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ХУМБОЛТОВ СЪЮЗ В БЪЛГАРИЯ
HUMBOLDT UNION IN BULGARIA

HUMBOLDT KOLLEG

***Humboldtians and Scientific Progress
in the Central and Eastern European Countries***

November 16–18, 2017, Sofia (Bulgaria)

PROGRAM

(As of 13 November 2017)

**16 November 2017
(Thursday)**

**Sofia University
Aula (Ceremonial Hall)**

09:00 – 10:00	REGISTRATION
10:00 – 12:00	OPENING CEREMONY Chair: Georgi Vayssilov (Bulgaria) <ul style="list-style-type: none">• Ilza Pajeva, President of the Humboldt Union in Bulgaria• Rebecca Grossmann, Programme Director, Division Europe, Alexander von Humboldt Foundation - Germany• Jörg Schenk, Counselor and Referent on Scientific Issues in the Embassy of the Federal Republic of Germany• Representatives of Bulgarian state and academic institutions• Prof. Ruxandra Cosma, Humboldt Club - Romania• Dimo Platikanov (presented by Ilza Pajeva, Bulgaria) – History of the Humboldt Union in Bulgaria
12.30 – 13.45	LUNCH (“Krivoto” / “Fly Bar”)
14.00 – 17.30	SESSION: Humboldtians' Contributions to the Advancement of Science in Bulgaria Chair: Christo Balarew (Bulgaria)
14:00 – 15:30	Part 1
14:00 – 14:30	• Lora Taseva, Dilyana Boteva, Krum Bacvarov (Bulgaria) – Humanities and social sciences
14:30 – 15:00	• Nikolai Lazarov, Radka Argirova (Bulgaria) – Biological and medical sciences
15:00 – 15:30	• Ognyan Kounchev (Bulgaria) – Mathematics and physical sciences
15:30 – 16:00	COFFEE BREAK
16:00 – 17:15	Part 2
16:00 – 16:30	• Christo Tsvetanov, Petar Petrov (Bulgaria) – Chemical sciences
16:30 – 16:50	• Silviya Boycheva (Bulgaria) – Technical sciences
16:50 – 17:15	• Georgi Vayssilov (Bulgaria) – Science in Bulgaria - national and European aspects
17:20	Group photo in front of the Aula
18:00 – 21:00	RECEPTION HOSTED BY THE GERMAN EMBASSY IN SOFIA National Museum of Archaeology, Bulgarian Academy of Sciences Chair: Jörg Schenk (Germany)

Greeting Addresses and Awards

- **Herbert Salber**, Ambassador of the Federal Republic of Germany to the Republic of Bulgaria
- **Presidency** of the Republic of Bulgaria
- **Presidency** of the Bulgarian Academy of Sciences
- **Enno Aufderheide**, Secretary General of the Alexander von Humboldt Foundation
- Other officials

09:00 – 11:00	SESSION: HUMBOLDTIANS' CONTRIBUTIONS IN THE CEE COUNTRIES Chair: Krum Bacvarov (Bulgaria)
09:00 – 09:20	• Ruxandra Cosma (Romania) – Change, exchange, transition, innovation, upheaval
09:20 – 09:40	• Jasmina Marković-Lipkovski (Republic of Serbia) – Contribution of Humboldtians to the scientific progress in Serbia in the past 25 years
09:40 – 10:00	• Mile Ivanda (Croatia) – Croatian Humboldt club and science in Croatia
10:00 – 10:20	• Marian Jaskuła (Poland) – Internalisation and globalisation of science
10:20 – 10:40	• György Németh (Hungary) – Humboldtians in Hungarian Classics
10:40 – 11:00	• Alexander Kartosia (Georgia) – The contribution of the Humboldtians to the construction of the Georgia state in the last quarter century
11:00 – 11:30	COFFEE BREAK
11:30 – 13:30	SESSION: SCIENCE TOMORROW Chair: Christo Tsvetanov (Bulgaria)
11:30 – 12:00	• Mirka Uhlirova (Germany) – The role of stress signaling in tissue homeostasis and disease
12:00 – 12:30	• Klaas Bergmann (Germany) – Controlling the internal energy of quantum systems
12:30 – 13:00	• Achim Rabus (Germany) – Neue Entwicklungen in der digitalen (Paläo-)Slavistik
13:00 – 13:30	• Gregor Eichele (Germany) – A cilia-based transport network in the brain
13:30 – 14:45	LUNCH (“Krivoto” / “Fly Bar”)
14:45 – 16:00	SESSION: FOCUS ON YOUNG SCIENTISTS Chair: Petar Petrov (Bulgaria)
14:45 – 15:15	• Irene Faas (Germany) – The academic career path in an international perspective: How young scholars around the world strive for professional establishment and sustainable career opportunities
15:15 – 15:45	• Rebecca Grossmann (Germany) – Presentation of the Programs of the Alexander von Humboldt Foundation
15:45 – 16:00	• Questions & Answers
16:00 – 16:30	COFFEE BREAK

PARALLEL SESSIONS: PRESENTATIONS OF YOUNG SCIENTISTS

16:30 – 18:30

SOCIAL SCIENCES AND HUMANITIES

Chair: Nikolina Burneva (Bulgaria)

- 16:30 – 16:45 • **Natalia Kulikova** (Poland)
The world of medical plants in the A. C. Celsus' Treatise "De Medicina"
(a part of an ancient world seen through the prism of an ancient text)
- 16:45 – 17:00 • **Tanya Dzhanfezova** (Bulgaria)
The hows and whys of the early neolithic painted pottery
- 17:00 – 17:15 • **Ivan Petrov** (Bulgaria)
Some observations on the attributive constructions with modifying
genitive phrase
- 17:15 – 17:30 • **Ivan Iliev** (Bulgaria)
New data about the Slavonic translation of Hippolytus' of Rome
Commentarii in Danielelem
- 17:30 – 17:45 • **Ivan Popov** (Bulgaria)
Kriterien für Wissenschaftlichkeit in der Literaturwissenschaft. Einige
historische Überlegungen
- 17:45 – 18:00 • **Diana Dimitrova, Brian McElree, Petra Schumacher**
(Bulgaria, Germany)
Speed and accuracy trade-off of semantic composition
- 18:00 – 18:15 • **Mariya Chankova** (Bulgaria)
Remix and mashup as equivalents to students' patchwriting
in a discussion on academic plagiarism in the digital age
- 18:15 – 18:30 • **Sonja Schüler** (Switzerland)
"Öffentliches Interesse"? Formen und Funktionen gesellschaftlicher
Interessenvertretung in Bulgarien

MUSICAL PERFORMANCE

of students from the National School of Music "Lyubomir Pipkov"

19:00 – 23:00



OFFICIAL DINNER

Club-restaurant "PANORAMA", 11 Dondukov Blvd.

PARALLEL SESSIONS: PRESENTATIONS OF YOUNG SCIENTISTS

16:30 – 18:30

CHEMICAL SCIENCES (Part 1)
Chair: Yuri Kalvachev (Bulgaria)

- 16:30 – 17:00 • **Keynote lecture: Valentin Mirčeski** (Republic of Macedonia)
Square-wave voltammetry: from electroanalysis to bioelectrochemistry
- 17:00 – 17:15 • **Hristiyan Aleksandrov, Iskra Koleva, Waenkaew Pantupho, Sirinuch Loiha, Georgi Vayssilov** (Bulgaria, Thailand)
Modelling of Fe- and W-containing species in the pores of ZSM-5 zeolite
- 17:15 – 17:30 • **Iskra Koleva, Hristiyan Aleksandrov, Georgi Vayssilov** (Bulgaria)
Modelling of structure and reducibility of catalytic systems based on ceria
- 17:30 – 17:45 • **Petko Petkov, Georgi Vayssilov, Thomas Heine** (Bulgaria, Germany)
Computational modeling of metal-organic frameworks
- 17:45 – 18:00 • **Antonia Diukendjieva, Merilin Al Sharif, Ivanka Tsakovska, Tania Pencheva, Petko Alov, Ilza Pajeva** (Bulgaria)
In silico study of natural compounds: prediction of metabolism, toxicity and biochemical interactions
- 18:00 – 18:15 • **Kai Exner, Anela Ivanova** (Germany, Bulgaria)
Modeling of an efficient drug delivery system based on molecular dynamics simulations
- 18:15 – 18:30 • **Nikoleta Ivanova, Anela Ivanova** (Bulgaria)
Exploring the possibility for penetration of a drug-peptide complex into model membrane systems

MUSICAL PERFORMANCE

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Club-restaurant "PANORAMA", 11 Dondukov Blvd.

PARALLEL SESSIONS: PRESENTATIONS OF YOUNG SCIENTISTS

9:00 – 11:00

CHEMICAL SCIENCES (Part 2)

Chair: Tony Spassov (Bulgaria)

- 9:00 – 9:15 • **Totka Todorova, Yuri Kalvachev** (Bulgaria)
Modified mordenite as a catalyst for m-xylene transformation
- 9:15 – 9:30 • **Antoan Rangelov, Tony Spassov** (Bulgaria)
Starch-based inclusion complexes: formation and characterization
- 9:30 – 9:45 • **Stiliyana Pereva, Tsveta Sarafska, Svetla Bogdanova, Tony Spassov** (Bulgaria)
Efficiency of cyclodextrin-ibuprofen inclusion formation
- 9:45 – 10:00 • **Emi Haladjova, Silvia Halacheva, Stanislav Rangelov** (Bulgaria)
DNA delivery systems based on novel polyethyleneimine comb-like (co)polymers: influence of polymer composition and chain topology
- 10:00 – 10:15 • **Nataliya Toncheva-Moncheva, Emiliya Veleva-Kostadinova, Ivaylo Dimitrov, Denitsa Momekova, Christo Novakov, Stanislav Rangelov** (Bulgaria)
Thermally responsive, polypeptide-based copolymers as non-viral vectors for delivery of nucleic acids
- 10:15 – 10:30 • **Julia Romanova** (Bulgaria)
Molecular design of luminescent PT(II)- and RU(II)-based organometallic complexes
- 10:30 – 10:45 • **Kiril Simitchiev, Violeta Stefanova, Veselin Kmetov, George Andreev, Vanya Zapryanova, Antonio Canals** (Bulgaria, Spain)
Impact of mathematical correction of spectral interferences on the uncertainty of spectrochemical results
- 10:45 – 11:00 • **Nina Tipova** (Bulgaria)
Possible route for reduction of the zinc level in rubber compounds for an enhanced environment

11:00 – 11:30

COFFEE BREAK

PARALLEL SESSIONS: PRESENTATIONS OF YOUNG SCIENTISTS

9:00 – 11:00

BIOLOGICAL AND MEDICAL SCIENCES

Chair: Radka Argirova (Bulgaria)

- 9:00 – 9:15 • **Nikola Tomov, Lachezar Surchev, Clemens Wiedenmann, Máté Döbrösy, Guido Nikkhah** (Bulgaria, Germany)
Intracerebral grafts modify glial reactivity
- 9:15 – 9:30 • **Anita Kavrakova, Albena Todorova, Kamen Anachkov, Krassimir Yanev, Vanyo Mitev** (Bulgaria)
High-risk human papilloma viruses as inflammatory cofactor in Bulgarian patients with disturbed molecular profile, suspected for prostate cancer
- 9:30 – 9:45 • **Georgi Danovski, Teodora Dyankova, Radoslav Aleksandrov, Stoyno Stoynov** (Bulgaria)
Computer analysis of fluorescent microscopy images as a method of obtaining the kinetics of proteins involved in DNA repair
- 9:45 – 10:00 • **Teodora Dyankova, Radoslav Aleksandrov, Georgi Danovski, Stoyno Stoynov** (Bulgaria)
Dynamic of recruitment of PARP1 and PAR- dependent proteins to DNA damage sites in the presence of PARP inhibitor
- 10:00 – 10:15 • **Nia Petrova, Violeta Velikova, Tsonko Tsonev, Tonya Andreeva, Stefka Taneva, Sashka Krumova, Kalina Danova** (Bulgaria)
Photosynthetic performance of shoot in vitro cultures of medicinal plants with modified secondary metabolism
- 10:15 – 10:30 • **Antonios Trochopoulos, Deyan Yosifov, Penka Genova, Mina Mihaylova, Maya Zaharieva, Martin R Berger, Margarita Genova, Spiro Konstantinov** (Greece, Bulgaria, Germany)
In vitro three-dimensional human cell culture model of bone lesions in multiple myeloma
- 10:30 – 10:45 • **Antonios Trochopoulos, Ervin Ivanov, Gyuljan Yakub, Ilia Rashkov, Nevenka Manolova, Denitsa Momekova, Maya Zaharieva, Krassimira Yoncheva, Hristo Najdenski, Martin Berger, Spiro Konstantinov** (Greece, Bulgaria, Germany)
Antineoplastic potential of cannabidiol and curcumin loaded polymeric formulations against human malignant cells
- 10:45 – 11:00 • **Maya Zaharieva, Lyudmila Dimitrova, Martin Berger, Spiro Konstantinov, Hristo Najdenski** (Bulgaria, Germany)
Antimicrobial activity of alkylphosphocholines

11:00 – 11:30

COFFEE BREAK

PARALLEL SESSIONS: PRESENTATIONS OF YOUNG SCIENTISTS

11:30 – 13:15 **MATHEMATICAL AND PHYSICAL SCIENCES**
Chair: Albena Paskaleva (Bulgaria)

- 11:30 – 11:45 • **Denitsa Grigorova** (Bulgaria)
Correlated probit analysis of two longitudinal ordinal outcomes
- 11:45 – 12:00 • **Hristina Hristova** (Bulgaria)
Adiabatic techniques for manipulation of light in waveguide arrays and nonlinear crystals
- 12:00 – 12:15 • **Marin Mutafchiev** (Bulgaria)
Theory of nonlinear water waves and the modified simple equation method
- 12:15 – 12:30 • **Christian Pillz, Theeraphot Sriarunothai, Svetoslav Ivanov, Sabine Wolk, Christof Wunderlich** (Germany, Bulgaria)
Versatile microwave-driven trapped ion spin system for quantum information processing
- 12:30 – 12:45 • **Kaloyan Zlatanov, Nikolay Vitanov** (Bulgaria)
Adiabatic generation of arbitrary coherent super-positions of two quantum states
- 12:45 – 13:00 • **Lachezar Filchev** (Bulgaria)
Remote sensing of vegetation stress
- 12:45 – 13:15 • **Maya Zhekova, Lyubomir Stoyanov, Ivan Stefanov, Alexander Dreischuh** (Bulgaria)
Bessel-like beam generation by manipulation of the topological charges of optical vortices

13:20 – 13:25 **CLOSING CEREMONY (Aula)**

13:30 – 14:30 **LUNCH (“Krivoto”)**

15:00 – **SOCIAL PROGRAM: WALKING TOUR IN ANCIENT SOFIA**

PARALLEL SESSIONS: PRESENTATIONS OF YOUNG SCIENTISTS

TECHNICAL SCIENCES

11:30 – 13:00

Chair: Silviya Boycheva (Bulgaria)

- 11:30 – 12:00 • **Keynote lecture: Cyril Popov** (Germany)
Bio-properties and applications of ultrananocrystalline diamond films
- 12:00 – 12:15 • **Ravshanjon Khujanov, Uwe Gampe, Shavkat Nurmatov**
(Uzbekistan, Germany)
Erhöhung des Solarwärmeanteils im Hybrid-Kraftwerksprozess mit thermo-chemischer Energieumwandlung und zusätzlicher Solarwärmeeinkopplung durch Integration von Speichern
- 12:15 – 12:30 • **Alexander Schmidt, Johann Peter Reithmaier, Cyril Popov** (Germany)
Fabrication of nanocrystalline diamond nanopillars and atomic force microscopy tips
- 12:30 – 12:45 • **Denitza Zgureva, Silviya Boycheva** (Bulgaria)
Experimental and numerical description of carbon dioxide adsorption onto fly ash zeolite
- 12:45 – 13:00 • **Ivaylo Naydenov** (Bulgaria)
Intrinsic barrier quality of reactor-grade plutonium as a function of fuel type, cooling time, and burn-up

13:20 – 13:25

CLOSING CEREMONY (Aula)

13:30 – 14:30

LUNCH (“Krivoto”)

15:00 –

SOCIAL PROGRAM: WALKING TOUR IN ANCIENT SOFIA

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