



Alexander von Humboldt  
Stiftung/Foundation

**Humboldt Kolleg**

***“Expanding the Frontiers of Science: A  
Transdisciplinary Approach”***

**PRELIMINARY  
PROGRAM**

**October 27 - 29, 2022  
Montevideo, URUGUAY**



Thursday, October 27, 2022 (FIC, School of Information and Communication)

08:00 - 08:30	Registration (also available Wednesday, October 26 afternoon, Dazzler Hotel)
08:30 - 09:25	Opening ceremony Speakers: H.E. Eugen Wollfarth (German Ambassador), Prof. Dr. Drs. h.c. Helmut Schwarz, Dr. Frauke Bode, Prof. Dr. Álvaro Mombrú, Prof. Dr. Rafael Radi, Dr. Jorge S. Gancheff.
October 27, Module 1. <b>Moderator: Dr. Nicolás Veiga</b>	
09:30 - 10:15	Plenary lecture <b>Prof. Dr. Drs. h.c. Helmut Schwarz</b> , Honorary President of the Alexander von Humboldt Foundation, Technische Universität Berlin, Germany. <i>The methane challenge: A cold experimental/computational approach to a hot problem.</i> (PL01)
10:15 - 10:30	<b>Dr. Ignacio Carrera</b> , Universidad de la República, Uruguay <i>Ibogaine: an atypical psychedelic drug with anti-addictive properties. A tale from organic synthesis to neurochemistry.</i> (OC01)
10:30 - 10:45	<b>Prof. Dr. Claudia Treviño</b> , Universidad Nacional Autónoma de México, México <i>The study of sperm physiology, bioethical considerations.</i> (OC02)
10:45 - 11:15	Coffee break
October 27, Module 2. <b>Moderator: Dr. Lorena Martínez</b>	
11:15 - 11:45	Keynote lecture <b>Prof. Dr. Christopher Rose</b> , Université de Montreal, Canada <i>Testing for subclinical neurocognitive impairment in patients with liver disease; what, when, why, who and how?</i> (KN01)
11:45 - 12:00	<b>Dr. Uriel Koziol</b> , Universidad de la República, Uruguay <i>Cellular basis for growth, development, and metamorphosis in tapeworms.</i> (OC03)
12:00 - 12:15	<b>Prof. Dr. Oscar Ventura</b> , Universidad de la República, Uruguay <i>Environmental and Computational Chemistry: a Meeting of Disciplines.</i> (OC04)
12:15 - 12:30	<b>Dr. Ana Bellomo</b> , Instituto Nacional de Tecnología Industrial, Argentina <i>High throughput screening (HTS) applied to the discovery and fast optimization of chemical reactions. Technology to address challenging problems in academy and industry.</i> (OC05)
12:30 - 13:00	Keynote lecture <b>Dr. Andrea S. S. de Camargo</b> , University of Sao Paulo, Brazil <i>Gender equality in hard sciences: Let's teach girls to be brave!</i> (KN02)
13:00 - 14:30	Lunch



October 27, Module 3. Moderator: Dr. Francisco Núñez	
14:30 - 15:00	Keynote lecture <b>Prof. Dr. Vladimiro Mujica</b> , Arizona State University, USA <i>Nanobiosensors as early-detection devices for infectious diseases.</i> (KN03)
15:00 - 15:15	<b>Dr. Martina Kieninger</b> , Universidad de la República, Uruguay <i>Integrating models of small molecules in the larger context of biological systems: The example of FAD.</i> (OC06)
15:15 - 15:30	<b>Dr. Analía Zwick</b> , Centro Atómico Bariloche. <i>Quantum Technologies for advancing Magnetic Resonance Imaging techniques.</i> (OC07)
15:30 - 16:00	Keynote lecture <b>Prof. Dr. Hellmut Eckert</b> , University of Sao Paulo, Brazil <i>Structural characterization of glasses: a transcontinental experiment.</i> (KN04)
16:00 - 16:30	Coffee break
October 27, Module 4. Moderator: Dr. Fernanda Cerdá	
16:30 - 16:45	<b>Dr. Eduardo Méndez</b> , Universidad de la República, Uruguay <i>Electrochemistry and nanotechnology applied to the decentralized in-home detection of lead.</i> (OC08)
16:45 - 17:00	<b>Dr. Gonzalo Álvarez</b> , Comisión Nacional de Energía Atómica, Argentina <i>Q&amp;A: Using quantum tricks to scan the brain.</i> (OC09)
17:00 - 17:30	Keynote lecture <b>Dr. Jaime Ruiz García</b> , Universidad Autónoma San Luis Potosí, México <i>Making friends to our old enemies: The Viruses.</i> (KN05)
17:30 - 18:15	Plenary lecture <b>Prof. Dr. Rafael Radi</b> , Universidad de la República, Montevideo, Uruguay <i>Science as a human right.</i> (PL02)
18:15 - 19:45	Coffee break and poster session
20:00 - 21:00	Humboldt-Kolleg-Organizers Meeting. (Dazzler Hotel)



Friday, October 28, 2022 (FIC, School of Information and Communication)

October 28, Module 1. Moderator: Dr. Olaf Brummel	
08:30 - 09:15	Plenary lecture <b>Prof. Dr. Manuel Alcarazo</b> , Georg-August-Universität Göttingen <i>From ligand design to the synthesis of biologically active molecules. (PL03)</i>
09:15 - 09:30	<b>Dr. Pablo Dans</b> , Universidad de la República, Uruguay <i>Structural biology of genes, chromosomes and nuclei: A transdisciplinary field per definition. (OC10)</i>
09:30 - 09:45	<b>Prof. Dr. Carlos Pungitore</b> , Universidad Nacional de San Luis, Argentina <i>Chemistry and activity of natural products of plant species of the region of Cuyo, Argentina. (OC11)</i>
09:45 - 10:00	<b>Dr. Fernanda Cerdá</b> , Universidad de la República, Uruguay <i>Dyes from the southern lands: an alternative or a dream? (OC12)</i>
10:00 - 10:15	<b>Dr. Giuliano Clososki</b> , University of Sao Paulo, Brazil <i>Rational synthesis of potentially bioactive compounds using organometallic reagents. (OC13)</i>
10:15 - 10:45	Coffee break
October 28, Module 2. Moderator: Prof. Claudia Treviño	
10:45 - 11:00	<b>Dr. Reza Dousti</b> , Universidade Federal de Pernambuco, Brazil <i>Human capital flight from Iran: why, who, how and where. (Virtual) (OC14)</i>
11:00 - 11:30	Keynote lecture <b>Prof. Dr. César Costa</b> , Universidad Politécnica Nacional, Ecuador <i>Molecular dissociations dynamics on nanoparticles surfaces driven by tailored ultrafast laser electric fields. (KN06)</i>
11:30 - 11:45	<b>Dr. Leopoldo Suescun</b> , Universidad de la República, Uruguay <i>Auto-combustion synthesis of simple and complex micro/nano-structured advanced perovskites for modern applications. (OC15)</i>
11:45 - 12:00	<b>Prof. Dr. Maria Vaz</b> , Universidade Federal Fluminense, Brazil <i>Building a Sound Advising Relationship between PhD students and her adviser: Experiences beyond the lab. (OC16)</i>
12:00 - 12:45	Plenary talk <b>Dr. Frauke Bode</b> , Alexander von Humboldt Foundation (AvH) & <b>Ulrike Doil</b> , German Academic Exchange Service (DAAD). <i>Programs of the AvH Foundation, and of the DAAD Service</i>



12:45 - 14:15	Lunch
October 28, Module 3. <b>Moderator: Prof. Vladimiro Mujica</b>	
14:15 - 14:45	Keynote lecture <b>Prof. Dr. Luis Baraldo</b> , Universidad de Buenos Aires, Argentina <i>The challenge of storing renewable energy. (KN07)</i>
14:45 - 15:00	<b>Dr. Victoria de la Sovera</b> , Universidad de la República, Uruguay <i>Bioactive chemical space exploration via greener GBB multicomponent reaction. (OC17)</i>
15:00 - 15:15	<b>Dr. Ivana Aguiar</b> , Universidad de la República, Uruguay <i>Nanomaterials: contributions from research, teaching and outreach. (OC18)</i>
15:15 - 16:00	Plenary lecture <b>Dr. Federico Rabuffetti</b> , Wayne State University, USA <i>Using light to probe temperature. (PL04)</i>
16:00 - 16:30	Coffee break
October 28, Module 4. <b>Moderator: Prof. Antonio Bianchi</b>	
16:30 - 16:45	<b>Dr. María Belén Blanco</b> , Universidad Nacional de Córdoba, Argentina <i>Tropospheric degradation of volatile organic compounds. Pollution and environmental impact. (Virtual) (OC21)</i>
16:45 - 17:00	<b>Laura Maccio</b> , Khem Incubadora de Empresas, Uruguay <i>Start ups: the necessary interface between scientific knowledge and innovation to generate global impact. (OC19)</i>
17:00 - 17:15	<b>Dr. Lorena Martínez</b> , Universidad de la República, Uruguay <i>A statistical study of the students' performance in an Inorganic Chemistry Laboratory Course. (OC20)</i>
17:15 - 17:30	<b>Prof. Dr. Diego Venegas</b> , University of Chile, Chile <i>Magnetic and electronic properties of polyoxidometalates (OC22)</i>
17:30 - 18:15	Plenary lecture <b>Prof. Dr. Jörg Libuda</b> , Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany <i>Novel concepts in energy storage and conversion. (PL05)</i>
18:15 - 19:45	Coffee break and poster session



Saturday, October 29, 2022 (FIC, School of Information and Communication)

October 29, Module 1. Moderator: Prof. Maria Vaz	
08:30 - 09:00	Keynote lecture <b>Prof. Dr. Irina Podgorny &amp; Dr. Susana García</b> , Universidad Nacional de La Plata, Argentina <i>Scientific Collections on the Move: Provincial museums and international networks, an EU RISE project (2021-2024): presentation and preliminary results.</i> (Virtual) (KN08)
09:00 - 09:15	<b>Dr. Francisco Núñez</b> , Universidad de Medellín, Colombia <i>Computational chemistry as a tool for understanding complex problems in catalysis.</i> (OC23)
09:15 - 09:30	<b>Dr. Fernando Batista da Costa</b> , University of Sao Paulo, Brazil <i>Metabolism and physiology of Humulus lupulus (common hop) cultivated in Brazil.</i> (OC24)
09:30 - 9:45	<b>Dr. Dolores Carrer</b> , Instituto de Investigación Médica Mercedes y Martín Ferreyra, Argentina <i>Topical treatment of Cutaneous Leishmaniasis.</i> (OC25)
9:45 - 10:30	Plenary lecture <b>Prof. Dr. Marius Andruh</b> , University of Bucharest, Romania <i>The interdisciplinary approach of the old coordination chemistry.</i> (PL06)
10:30 - 11:00	Coffee break
October 29, Module 2. Moderator: Dr. Andrea S. S. de Camargo	
11:00 - 11:15	<b>Prof. Dr. Dr. Vânia Gomes Zuin Zeidler</b> , Leuphana University, Germany; Federal University of Sao Carlos, Brazil <i>Chemistry for a circular economy: chemical complexity, product recycling and manufacturing sustainability.</i> (Virtual) (OC26)
11:15 - 11:45	Keynote lecture <b>Prof. Dr. Rafael Sotelo</b> , Universidad de Montevideo, Uruguay <i>Applications of quantum computing to air cargo.</i> (KN09)
11:45 - 12:00	<b>Dr. Matteo Savastano</b> , Università degli Studi di Firenze, Italy <i>Renewable energy and endangered elements: fueling vehicles and challenges in catalysis.</i> (OC27)
12:00 - 12:15	<b>Dr. Erika Banchio</b> , Universidad Nacional de Río Cuarto, Argentina <i>Application of plant growth promoting rhizobacteria (PGPR) in aromatic and medicinal plants.</i> (OC28)
12:15 - 13:00	Plenary lecture <b>Prof. Dr. Hans-Peter Steinrück</b> , Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany <i>Examples for successful German-Latin America collaborations in fundamental interface science.</i> (PL07)
13:00 - 14:30	Lunch.



October 29, Module 3. Moderator: Dr. Analía Zwick	
14:30 - 14:45	<b>Prof. Dr. Rolando Rivera</b> , Universidad Nacional del Nordeste, Argentina <i>Science in the laboratory, field and society for making educated decisions on biodiversity and climate change. (OC29)</i>
14:45 - 15:00	<b>Dr. Juan Carlos Ramos</b> , Universidad de la República, Uruguay <i>From the University towards private sector: examples of success in Fine Chemistry in Uruguay. (OC30)</i>
15:00 - 15:15	<b>Dr. Rodrigo G. Gibilisco</b> , Universidad Nacional de Tucumán, Argentina <i>Breathe2Change Initiative. (OC31)</i>
15:15 - 16:00	Plenary lecture <b>Prof. Dr. Roberto Markarian</b> , Former Rector of Universidad de la República, Uruguay <i>Science and innovation: speculations and certainties in an emerging economy country. (PL08)</i>
16:00 - 16:30	Coffee break
October 29, Module 4. Moderator: Prof. Rafael Radi	
16:30 - 16:45	<b>Patricio Testorelli</b> , Scelza y Montano, Uruguay <i>The electricity sector in Uruguay. (OC32)</i>
16:45 - 17:15	Keynote lecture <b>Senador Enrique Rubio</b> , Comisión de Ciencia, Innovación y Tecnología, Uruguay. <i>Cambio educativo, I+D+i, diversificación productiva. (KN10)</i>
17:15 - 17:45	Keynote lecture <b>Ec. Isaac Alfie</b> , Oficina de Planeamiento y Presupuesto, Uruguay. <i>Title to be defined (KN11)</i>
17:45 - 18:15	Keynote lecture <b>Prof. Dr. Holm Tiessen</b> , Former Professor of Agronomy Universities of Saskatchewan (Canada), and Göttingen (Germany), past Director of the Inter-American Institute for Global Change Research <i>Transdisciplinarity - the art of dialogue. (KN12)</i>
18:15 - 19:45	Networking session
19:45	Closing ceremony