



SERBIAN ACADEMY OF SCIENCES AND ARTS

---

# 8<sup>th</sup> DANUBE ACADEMIES CONFERENCE

Belgrade  
2018

8<sup>th</sup> DANUBE ACADEMIES CONFERENCE

8. КОНФЕРЕНЦИЈА АКАДЕМИЈА  
ПОДУНАВСКЕ РЕГИЈЕ

СРПСКА АКАДЕМИЈА НАУКА И УМЕТНОСТИ

---

ПРЕДСЕДНИШТВО

---

# 8. КОНФЕРЕНЦИЈА АКАДЕМИЈА ПОДУНАВСКЕ РЕГИЈЕ

Београд, 21–22. септембра 2017. године

Примљено на IV седници Председништва Српске академије наука  
и уметности 4. јуна 2018. на основу рецензија академика  
*Владимира Стевановића* и академика *Дејана Поповића*

У р е д н и к

академик Марко АНЂЕЛКОВИЋ

У р е ђ и в а ч к и о д б о р

академик Љубомир МАКСИМОВИЋ

академик Владимир СТЕВАНОВИЋ

академик Дејан ПОПОВИЋ

Б Е О Г Р А Д 2 0 1 8

SERBIAN ACADEMY OF SCIENCES AND ARTS

---

P R E S I D E N C Y

---

# 8<sup>th</sup> DANUBE ACADEMIES CONFERENCE

Belgrade, 21–22 September, 2017

Accepted at the 4<sup>th</sup> meeting of the Presidency of the Serbian Academy  
of Sciences and Arts, on 4<sup>th</sup> June 2018, on the basis of reviews by  
academician *Vladimir Stevanović* and academician *Dejan Popović*

E d i t o r

Academician Marko ANĐELKOVIĆ

E d i t o r i a l B o a r d

Academician Ljubomir MAKSIMOVIĆ

Academician Vladimir STEVANOVIĆ

Academician Dejan POPOVIĆ

B E L G R A D E 2 0 1 8

Published by  
*Serbian Academy of Sciences and Arts*  
Belgrade, 35 Kneza Mihaila St.

Proof-readers for English  
*Tatjana Ćosović*  
*Žarko Radovanov*

Prepared for printing by  
*Mira Zebić*

Text assembly  
*Nikola Stevanović*

Number of copies  
400

Print  
*Službeni glasnik, Belgrade*

ISBN 978-86-7025-779-5

© 2018  
Serbian Academy of Sciences and Arts

Издаје  
*Српска академија наука и уметности*  
Београд, Кнеза Михаила 35

Лектори за енглески језик  
*Татјана Ћосовић*  
*Жарко Радованов*

Технички уредник  
*Мира Зебић*

Прелом  
*Никола Стевановић*

Тираж  
400

Штампа  
*Службени гласник, Београд*

ISBN 978-86-7025-779-5

© 2018  
Српска академија наука и уметности

## CONTENTS

### TOPIC 1: Endangered Danube: What can we do?

Thomas Hein, Andrea Funk, Florian Pletterbaue, Daniel Trauner <i>Rivers under threat – challenges for biodiversity conservation in the Danube River</i> .....	9
Vladimir Stevanović <i>HIPPO effects on biodiversity changes in Danube accumulations</i> .....	17
Jasmina Šinžar-Sekulić, Aljoša Tanasković <i>Preliminary research of macrophyte production in Danube reservoirs – case study of two invasive plant species – native <i>Trapa natans</i> and alien <i>Paspalum paspalodes</i>.</i> .....	33
Momir Paunović, Béla Csany <i>Southern Corridor of Aquatic Invasive Network – the Danube river paradigm.</i> .....	45
R. Kalchev, M. Beshkova, V. Evtimova, R. Fikova, H. Kalcheva, V. Tzavkova, V. Vassilev <i>Long-term trophic changes in Bulgarian–Romanian Danube River section and in adjacent wetland on Bulgarian territory during its restoration.</i> .....	55
Jovan Despotović, Marko Ivetić, Mihajlo Gavrić, Aleksandar Šotić <i>Integrated evaluation of hydrologic, hydraulic and sediment processes on the Danube influenced by the Đerdap reservoir, aiming at projection of system safety accounting for global and climatic conditions</i> .....	79

Cristian Hera, Nicolae Panin  
*Strategy of Romania Development in the Following 20 Years,  
including the Lower Danube Problems –  
a strategy proposed by the Romanian Academy* . . . . . 87

Boris Bourkinskyi, Paul Goriup, Oleg Rubel  
*Potential of innovation for biomass use in Danube region of Ukraine* . . . . . 91

Pavol Sajgalik  
*WATERS initiative “People and water” coexistence  
in the Slovakian Danube region* . . . . . 93

## **TOPIC 2: Universities in Transition**

Ivanka Popović  
*The role of higher education in developing an innovation spirit* . . . . . 97

Alojz Kralj  
*Danube regions universities in transition: the issues and challenges* . . . . . 99

Marijana Vidas-Bubanja  
*Education as a way to prepare Serbia for digitally connected world* . . . . . 119

Georgi M. Dimirovski  
*Chinese approach in globalization era:  
information-based revolution of education, science and technology*. . . . . 143

Dejan Popović  
*For whom are the Ph.D. schools in Serbia today?* . . . . . 163

TOPIC 2:  
Universities in Transition





# THE ROLE OF HIGHER EDUCATION IN DEVELOPING AN INNOVATION SPIRIT

Ivanka POPOVIĆ\*

Academia is traditionally geared toward academic excellence and training young minds to accept and develop new ideas. Major scientific breakthroughs are usually made at universities. However, the concepts of translating an evolving idea into a proper innovation and, consequently, a commercial technology are not sufficiently passed on to students at the university level. Universities need to provide stimulating innovation ecosystems, not only for researchers, but also for students. Awareness raising activities, specialized courses and degree programs, dealing with innovation, need to be integrated into the academic ecosystem. Universities are expected to provide a system of innovation centers, technology incubation centers and science technology parks that provide support to technology development. Thus, a close interaction between established researchers and novices can be established, starting from conceptualization down to commercialization with emphasis on financial support, especially in countries in which the pre-incubation phase of innovation is extremely fragile. The University of Belgrade has set up such a support structure. It consists of eight innovation centers, the UB Center for Technology Transfer, the Business-Technology Incubator of Technical Faculties and the Belgrade Science Technology Park. The University of Belgrade is also working on setting up various partnerships for financing schemes that support innovation.

The challenges of open science and citizen science and their integration into traditional universities will be discussed. In countries in transition, a balance needs to be found between academic and innovation strategies, as well as a pragmatic focus on smart specializations and regional priorities.

---

\* University of Belgrade