

HUMBOLDT-KOLLEG 2018  
„SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE:  
CONNECTING RESEARCH, EDUCATION, POLICY AND PRACTICE“  
Belgrade, September 19-22, 2018

## **BOOK OF ABSTRACTS**

**(with Kolleg Agenda)**

**Editors:** Mirko Komatina, Dragan Nonić, Branimir Jovančićević

Belgrade, 2018

HUMBOLDT-KOLLEG 2018  
„Sustainable Development and Climate Change:  
Connecting Research, Education, Policy and Practice“  
Belgrade, September 19-22, 2018

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**Published by:** Humboldt-Club Serbia, Studentski trg 1, 11000 Belgrade, Serbia

University of Belgrade - Faculty of Forestry, Kneza Višeslava 1, 11030 Belgrade,  
Serbia

**For Publisher:** Dr. Mirko Komatinia

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The publication of this issue is financially supported by the Alexander von Humboldt Foundation.

Abstracts are published as submitted by the authors.

**Website:** <http://www.humboldt-serbia.ac.rs/kolleg2018/index.html>

**Computer text design:** Nenad Ranković

**Printed by:** "Planeta print", Printing Office, Ruzveltova 10, Belgrade

**Number of copies:** 250

We thank for the support / Wir danken fur die Unterstützung

Unterstützt von / Supported by



**Alexander von Humboldt**  
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## HUMBOLDT-KOLLEG BELGRAD 2018

Sustainable Development and Climate Change: Connecting Research, Education, Policy and Practice

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Од 16. октобра 1990. године Хумболтов клуб Србије окупља стипендисте и добитнике награде „Фондације Александар фон Хумболт“ у Србији. Знања и искуства стечена у Немачкој током својих последокторских усавршавања, руководство и чланови Клуба користе у циљу развијања науке у Србији кроз подстицање научног подмлатка и промовисање науке у друштву. Активности Клуба су бројне. Предавања еминентних научника из Србије и иностранства о актуелним научним темама омогућавају стални контакт Хумболтоваца. На предавања се повозијају младе колеге, потенцијални апликанти за престижну Хумболтову стипендију. На тај начин они су у прилици да се упознају са могућностима усавршавања у Немачкој, са предностима које таква усавршавања пружају, и да при томе процене своје шансе за добијање стипендије.

Међу најважнијим активностима Хумболтовог клуба Србије су и оне које се односе на организовање научно-стручних скупова. Конференцију „Одрживи развој и климатске промене: повезивање истраживања, образовање, политике и праксе“ („Sustainable Development and Climate Change: Connecting Research, Education, Policy and Practice“), Клуб организује од 19. до 22. септембра 2018. године у Београду. Одговоре на постављени задатак покушаће да дају еминентни истраживачи из природних и хуманистичких наука: у колико мери су климатске промене последица деловања човека на животну средину, или су оне само последица турбулентних, али нормалних, појава у развоју Земље као планете?

Учесници скупа су пре свега Хумболтовци из Србије и других, махом суседних, земаља. И овом приликом свој допринос ће дати научници из Немачке. Велики број младих научника који су потенцијални добитници престижне стипендије кроз своје радове и дискусије покушаће да допринесу успеху конференције. Посебно драги гости су, свакако, званичници Фондације Александар фон Хумболт из Бона и представници немачких дипломатских и других институција у Београду и у Србији. Посвећеност међународној сарадњи, Универзитет у Београду је још једном показао тиме што је у организовању ове конференције узео активно учешће. Поред дефинисаних научних циљева, организатор има жељу да промовише и поспеши сарадњу међу Хумболтовцима, не само у Србији већ и у региону, и да друштву, а пре свега младим истраживачима, приближи и јасније представи користи усавршавања у Немачкој кроз рад Фондације Александар фон Хумболт.

У име члanova Научног одбора и организатора овог скупа изражавам наду да ће конференција испунити очекивања. Користим прилику да се захвалим „Фондацији Александар фон Хумболт“ која је и овог пута подржала организовање Конференције.

Београд, септембар 2018. год.

Бранимир С. Јованчићевић,  
председник Научног одбора Конференције

Мирко Коматина,  
Председник Хумболтовог клуба Србије

Since October 16, 1990, the Humboldt Club of Serbia has gathered scholars and winners of the Alexander von Humboldt Foundation in Serbia. Knowledge and experience acquired in Germany during their postdoctoral studies, the management and members of the Club use in developing science in Serbia by encouraging scientific research and promoting science in society. Club activities are numerous. Lectures by eminent scientists from Serbia and abroad on current scientific topics enable constant contact between Humboldtians. Young colleagues, potential applicants for the prestigious Humboldt Scholarship are invited to the lectures. In this way, they have the opportunity to become familiar with the study opportunities in Germany, with the benefits of such advanced study, and to assess their chances of obtaining a scholarship.

Among the most important activities of the Humboldt Club of Serbia are those related to the organization of scientific-professional meetings. The Club is organizing the conference „Sustainable Development and Climate Change: Connecting Research, Education, Policy and Practice“ from September 19 to 22, 2018 in Belgrade. Responses to the task will be tried by eminent researchers from natural and humanistic sciences: to what extent are climate changes resulting from man's action and impact on the environment, or are they only a consequence of turbulent, but normal, phenomena in the development of the Earth as a planet?

The participants of the conference are primarily Humboldtians from Serbia and other, mostly neighboring countries. On this occasion, scientists from Germany will also contribute. A large number of young scientists who are potential winners of a prestigious scholarship will try to contribute to the success of the conference through their articles and discussions. Certainly dear guests are, of course, members of Alexander von Humboldt Foundation from Bonn and representatives of German diplomatic and other institutions in Belgrade and Serbia. The University of Belgrade once again demonstrated its commitment to international cooperation by active participation in organizing this conference. In addition to the defined scientific goals, the organizer has the desire to promote and accelerate cooperation among the Humboldtians, not only in Serbia, but also to bring closer to society, and above all young researchers, the benefits of training in Germany through the work of the Foundation Alexander von Humboldt.

On behalf of the members of the Scientific Committee and the organizer of this event, I express my hope that the conference will meet expectations. I take the opportunity to thank the Alexander von Humboldt Foundation, who once again supported the organization of the conference.

Belgrade, September, 2018

Branimir S. Jovančićević,  
Chairman of the Scientific Committee of the Kolleg

Mirko Komatinia,  
President of the Humboldt-Club Serbia

Seit dem 16. Oktober 1990 hat der Humboldt Club im Serbien Stipendiaten und Preisträger der Alexander von Humboldt Stiftung in Serbien versammelt. Erworbene Kenntnisse und Erfahrungen während ihrer Postdoc Ausbildung im Deutschland werden vom Management und den Mitgliedern des Clubs bei der Entwicklung der Wissenschaft in Serbien genutzt, durch Forschungs Förderung und Förderung der Wissenschaft in der Gesellschaft. Clubaktivitäten sind zahlreich. Vorträge renommierter Wissenschaftler aus Serbien und Ausland zu aktuellen wissenschaftlichen Themen ermöglichen den ständigen Kontakt zwischen den Humboldtianern. Junge Kollegen, potenzielle Bewerber für das renommierte Humboldt Stipendium werden zu den Vorträgen eingeladen. Auf diese Weise haben sie die Gelegenheit sich über die, Ausbildungsmöglichkeiten in Deutschland und mit den Vorteilen einer solchen Fortbildung bekantzumachen und ihre Chancen eine Stipendium zu erhalten abzuschätzen.

Zu den wichtigsten Aktivitäten des Humboldt Clubs im Serbien gehören die Organisierung von wissenschaftlich-fachlichen Treffen. Der Club organisiert die Konferenz „Nachhaltige Entwicklung und Klimawandel: Verbindung von Forschung, Bildung, Politik und Praxis“ („Sustainable Development and Climate Change: Connecting Research, Education, Policy and Practice“) die von 19. bis 22. September 2018 in Belgrad stattfindet. Renommierter Forscher in den Natur- und Humanwissenschaften werden versuchen die Antworten auf die Aufgabe zu geben: in welchem Umfang ist der Klimawandel Folge der Einwirkung der Menschen und anthropogenen Einflüsse auf die Umwelt, oder ist es nur eine Folge der normalen turbulenten Phänomene in der Entwicklung der Erde als Planet?

Die Teilnehmer der Treffen sind in erster Linie Humboldtianer aus Serbien und anderen, meist benachbarten, Ländern. Bei dieser Gelegenheit werden auch Wissenschaftler aus Deutschland beitragen. Eine große Anzahl von jungen Wissenschaftlern, die potenziellen Gewinner der angesehenen Stipendium, werden versuchen durch ihre Artikeln und Diskussionen zum Erfolg der Konferenz beizutragen. Besonders liebe Gäste sind natürlich die Mitglieder der Alexander von Humboldt Stiftung aus Bon und Vertreter der deutschen diplomatischen und anderen Institutionen in Belgrad und Serbien. Der Universität in Belgrad hat erneut engagement für internationale Zusammenarbeit gezeigt durch aktive Teilnahme an der Organisation dieser Konferenz. Zusätzlich zu den definierten wissenschaftlichen Zielen, der Veranstalter hat den Wunsch das Zusammenarbeiten zwischen Humboldtianer, nicht nur in Serbien, zu fördern und zu beschleunigen, und auch der Gesellschaft und vor allem jungen Forschern die Vorteile der Ausbildung in Deutschland durch die Arbeit der Alexander von Humboldt Stiftung näher zu bringen.

Im Namen der Mitglieder des wissenschaftlichen Ausschusses und des Organisators dieser Veranstaltung hoffe ich, dass die Konferenz die Erwartungen erfüllen wird. Ich nutze die Gelegenheit der Alexander von Humboldt Stiftung zu danken, die die Organisation der Konferenz erneut unterstützt hat.

Belgrad, September 2018.

Branimir S. Jovančićević,  
Vorsitzender des Wissenschaftlichen Ausschusses  
der Konferenz

Mirko Komatina,  
Präsident des Humboldt-Clubs Serbien



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## **THE MITIGATION OF THE ECONOMIC IMPACTS FROM THE FUEL PRICE SHOCKS: SERBIAN CASE**

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The exposure to the risks of the crude oil price volatility for an net-importer country such as Serbia are neglected in its energy policy which has to be first and most important level of structural response to this inherent feature. The shocks in the past, and the current challenges, are not intended to be solved in long-term and sustainable way. The energy transition in Serbia have to be based on locally available and climate friendly energy sources, energy efficiency measures, new technologies, but not only in the area of fiscal policy and taxation of fuels. Having in mind the importance of fuels on the expense/revenue sides of the national budget, this paper will analyze two energy policy scenarios in two fuel price outlooks regarding impacts to the national budget, and further economic development. The economic impacts of the fuel prices volatility will be quantified: by sector of the transport for agriculture, commercial and household sectors, to determine their vulnerability to the shocks. The elasticity of the sectors to respond to these impacts will be qualified. Then, the possible pathways of an economically, and socio-environmental effective distribution of the impacts within these sectors will be suggested to the decision makers. Finally, the potential of long term mitigation of these impacts by the terms of an energy climate policy and energy transition scenarios will be discussed.

**Keywords:** energy transition, national budget, taxation, fuel prices, sustainable energy