was renamed the Section of Biochemistry, Biophysics and Molecular Biology by decision of the USB Management Board. At that time, it had 347 members. In April of the same year, with the decision of the Management Board of the USB, a Student Group of 40 people was formed.

At all times, the efforts of the management were aimed at creating conditions for the unification and continuous exchange of scientific information and experience between biochemists, biophysicists and molecular biologists in Sofia and the country.

The development of biochemistry, biophysics and molecular biology in Bulgaria was well reflected in the five national congresses of biochemistry organized by the section - the first in 1966 in the main building of Sofia University and the last in 2001 at the Hotel Rodina in Sofia. The work of the congresses were divided into many sections and reflected the achievements of the Bulgarian biochemistry in various fields of research (clinical biochemistry, structural biochemistry, pathobiochemistry, enzymology, structure and function of chromatin, biophysics, biotechnology, etc.).

Between congresses, the activities of the members of the Section were reflected in a number of more closely targeted national events such as symposiums on "NA Research Methods", "Cell Nucleus", "Mechanism of Action of Antimetabolites", "Chromatin Structure and Function", etc., with participation of featuring biochemists from Bulgaria and guests from abroad.

To help the members of the section, the management also organized numerous methodological courses available for specialists from Sofia and all over the country. For example, five courses in Gel filtration and ion exchange chromatography were organized jointly with the Department of Biochemistry, University of Uppsala and the Pharmacy Ltd (Sweden) from 1968 to 1976. Together with Amersham Ltd (England) two courses were organized: "Application of Isotope Methods in Biology and Medicine" (1984) and "Modern Methods in Biotechnology" (1986). Six schools for young research assistants were organized at the Science Station of the University of Sofia – Gyulechica on the topic "Modern Methods in Biochemistry and Biophysics" in 1982, 1983, 1986, 1989, 1992 and 1994.

Public discussions of textbooks and monographs ("Replication and Transcription of Chromatin" by R. Tsanev, G. Rusev, Il. Pashev and I. Zlatanova; "Proteins" by M. Krastev and I. Dalev, etc.) have been periodically held.

In 1971, at the end of the 7th FEBS Congress, a "Discussion on the Problems of Biochemistry Education and Biochemist Training" was organized for the first time in collaboration with Prof. P. Campbell

(University of Leeds, England), it aroused great interest and initiated many further discussions on the same topic (Symposium on "Biochemistry Education - Today and Tomorrow" - 1990, Seminar on the same topic - 1995, etc. ).

During the whole period of organizational activity in the form of specially organized lectures or general meetings of the Section more than 100 scientific reports were presented by reputable Bulgarian scientists or guests of our country.

Since 2004, at the suggestion of the chairman of the section Prof. I. Ivanov, a monthly lectures has been organized (in the meeting hole of the Institute of Plant Physiology at the Bulgarian Academy of Sciences), at which Bulgarian biochemists, biophysicists and molecular biologists were lecturers. A lecture was dedicated to the 50th anniversary of the creation of the double-stranded DNA model and the 60th anniversary of the USB. Members of the section presented reports on interesting topics related to the latest inovations in biology. In September 2009, the section, jointly with the Institute of Organic Chemistry with the financial support of FEBS, held an International School for the Study of Protein Structure and Application, which included practical classes and lectures delivered mainly by foreign and Bulgarian renowned scientists in the field.

The members of the section were honored with awards for excellence in biology. The scientists of the section actively published in international journals, which was also indicators about the scientific development of the section's representatives.

Since 2005 an award has been established in the name of Prof. Todor Nikolov, which awards active and long-standing members of the section.

A seminar in memory of Academician Rumen Tsanev was organized in 2008, at which his huge contribution to the development of biochemistry and molecular biology in Bulgaria was noted.

### **International activity**

The Section of Biochemistry, Biophysics and Molecular Biology has always actively assisted its members in participating in international congresses, symposia, methodological and scientific courses and schools organized by the International Union of Biochemistry and Molecular Biology (IUBMB), Federation of European Biochemical Societies (FEBS) and other related organizations. It may be noted here that the Section is one of the organizations that founded FEBS in 1964 and, despite the recent financial difficulties, has been a member of it so far.

One of the most significant international scientific events of the Biochemistry and Biophysics Section was the organization of the 7th FEBS Congress in 1971 in Varna. It has been met with great interest by biochemists in Europe. More than 3,000 biochemists from around the world took part in it, and its official estimate was that it is one of the best organized congresses of FEBS. Prof. T. Nikolov was the chairman of the Section and the Organizing Committee at that time, and Prof. A. Hadzhiolov, Prof. R. Tsanev, Prof. M. Yomtov, Prof. T. Radev, Prof. G. Markov as well. For the Bulgarian biochemists, the implementation of this congress in our country was very important not only as a source of scientific information, but also as an opportunity for an objective assessment of their own scientific achievements.

The Section has also assisted its members in participating in all FEBS congresses from 1964 to the present, as well as in international congresses, schools and meetings organized by IUBMB. Membership in the International Union of Biochemistry and Molecular Biology has enabled the Bulgarian biochemists to repeatedly receive financial assistance for joint research in laboratories of other European countries, to participate in seminars, summer schools, qualification courses and so on. Regular connection with the IUBMB Education Committee is a long-standing source of highly relevant and useful information for updating biochemistry and molecular biology education in our teaching units, and the inclusion of the FEBS SARS Section enables free use exchange of literature and apparatus from 1993 to the present. Unfortunately, due to lack of funding, since 1995 the Section was forced to cease membership with IUBMB.

A significant international event, organized on a regular basis by the efforts of a large number of Section members, was the Balkan Biochemical and Biophysical Days (BBBD). These were organized for the first time in 1977 on the initiative of the Section Management and jointly with the Greek National Committee on Biochemistry as "Bulgarian-Greek Biochemical and Biophysical Days". Since the next meeting, in 1978 they have grown into the Balkan Biochemical and Biophysical Days and have been running periodically every two years until 2002. The Bulgarian side hosted and organized the 2nd BBBD in Varna in 1978, the 6th BBBD in Plovdiv in 1985 and the 10th BBBD in Joliot-Curie - St. Constantine in 1994. They usually included about 300 scientists from the neighboring Balkan countries (Greece, Turkey, Albania and Macedonia. Montenegro), as well as guests from the UK, France, Sweden, Italy and others.

Joint symposia and meetings of Bulgarian and German (GDR) biochemists have been organized several times, albeit on a smaller scale (Varna 1983; Erfurt 1985; Blagoevgrad 1987, etc.).

Visits to the annual FEBS congresses are regularly organized, with section members presenting reports and posters.

The connections with the FEBS Executive committee are very active and in 2006 they visited Bulgaria and got acquainted with the development of biochemistry, biophysics and molecular biology. In 2007, some of the section's funds were used for the visit the FEBS Education Committee. A two-day seminar on the new methods of biochemistry education was organized, which ended with practical tasks applied at the Medical Exams at the Universities of Manchester and Izmir. The main tools for the workshop were provided by FEBS. In 2017 a new seminar for new methods of education in biochemistry and molecular biology was organized as well. The section management, together with the FEBS Executive committee, arranged the delivery of second-hand equipment for equipping study laboratories at the Department of Biochemistry, Faculty of Biology, Sofia University, as well as for some institutes at Bulgarian Academy of Sciences.

The Chair and the Section Secretary regularly attend Council meetings held after the annual congresses. In 2019 members of FEBS Executive Committee and members of the Working group of Integration visited Bulgaria.

### **Working with young professionals**

Both PhD students and students are traditionally involved in all the activities of the Section. The management of the section has always endeavored, to the best of its ability, to assist them. Since the beginning of 1991, a Student Group of about 40 has been set up at the Section, which formally regulates the youth belonging to the Section and enables them to use a large number of short and long term scholarships from FEBS and IUBMB to participate in the various summer schools, symposia, congresses and specializations. The youth group also organized its own seminars and meetings and participated with priority in methodological schools. Unfortunately, since 1995, the number of young professionals has sharply decreased due to the wave of emigrants involved and the activity of this group has been minimized. The youth group currently has about 50 members.

### **Publishing activity**

After the implementation of youth schools, Balkan biochemical and biophysical days or congresses in Bulgaria, the corresponding programs and abstracts were published. Extremely original in this respect is the Newsletter issued in English during the 7th FEBS Congress. It contained the necessary daily information, presented with a great mood and humor. Its authors were the Mormarevi Brothers, one of whom is actually Prof. M. Yomtov, a renowned scientific biochemist and immunologist and long-time Secretary general of FEBS, who has contributed a great deal to the international prestige of our biochemical science.