Contents of Issue 6, 2015

1 NOVEMBER – DAY OF THE BULGARIAN REVIVAL LEADERS AND BULGARIAN SCIENTISTS
Georgi N. Nikolov: St Ivan Rilski – the Heavenly Patron of the Bulgarians
Awarded Scientists in the Competition for High Scientific Achievements in 2016

FOUNDATION-LAYING MISSION
Nikolay Poppetrov: 50 Years International House of Scientists „Frédéric Joliot-Curie“
Damian Damianov: 147 Years Bulgarian Academy of Sciences
Valentin Stavrev: 75 Years Higher Technical Education in Bulgaria

110 YEARS NATIONAL ETHNOGRAPHIC MUSEUM
Petko Hristov: Days of Cultural Heritage at IEFSEM – 2016
Anita Komitska: Exhibition „Dr. Evdokiya Peteva–Filova – Back in The Palace“
Elena Vodinchar: The Exhibition „Ethnographic Etudes. Dedicated to Dimitar Marinov !“
Iglika Mishkova: Exhibition „Ex Votos“ at IEFSEM – BAS

PROBLEMS OF EDUCATION
Ana Georgieva, Penka Lazarova: SCIENCES ON THE SCHOOL STAGE

GLIMPSE AT THE PAST
Georgi Markov: One hundred Years since the Liberation of Dobrudzha

HEALTH AND MEDICINE
Dimitar Minkov: Significance of Hip protectors for Prevention of Fractures in the Hip joint region

THE FLOOR TO THE YOUNG PEOPLE
Stanislav Gyoshev, Nikolay Stoimenov: 3D Tactile Representation of the Battle of Pavia
Award Winners of the National Programme of UNESCO and L’Oréal „Women in Science“ for 2016
Penka Lazarova: 18th National Competition „Space – Present and Future of Mankind“
Anelia Dakova: 5th National Students‘ Scientific Workshop in Physics and Engineering Technologies

PERSONALITIES
Veneta Kotseva: Roger Boscovich – Encyclopaedic Scientist

ANNIVERSARIES
Nikolay Poppetrov: Academician Georgi Markov turns 70
Vanina Sumrova: Corr. Member of BAS Emilia Pernishka has a Jubilee
Dimitar Kenanov: Prof. D.Sc. Ivan Haralampiev turns 70

EUROPEAN RESEARCHERS’ NIGHT 2016
10th European Researchers’ Night in Bulgaria
Savelina Popovska, Teodora Vulova, Rajna Gindeva: Medical University – Pleven hosts the European Researchers’ Night for the fourth time
Nasko Stamenov:Researchers’ Night at the National Polytechnic Museum
Petja Gancheva, Stefka Kitanova: Reserachers’ (Day and) Night in Rousse
IN MEMORIAM
Robert Kurt Popitz (30 November 1933 – 7 November 2016)

SCIENTIFIC EVENTS AT USB
Elena Nikolova: A Scientific Forum in Smolyan
Boris Jovchev, Seferin Mirchev: National Conference with International Participation
TELECOM 2016
Abstract

This is the saint most highly revered by the Bulgarians – from the Middle Ages until today. August 18, 2016 marked 1070 years since the blessed Assumption of St Ivan Rilski († 946) – heavenly protector of the Bulgarian people since the 10th century and into the future centuries. The memory of the Bulgarian people has kept another two dates as a token of reverence for the saint – October 19 (the transfer of his holy relic from Sredets/Sofia to Târnovo – 1195) and July 1 (the transfer of his holy relic from Târnovo into the monastery founded by him in the Rila mountain – 1469).

Awarded Scientists in the Competition for High Scientific Achievements in 2016
International House of Scientists „Frédéric Joliot-Curie“ (IHS), in the resort „St. St. Constantine and Elena“ near Varna, on the Black Sea, was established in 1964 to 1966 on the initiative of the Union of Scientists in Bulgaria as a center for science work for various scientific forums and rest. Its construction is an expression of the understanding that science communication at national and international level is essential for the development of science in the modern world. With the opening of IHS the country makes its contribution to the development of congress tourism. The home has a huge importance for the development of scientific communications in terms of the Cold War. On the occasion of the 50th anniversary of its creation in the article provides a brief overview of its history and its meaning.
The paper is based on the speech of the Vice President of Bulgarian Academy of Sciences (BAS) on the celebration of the 147 anniversary from the establishment of BAS. It is focused on the important facts of the history, scientific achievements and future developments of the Academy. The names and contributions of important persons associated with the history of the Bulgarian Learned Society and BAS and some of the research results, performance, technology, apparatus, methods and new materials were emphasised. The Academy is the best national institution that makes science and produces scientific results, recognized by the international scientific communities, as well as Bulgarian and foreign enterprises.
The higher technical education in Bulgaria dates back to the creation of the Higher Technical School in Sofia (law of 1941). It is the result of many years of efforts and initiatives (from the middle of the first decade of the twentieth century) by the engineers and architects organized into their own association. After the acceptance of the law is carried out enormous organizational work competitions for university teachers, development of regulations, equipment for the rooms, creating a library and auxiliary services, etc. The Higher Technical School (Bulgarian Technical University) opens on 4 October 1942 with five professors, 100 of students and one faculty with two specialties: Civil Engineering and Geodesy. In the second half of the 40s already exist all the engineering disciplines, while in 1953 from the Higher Technical School are separated four specialized engineering universities. The article traces the main aspects of the direct creation of the Higher Technical School.
In 2016 the National Ethnographic Museum in Sofia celebrated its 110th anniversary. Despite of its initial prominence in Bulgaria and abroad, the Museum was unfortunately destructed in 1944 as a result of bombing. In the post-war period the remaining exhibits and documents were re-located. Further they were recovered and enriched during the decades of socialism and during the difficult years of post-socialist transition. On the occasion of the anniversary the Museum the national fundraising campaign „To Breathe New Life to the National Ethnographic Museum!” under the patronage of the President of the Republic of Bulgaria was launched by the Institute of Ethnology and Folklore Studies with Ethnographic Institute – Bulgarian Academy of Sciences (IEFSEM). At the same time the anniversary was celebrated at IEFSEM with the opening of two exhibitions in the halls of the National Ethnographic Museum dedicated respectively to Evdokia Peteva–Filova (one of the first European-educated curators at the museum) and Dimitar Marinov (the first director of the National Ethnographic Museum). The culminations of the celebrations were the Days of Cultural Heritage at IEFSEM held from October 14 (St. Petka Day) to October 27 (St. Demetrius Day). This initiative included two scientific conferences and an Open Day at the National Ethnographic Museum. All the initiatives enjoyed considerable public attention and success.
The exhibition „Dr. Evdokiya Peteva–Filova – Back in The Palace“ is a part of the Heritage days, organized by IEFSEM–BAS, on the occasion of the 110th anniversary from the foundation of the National Ethnographic Museum. It is dedicated to Dr Evdokiya Peteva–Filova, curator at the National Ethnographic Museum (1925–1940), researcher of the Bulgarian traditional art and prominent scientist.

The exhibition is the first to show in public significant photographs and documents, that have been kept in the State Archives, the National Library „St. st. Cyril and Methodius“ Archive, Dr Evdokiya Peteva–Filova’s family archive and private collections, which represent her life, scientific achievements and charity.

The model of the exposition emphasizes on the exposing of Dr Peteva–Filova’s publications, while the illustrations from her researches have been accompanied by the original objects, kept in the museum funds. The visitors can see women’s festive costumes and accessories, bride’s head coverings and embroidery, pieces of Bulgarian traditional goldsmith, pottery and coppersmith.

The exhibition was realized with the financial support of the UNESCO National commission for the Republic of Bulgaria.
Elena Vodenichar: The Exhibition „Ethnographic Etudes. Dedicated to Dimitar Marinov“
THE EXHIBITION „ETHNOGRAPHIC ETUDES. TO DIMITAR MARINOV IT’S DEDICATED!“
Elena Vodenichar

Abstract

This paper presents an exhibition of the National Museum of Ethnography. The main goal of is to remind us of the big collector of ethnographic and folklore materials Dimitar Marinov. The text focuses on the plot of the exhibition, which presents the forgotten knowledge of the past, when Ethnographic Museum is just an idea, but today it is 110 years. In five exhibition halls using a variety of ethnographic exhibits are shown biographical moments of D. Marinov, his interest in Bulgarian customs and lifestyle of the people, folk music and spirituality. Attention is paid to the history of the museum and participation Marinov in its construction. Only a few years he organized the working process in the museum, according to the European pattern. He laid the foundation of the leading ethnographic collections: folk costumes and ornaments, ritual art, pottery, rugs, wood carving, Christian symbols, folk musical instruments and so on. He started publishing „Reports of the Ethnographic Museum in Sofia“. But most of all Dimitar Marinov changed the public attitudes towards the Bulgarian traditional culture.
THE EXHIBITION „EX VOTOS“
Iglika Mishkova
Abstract

The exhibition is arranged in the frames of project „Thracian patrimony – ethnological and folkloristic interpretations“ – Institute of Ethnology and Folklore Studies with Ethnographic Museum.

The term ex-votos (votivi in Bulgarian) is derived from the Latin word ex-voto and in Bulgarian most commonly it means a ‘promise’, ‘offering’, ‘vow’, ‘pledge’ (obrok – Bulg.). That is why the people called them offerings. The word offering refers both to the act of making promise, or the pledge, as well as to the object being offered. Almost everything, whatever its dimensions, weight, shape and often functions could make an offering if only it is devoted to God/divinity. Votive offerings were not used in the course of liturgy but they were set at sacred places – upon the icons in the temples, at the shrines tied with red thread.

Ex-votos are gifted by the worshippers for two general reasons. On the one hand, these are the offerings presented with a wish, request and gratitude for good health or a child. On the other hand, the basic motive for the offering could be the wish or request for fertility or success of a particular work, as well as orientation of a child to a specific profession when he/she grows up, for a new home.
Although with less participants (111 students and 31 teachers) than in its previous editions, the 6-th national festival, held 28–30.10. 2016 in High School „Vasil Levski”, succeeded to demonstrate that the application of inquiry-based teaching approaches in biology, physics, chemistry and mathematics from the teachers, ignites students’ interest in sciences. All teachers and students presented their projects on stands and as an additional advantage as workshops or seminars. The selection of the best projects which will represent Bulgaria on European Festival in Debrecen next year was not an easy task.

Judging by the rating of the projects by the jury of experts – scientists and educators from the Unions of Physicists, Chemists, Biologists and Mathematicians in Bulgaria and the Students’ Eko-parlament, there is a growing interest and enthusiasm of the teachers of the youngest students in preschool and elementary school level, which involve the kids to work on their own, observe and experiment with the surrounding nature. Considerable interest among school teachers and students is pointed towards environmental and „low-cost” science projects, although projects under all the guiding themes were presented.
The liberation march of the Third Army led by General Stefan Toshev in Dobrudzha in the autumn of 1916 is one of the most glorious pages in the new Bulgarian history. The capture of the bridgehead fortress of Tutrakan and the battle of Dobrich guaranteed the victory over the coalition Romanian and Russian troops, which sought to connect with the armies of France, Britain and Italy on the Macedonian front. The breakthrough at Kubadin strengthened position allowed the Bulgarians to advance to the Danube Delta excluding the danger of enemy landings on the west coast of the Black Sea. The retention of significant enemy forces in Dobrudzha helped the capture of Bucharest and the rapid defeat of Romania.

Bulgarian historiography is in debt to the study of Bulgaria's participation in the war against Romania, because for decades it has kept silent due to political reasons. The liberation of Dobrudzha was one of the national objectives in the fight for „uniting all Bulgarians in one state“ and should not be associated with the expansion of this or that Great Power in the Balkans. History should be written as it was and not be a slave to variable political situation and misunderstood „neighborhood“. Any consideration of current conditions under the pretext of „reconciliation“ is to the detriment of the truth about World War One and leads to self-censorship, which is a hardly surmountable obstacle in the humanities.
HEALTH AND MEDICINE
Dimitar Minkov: Significance of Hip protectors for Prevention of Fractures in the Hip joint region

SIGNIFICANCE OF HIP PROTECTORS OF FRACTURES OF THE FEMOR IN THE HIP JOINT REGION
DIMITAR MINKOV

Abstract
The fractures in the femoral neck and trochanter fractures are a disease with great social significance. The estimated number of these fractures worldwide in 2050 over 6 million. Means of reducing peak impact force and consequently the risk of fractures are external protectors for the proximal thigh. The hip protectors can absorb energy in the phase of impact and thus reduce the risk of fracture, but until now they have not known and are not routinely used in hospital and outpatient care in our country.
Abstract

The 3D technologies in the recent years evolve very fast. This makes opportunities for using the technologies in representation of historical events and artefacts. In the presented article attention is paid to historical battle of Pavia, Italy 1525 between the French army and the Holy Roman Empire. For representation of the battle are used the original 7 tapestries, which represents moments from the battle. The tapestries are digitalized, modelled and 3D printed as tactile versions. This gives the possibility for visually impaired people to use and explore them by touching. Great attention is paid to the main characters, they are 3D reconstructed from 2D sources (tapestries) by using 3D software. The 3D printed models were presented in Castle of Pavia, during EXPO 2015 and was visited by over 11 000 people.
Abstract

The eminent scientist-encyclopaedist by Croatian birth Roder Joseph Boscovich (1711–1787) was author of numerous scientific discoveries and inventions in the fields of mathematics, mechanics, astronomy, meteorology, cartography, geophysics, geodesy, engineering, archaeology, philosophy, poetry, etc. He was a great civil engineer, hydraulic engineer and restorer of the church Saint Peter in Rome, Empire’s Library in Vienna, too. Boscovich was author of the travel notes „Diary of one trip from Istanbul to Poland“. This diplomatic trip was realized in 1762 and included as well the Bulgarian territories in Ottoman Empire – the regions of Strandzga Mountains, the Eastern Balkan Mountains and town of Shumen. Federation International des Geometers (FIG) pays tribute to Roder Boscovich and announces 2016 for the year dedicated to him life and multilateral scientific contributions in the fields of the geosciences.