

## Contents

Issue 4, 2017

### A SCIENTIST'S VIEWPOINT

[Lilia Krumova-Tsvetkova: Bulgarian Explanatory Lexicography and National Identity and Culture](#)

### SCIENTIFIC RESEARCH

[Nikolai Spassov: An International Scientific Team Confirmed the View that the First Hominin Lived in the Balkans 7,2 Million Years Ago](#)

[Emilia Chengelova, Milena Angelova, Stefan Petranov: Multifactor Theory of Professions' Attractiveness](#)

### PROJECT-BASED FINANCING OF SCIENTIFIC RESEARCH

[Radostina Kamburova: INERA – a Project to Create Materials for the Future](#)

### PROBLEMS OF ECOLOGY

[Anna Ganeva, Stefka Chankova, Petja Parvanova: X<sup>th</sup> Anniversary Seminar of Ecology – 2017 with International Participation](#)

[Atanas Atanasov et. al: The Role of Innovations for the Prosperity of the Bulgarian Agriculture](#)

[Asya Asenova: Environmental Education Model – an Analysis of Good Practices, Trends and Perspectives](#)

### GLIMPSE AT THE PAST

[Ivan Nurkov: Cognitive Scope of the History of the Weapon](#)

Gabriela Yoncheva, Darina Petrova: Second International Scientific Conference „Slavonic Studies“ in the Town of Nikolaev, Ukraine

[Alexander Pronkevitch: The Cult of the Book and the Literary Work in the South Slavonic Boarding House](#)

[Darina Ilieva, Gabriela Vaptzarova: P. Abrashev's Memories of the Teaching of Aleko Konstantinov in Todor Minkov's Boarding House](#)

### PERSONALITIES

Vladimir Dimitrov: Academician Bogdan Kurtev – a Life Devoted to the Institute of Organic Chemistry

[Atanas Atanasov: Academician Tseno Hinkovski – 90 Years since his Birth](#)

Dimitrina Ilchovska: 90 Years since the Birth of Academician Nikola Tomov

### DESERVED RECOGNITION

Michail Videnov: In Memory of Acad. Ivan Duridanov

### THE FLOOR TO THE YOUNG PEOPLE

[Veselka Radeva et al.: Project „Blue Space“ – Space Solutions to Global Terrestrial Problems](#)

### ANNIVERSARIES

Stefka Kitanova, Vassil Chakarov: *The Plants of Tomorrow are the Grains of Today*

### BOOK REVIEW

## A SCIENTIST'S VIEWPOINT

Lilia Krumova-Tsvetkova: Bulgarian Explanatory Lexicography and National Identity and Culture

### BULGARIAN EXPLANATORY LEXICOGRAPHY AND NATIONAL IDENTITY AND CULTURE

Lilia Krumova-Tsvetkova

#### Abstract

The paper outlines the significance for collecting and preserving the Bulgarian word-stock of the most representative dictionaries of Bulgarian language: Naiden Gerov's *Dictionary of Bulgarian Language* and multi-volume academic explanatory *Dictionary of Bulgarian Language*. It describes the importance of these dictionaries for the development of Bulgarian culture and preservation of Bulgarian national identity.

Keywords: Bulgarian language, explanatory dictionary, national identity, Bulgarian National Revival

## SCIENTIFIC RESEARCH

Nikolai Spassov: An international scientific team presents evidences that the first hominins arose in the Eastern Mediterranean 7,2 Milion Years ago

AN INTERNATIONAL SCIENTIFIC TEAM PRESENTS EVIDENCES THAT THE FIRST HOMININS AROSE IN THE EASTERN MEDITERRANEAN 7,2 MILLION YEARS AGO

Nikolai Spassov

Abstract

An international scientific team from Germany, Bulgaria, Greece, Canada, France and Australia, presents evidences that the first hominins (first pre-humans) arose in the Eastern Mediterranean 7,2 Million Years ago. The present-day chimpanzees are humans' nearest living relatives. Researchers have assumed up to now that the lineages of chimps and humans diverged five to eight million years ago and that the first pre-humans developed in Africa.

The recent research published in two papers (PLOS ONE, May 22.2017) presents another scenario about the origin of the humankind. The new view point is based on two fossil remains, discovered in Greece at (at Pyrgos Vassilissis near Athens) and in Bulgaria (the area of Azmaka near Chirpan). Both finds must be referred to one and the same species, the fossil hominid *Graecopithecus freibergi*. Its dental features give ground to consider *Graecopithecus* a pre-human (hominin).

The determined remains of the mastodont *Anancus* sp., the bovid *Tragoportax macedoniensis* and several other newcomers in the local fossil fauna indicate that the age of the *Graecopithecus* localities is younger that the one of the well-known paleontological locality of Pikermi in Greece. The precise analyses show an age of 7.24 Ma for the find from Azmaka and respectively 7.175 for the one from Pyrgos Vassilissis. The rather dry savannah paleoenvironment of this pre-human is also restored.

All this characterizes *Graecopithecus* the oldest potential hominin, whose age exceeds by several hundred years that of *Sahelanthropus*, found in Chad and considered until now to be the oldest hominin.

Thus, the chimpanzee-human lineage split and the appearance of pre-humans most probably occurred in the Eastern Mediterranean and not – as customarily assumed – in Africa.

In 1994 the eminent French paleontologist Yves Coppens emphasized the role of droughting of the East African landscapes for the evolution of the pre-humans and calling it East Side Story. Today we have more reason to relate this process with a North Side Story.

Emilia Chengelova, Milena Angelova, Stefan Petranov: Multifactor Theory to Professions'  
Attractiveness

MULTIFACTOR THEORY TO PROFESSIONS' ATTRACTIVENESS

Emilia Chengelova, Milena Angelova, Stefan Petranov

Abstract

Despite the variety of theories discussing people's motivation, choice of profession and career development, so far, no theory of professions' attractiveness has been created in European research practice. The current text presents an innovative multifactor theory that explains the attractiveness of the professions with a set of endogenous and exogenous factors. Different in nature, factors have heterogeneous effects on the choice of profession and on the satisfaction of its exercising. The presented multifactor theory will be implemented as a methodological basis for conducting a series of survey studies focused on increasing the attractiveness of the professions in 4 key sectors for the Bulgarian economy: 1) Machine building and metalworking; 2) Electrical engineering and electronics; 3) Transportation and forwarding; and 4) Health care and beauty and health services.

## PROJECT-BASED FINANCING OF SCIENTIFIC RESEARCH

Radostina Kamburova: INERA – a Project to Create Materials for the Future

### INERA – A PROJECT TO CREATE MATERIALS FOR THE FUTURE

Radostina Kamburova

#### Abstract

INERA acronym (IN European Research Area) points out the ambition of the Institute of Solid State Physics, part of the Bulgarian Academy of Sciences (ISSP-BAS) for integration in ERA. The INERA project has contributed to enhancing the research infrastructure of the Institute, to attract experienced scientists, to strengthen research innovations, and exchange of knowledge and experience with European partners, with the aim to increase its visibility in Europe and the world. The project is an important platform to enhance the research and innovation strategy of ISSP and for its active participation in emerging advanced materials and nanostructures sciences.

## PROBLEMS OF ECOLOGY

Anna Ganeva, Stefka Chankova, Petja Parvanova: X<sup>th</sup> Anniversary „Seminar of Ecology – 2017“ with International Participation

### X<sup>TH</sup> ANNIVERSARY „SEMINAR OF ECOLOGY – 2017“ WITH INTERNATIONAL PARTICIPATION

Anna Ganeva, Stefka Chankova, Petja Parvanova

#### Abstract

The X<sup>th</sup> „Seminar of Ecology – 2017“ with international participation was held on 27-28 April in the meeting room of the Institute of Biodiversity and Ecosystem Researches – BAS (IBER – BAS). The jubilee event was organized by the Department of Biology of the USB and IBER – BAS.

Prof. Stephka Chankova – the chairman of the section „Biology“ – USB welcomes the participants. The Organizing Committee and the participants were greeted by prof. Diana Petkova, D.Sc. – President of the USB and prof. Dimitar Ivanov, D.Sc. – Scientific Secretary at the Bulgarian Academy of Sciences. The Director of IBER – BAS Assoc. Prof. Anna Ganeva also welcomes all guests and participants and presented the main research activities of IBER's team.

More than eighty scientists took part at the Seminar. The 7 plenary and 25 oral presentations as well as 43 posters were presented. Various Universities, organizations, ministries and agencies from Bulgaria and abroad were represented.

Two young scientists – Stefan Kazakov from IBER – BAS (the best oral presentation) and Andrey Popatanasov from Plovdiv University „Paisii Hilendarski“ ( the best poster presentation) were awarded with diploma and three tomes of the Red Book of Republic of Bulgaria – Plants and Mushrooms, Animals and Natural Habitats (joint edition of BAS and Ministry of Environment and Water, Sofia 2015) for their .

The Organizing Committee expresses its deep gratitude to the IBER-BAS and Bulgarian Academy of Science for assistance, providing free of charge conference hall, multimedia, and constructions for poster session. We also express our gratitude to the companies BULGAP EOOD and LKB-Bulgaria EOOD for their financial support.

In the form of congratulations and thanks to the Organizers, guests and participants also celebrated the Anniversary of the Seminar. They thanked for the perfect organization, for the unabated energy and enthusiasm, and for the participation opportunity provided. The audience united to the idea of the annual conduction of „Seminar of Ecology“. It was decided, after reviewing the reports to be published in the Anniversary Edition of the Collection „Seminar of Ecology – 2017“.

THE ROLE OF INNOVATIONS FOR PROSPERITY OF THE BULGARIAN AGRICULTURE

Atanas Atanasov, Goritsa Rakleova, Ivelin Panchev, Mariana Vlahova, Maria Shishiniova, Ventsislav Bardarov

Abstract

In the field of agriculture, Europe and in particular Bulgaria have a certain orientation towards increasing the part of the organic production. Our country has all natural resources to realize such a goal. In regard to this a number of issues related to the state of Bulgarian agriculture, which is one of the most important structurally defining sector in the economy are discussed. The development of specific short and long-term strategies for sustainable development not only of the conventional but also of organic farming will allow determining priorities in the production, its volume and quality as well. Special attention is paid to the application in practice of innovative scientific findings in order to solve problems related to the ecological management of the agrarian sector. Thus our country can take again its place as a stable agricultural producer whose quality production is sought not only in the domestic but also in the foreign markets.

## Asya Asenova: Environmental Education Model – Analysis of Good Practices, Trends and Perspectives

### ENVIRONMENTAL EDUCATION MODEL – ANALYSIS OF GOOD PRACTICES, TRENDS AND PERSPECTIVES

Asya Asenova

#### Abstract

This article provides a detailed analysis of the extracurricular activities in biology education in terms of national policies, programs and strategies. Presented and analyzed is a successful model for organizing environmental education and sustainable development through concrete tools for extracurricular activities. The educational product, which is presented in the article, is a training programme “Region for kids”, presented in the form of training aids, including handbook for teachers, a small guidebook in the biological diversity of the concrete region and a CD with special materials from the aid. The topics and activities are orientated to the age range of the target audience and the instruments proposed for performance reflect the modern trends in environmental education- interactive methods, a combination of theory and practice, inclusion of all the senses, applying the principles of natural interpretation.

**Key words:** *Environmental education, Sustainable development, Extracurricular activities*

## GLIMPSE AT THE PAST

Ivan Nurkov: Cognitive Scope of the History of the Weapon

COGNITIVE SCOPE OF THE HISTORY OF THE WEAPON

Ivan Nurkov

Abstract

The cognitive scope of the history of the weapon is part of the whole history of mankind – prehistory, history of the world (contemporary) history, going beyond the time of “written history”. Some of the historical weapons still exist today. They are basic material facts about the historical path of man, because the interpretation of the past as historiography, history, and historical science is based on the entire material and immaterial foundation of facts, respectively historical facts.

**Keywords:** History of the weapon, cognitive scope, written and whole history.

## Alexander Pronkevitch: The Cult of the Book and the Literary Work in the South Slavonic Boarding House

### THE CULT OF THE BOOK AND THE LITERARY WORK IN THE SOUTH SLAVONIC BOARDING HOUSE

Alexander Pronkevitch

#### Abstract

The South Slavonic Pansion, created by Todor Minkov in the town of Nikolaev in 1867 is an environment in which there is an atmosphere of intellectual competition in various fields, including literary work. In this sense logically graduates pansion are many professional writers and publicists. Some of whom (above all Aleko Konstantinov and Georgi Stamatov) become phenomena of a higher degree and enter the canons of Bulgarian literature.

Having completed their training in this port and military city, they continue to study at different universities in Russia and Europe and gain the reputation of remarkable masters of speech in their homeland. The basis of their future success, however, is undoubtedly laid in the South Slavonic boarding school.

The aim of this work is to try to understand those elements of the pedagogical system of Todor Minkov that lead to this remarkable result.

**Key words:** Nikolaev, Todor Minkov, literary work

Darina Ilieva, Gabriela Vaptzarova: Memories of P. Abrashev about the Teaching of Aleko Konstantinov in the Boarding House of Todor Minkov

MEMORIES OF P. ABRASHEV ABOUT THE TEACHING OF ALEKO KONSTANTINOV  
IN THE BOARDING HOUSE OF TODOR MINKOV

Darina Ilieva, Gabriela Vaptzarova

Abstract

At the South Slavonic boarding house in the town of Nikolaev in the 19th century, many Bulgarians live and study. After the Liberation, they became the „builders“ of modern Bulgaria. Much of them connected their lives with the Bulgarian Academy of Sciences.

The theme of this report is to reveal the friendship of two students from the boarding house of Todor Minkov – Peter Abrashev and Aleko Konstantinov, to show the relationships and friendship that arose between them away from home. This friendship gave birth to Abrashev's idea of writing and publishing later his memories of the South Slavonic boarding house in the town of Nikolaev.

*Keywords: South Slavonic Board, Peter Abrashev, Aleko Konstantinov, Bulgarian Academy of Sciences*

## THE FLOOR TO THE YOUNG PEOPLE

Veselka Radeva et al.: Project „Blue Space“ – Space Solutions to Global Terrestrial Problems

### PROJECT „BLUE SPACE“ – SPACE SOLUTIONS TO GLOBAL TERRESTRIAL PROBLEMS

Veselka Radeva, Ivo Peshev, Aleksander Georgiev, Dimitar Dudrenov

#### Abstract

This article presents the main ideas of the project „Blue Space“, which won a prize in the NASA Ames Space Settlement Contest for students to design space colonies. The scientific research part of the project analyses three global problems, related to natural disasters, energy crises, and terrorism. We present ideas for solving these problems through a network of satellites and a field of solar panels in Earth's orbit. We suggest engineering and technical solutions for building a space city, in which artificial gravity is created.