

REMARKABLE ANNIVERSARIES

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Devoted to the 130th anniversary of SOFIA UNIVERSITY, the 45th anniversary of INSTITUTE OF NUCLEAR RESEARCH AND NUCLEAR ENERGY-BULGARIAN ACADEMY OF SCIENCES, and 120th anniversary of birth of Professor Elisabeth Karamichailova



The **University of Sofia 'St. Kliment Ohridsky'** is the first higher educational institution in Bulgaria. Its history is an embodiment and a continuation of centuries of cultural and educational tradition in this country. Public teaching activities in Bulgaria date back to the second half of the 9th century. During the Bulgarian Renaissance, a new idea for opening a School of Higher Education was conceived.

The prestige of the School of Higher Education grew rapidly with the cultural and educational mission it acquired after the Liberation in 1878. In 1880 the Ministry of Education introduced the Bill of Schools at the National Assembly. It envisioned the 'opening of a Bulgarian school of higher education (university) which is to cover law, philosophy, medicine, natural and technical sciences'. University education was to follow high school comprehensive and grammar education. Seven years later, in 1887, the Minister of Education Todor Ivanchov issued a decree for opening the first Higher Pedagogical Course at the First Secondary School for Boys in Sofia. At the end of 1888, having considered the success of the Higher Pedagogical Course, the National Assembly passes a bill which transformed the Course into a School of Higher Education. The public in Bulgaria, led by the traditional respect for education, learning and culture, supported the establishment of the University by donations. The prominent financier Evlogy Georgiev, executing also the will of his brother Hristo Georgiev,



donated 10 200 sq. m. of land and 6 800 000 golden levs for the University building and financial support. The sculptures of the two brothers (left picture) are now featured on the facade of the University.

The first lecturers are appointed on January 31, 1888. They immediately set up the foundations of a University Library with many books and periodicals, and start working on the School's statute. They also insist on academic autonomy in the organisation and management of the School of Higher Education.

The first Rector is Professor Alexander Teodorov-Balan, a graduate of the universities of Prague and Leipzig, Doctor of the University of Prague (1884), lecturer in Linguistics, Dialectology and Slavic Philology. Classes began on October 1, 1888 almost unnoticed by the public. This is the birthdate of Bulgarian university education.

According to its provisional statute the Higher Pedagogical Course was to 'give higher education and prepare teachers for high schools'. Classes began with four regular and three external professors among whom were Alexandar Teodorov-Balan, Lyubomir Miletich, Ivan Georgov. They were all graduates of prestigious European universities and well-known scholars. The number of students was 43, all of them men. The provisional statute recognised only one Faculty, that of History and Philology, with three degree courses: History, Slavic Philology, and Philosophy and Education.

During Sofia University's first years, it had three faculties: Faculty of History and Philology (since 1888), Faculty of Physics and Mathematics (since 1889) and Faculty of Law (since 1892). A new Law on Higher Education was passed in 1894. Among the motifs for it are the scholarly and academic prestige of the School in other countries 'where it is officially recognised as a university...'. The duration of study is specified as three-four years. Faculty and Academic Councils, as well as student scientific societies are established. Procedures of graduation envisage defence of Diploma Thesis. The structure and organisation of the School of Higher Education is based on the principles of academic autonomy which makes it compatible with established foreign universities. Among its governing principles are democracy, self-rule, free admission for talented and gifted students from all social groups, academic ethical code. The year 1900 saw the first issue of the University year Book which contained publications of university professors and regulations for the functioning of the University Library. The first women, 16 in number, were welcomed to the university in 1901 and 25 November (8 December N.S.), the day of St. Kliment of Ohrid, became the university's official holiday the following year. In 1904 the School is transformed into a University. This sets the beginning of a new period in the development of higher education in Bulgaria. New lecturers are appointed and they are bearers of great public respect. The following years witness the opening of new Faculties. In 1905 the University receives a new name - Sofia University 'St. Kliment Ohridski'.

At the beginning of the Balkan Wars, 1379 students (725 men and 654 women) were recorded to attend the university. A fourth faculty was established in 1917, the Faculty of Medicine, the fifth, the Faculty of Agronomy following in 1921, the Faculty of Veterinary Medicine and the Faculty of Theology being founded in 1923. In 1922–1923, Sofia University had 111 chairs, 205 lecturers and assistants and 2388 students, of which 1702 men and 686 women.



The foundation stone of Sofia University's new edifice (top picture) was laid on 30 June 1924. Funds were secured by Evlogi Georgiev and Hristo Georgiev. The Rectorate was built according to the initial plans of the French architect Henri Bréançon, who had won a competition for the purpose in 1907. The plans were developed by Nikola Lazarov

and revised by Yordan Milanov, who also directed the construction, but died before the official opening on 16 December 1934.

On 27 October 1929, the first doctoral thesis in natural science of the university was defended by geologist Vassil Tzankov. The second one in chemistry followed on 1 July 1930 and the title doctor was granted to Aleksandar Spasov. In 1930–1931, the university had four more doctors.

In 1938 Sofia University 'St. Kliment Ohridski' celebrates its 50th anniversary as a fully developed academic institution. It already has 7 Faculties, 72 Institutes, Clinics and seminars, eminent full-time and visiting professors, considerable library holdings and its own journal. It has 42 826 full-time students, 14 826 of them graduates. The University is a field for scholarly and academic achievements. University professors establish number of schools and trends in the fields of mathematics, physics, chemistry, linguistics and history.

After the political changes of 9 September 1944 and the emergence of the People's Republic of Bulgaria, radical alterations were made in the university system of the country. At that time in 1944–1945, 13627 students attended the university, taught by 182 professors and readers and 286 assistants. Three new faculties were founded in 1947, one of Forestry, one of Zootechnics and one of Economics and major changes occurred, with many departments seceding in later years to form separate institutions. In the 1947-52 period the National Assembly passes number of bills which separate some Faculties and Institutes from the body of the University. They form the foundations of new schools of higher education: Higher Institute of Economics, the Medical Academy, the Veterinary-Medical Institute, the Academy of Agriculture. Some Institutes are included in the structures of the Bulgarian Academy of Science.

In the last few years some of those Faculties and Institutes were re-established as integral part of Sofia University, for example the Faculty of Theology. There is also a newly formed Faculty of Economics and Business Administration. The Faculty of Chemistry was transformed into Faculty of Chemistry and Pharmacy in 2012.

The Sofia University offers a wide range of degrees in 16 faculties:

- Faculty of Biology;
- Faculty of Chemistry and Pharmacy;
- Faculty of Classical and Modern Philology;
- Faculty of Economics and Business Administration;
- Faculty of Education;
- Faculty of Geology and Geography;
- Faculty of History;
- Faculty of Journalism and Mass Communication;
- Faculty of Law;
- Faculty of Mathematics and Informatics;
- Faculty of Philosophy;
- Faculty of Physics;
- Faculty of Pre-school and Primary School Education;
- Faculty of Slavic Studies;
- Faculty of Theology;
- Faculty of Medicine.

It has three Departments:

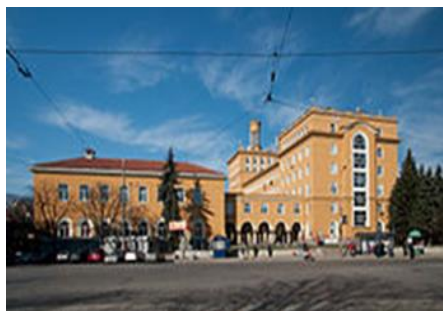
- Department of Language Learning;
- Department for Information and In-service Training of Teachers;
- Sports Department.



One of the lecture halls in the Rectorate and Faculty of Mathematics and Informatics



Faculty of Physics and Atomic Physics Department Laboratories at night (the old building)



Faculty of Chemistry and Pharmacy and Faculty of Biology

The University is exemplary in terms of its scientific research and educational activities, enjoying wide cultural and social significance. It forms the nucleus of the Bulgarian scientific and cultural elite and enlightens the Bulgarian national self-consciousness. About **250 000** students have graduated the University of Sofia since its foundation in 1988. The oldest university in Bulgaria is proud of its alumni, realizing their knowledge and potential in all spheres of public life of our country. Among them are famous scientists, writers, teachers, lecturers, journalists, lawyers, researchers, statesmen. They contribute significantly to the Bulgarian participation in the global development of science and education. Sofia University plays an active role in preparing and conducting policies of national, regional and international significance.

Sofia University 'St. Kliment Ohridski' has the mission to safeguard, enrich and carry through the centuries the spirit of knowledge and the aspirations of humanity to knowledge and truth. The University is the centre of the development of science and the education of students in all domains of life; it also cultivates highly educated, nationally responsible personalities who will lead the Bulgarian nation to spiritual feats and social welfare.

The University's objective is to assert its role as an academic, scientific and cultural centre of European standing. The educational programs of Sofia University must constantly meet the European quality standards and approximate the leading world criteria. The University aims at maintaining the level of the best practices in the

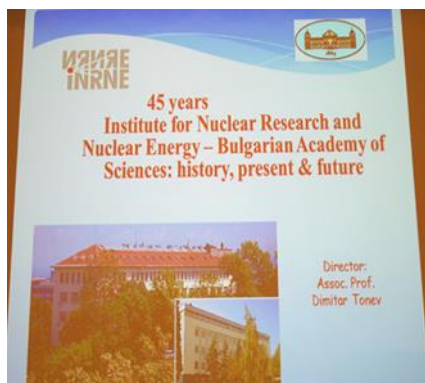
development, management and the implementation of scientific achievements in vitally important walks of social life and in the life of the separate individual.

The University will continue to expand its pivotal role in the setting up and development of projects, policies and strategies for the development of our country. It does its best to assert its leadership position in education, science and the key projects in social development.

All that the Sofia University will achieve by adhering to the principle of professionalism, i.e. top professional competence and impeccable professional performance both by faculty and personnel; the principle of focussing the activities on the stakeholders, the clients and the users of educational services and the activities offered by the University; the principle of continuous improvement and quest for better quality; the principle of prevention, based on ongoing monitoring, analysis and prognostication that will help avoid the occurrence of negative events in the activities and the educational services.

The **Sofia University Mountains on Alexander Island, Antarctica** were named for the university in commemoration of its centennial celebrated in 1988 and in appreciation of the university's contribution to the Antarctic exploration.

In **2018** the **University of Sofia 'St. Kliment Ohridsky'** celebrates its **130th** anniversary.



In **2017** the **Institute for Nuclear Research and Nuclear Energy (INRNE)** of the **Bulgarian Academy of Sciences** noted its **45th** anniversary. **INRNE - BAS** is the largest complex centre in Bulgaria for fundamental and applied research in the fields of: theoretical and mathematical physics, elementary particle theory, nuclear physics, high energy physics, nuclear power engineering, nuclear methods and technologies, monitoring and control of the environment, radioecology. It is the largest institute of the Bulgarian Academy of Sciences. It was founded in

1972 as a successor of the Physical Institute with Atomic Scientific Experimental Base at the Bulgarian Academy of Sciences. The scientific staff includes more than 350 scientists working in more than 30 research laboratories. The laboratories of **INRNE** work in the following fields: Theoretical and Mathematical Physics, Physics of High Energy and Particle Astrophysics, Nuclear Physics, Neutron and Reactor Physics, Nuclear Energy, Nuclear Methods and Radioecology and Environment. The efforts of the Institute's scientists are the main reason for approving Bulgaria's membership in **CERN** in **Geneva** in 1999.



INRNE - BAS operates the only national research nuclear reactor **IRT 2000** put into operation in 1961. The Institute establishes and maintains the **Basic Environmental Observatory - Moussala** for monitoring the transboundary transfer of radioactive substances. A **Cyclotron Centre** is under construction. Due to its years of experience and active cooperation with leading European and world scientific and technological centres such as **CERN**, **JINR** in **Dubna**, etc., **INRNE - BAS** contributes to the development of education, science and technology.

About 107 years ago, in **Ernest Rutherford's** laboratory, the atomic nucleus was discovered. Subsequently, number of new discoveries have shown that the study of new objects forming the micro-cosmos begins. The dimensions and dynamics of this new world prove to be quite different from what is known, and this requires the development of substantially new experimental and theoretical methods for its study. Researchers from different laboratories and universities are starting work to determine the properties of micro-objects and interactions between them. We can be proud that from the very beginning of this activity, Bulgarian scientists are included. They set the beginning of Bulgarian nuclear physics. In 1946 the **Physical Institute of the Bulgarian Academy of Sciences** was established.



Within this institute was a separate group led by **Professor Elisabeth Karamichailova** (left), who was engaged in the study of radioactivity. She was born in 1897 in Vienna. She enrolled in the **Sofia Girls' College** and graduated there in 1917, after which she departed to study at the **University of Vienna**. In 1922 Karamichailova graduated as a **PhD in Physics and Mathematics**. She wrote her thesis, entitled 'About Electric Figures on Different Materials, Especially on Crystals' under the direction of Karl Przibram. In 1931, Elisabeth Karamichailova and Marietta Blau observed a specific type of previously unknown radiation emitted from polonium, which would later be confirmed by **James Chadwick** as neutron radiation, leading to his discovery of **neutrons**. Elisabeth Karamichailova has worked as **research assistant in Vienna** until 1935, afterwards she obtained a 3-year **Alfred Yarrow Research Fellowship** from **Girton College, Cambridge**. She was subsequently employed at the **Cavendish Laboratory**. In December 1937, she applied for a position as a docent in Experimental Physics at **Sofia University**. Karamichailova managed to extend her scholarship by 10 months, and finally returned to Bulgaria in 1939, where she was appointed as a docent of **Experimental Atomistics with Radioactivity** at **Sofia University**. She set up an Atomic Physics course, introducing the latest knowledge from her studies in Austria and England and some of her equipment.

Elisabeth Karamichailova is the first habilitated woman at the University of Sofia, the first Professor of Radioactivity and Nuclear Spectroscopy, and the first woman - Professor of Physics in Bulgaria, founder of the Department of Atomic Physics at Sofia University and the Radioactivity Laboratory at the Physical Institute of Bulgarian Academy of Sciences.

Year **2017** marked **120** years since birth of Prof. Elisabeth Karamichailova, year **2018** notes **50** years since her death in Sofia.

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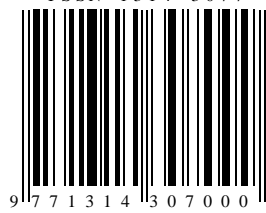
ЗАБЕЛЕЖИТЕЛНИ ГОДИШНИНИ

Галина Крумова

Русенски университет „Ангел Кънчев”

Посвещава се на 130 години от създаването на СОФИЙСКИЯ УНИВЕРСИТЕТ, 45 години от създаването на ИНСТИТУТА ЗА ЯДРЕНИ ИЗСЛЕДВАНИЯ И ЯДРЕНА ЕНЕРГИЯ-БАН и 120 години от рождението на професор Елисавета Карамихайлова
Използвани са материали от сайта на СУ 'Св. КЛИМЕНТ ОХРИДСКИ' и ИЯИЯЕ-БАН.

ISSN 1314-3077



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