



## Hungarian – Norwegian Bilateral Cooperation Research Conference & Knowledge Exchange

Agenda

15-16 February 2018, Budapest

**Venue:** Hungarian Academy of Sciences, Research Centre for Natural Sciences  
Magyar Tudományos Akadémia, Természettudományi Kutatóközpont  
Magyar tudósok körútja 2, 1117 Budapest, Hungary

### 15 February

- 09:00 – 09:30 Registration
- 09:30 – 09:40 **Welcome**  
His Excellency Olav Berstad, Ambassador of Norway
- 09:40 – 10:10 **Welcome & research system and areas of research excellence in Hungary**  
Professor József Pálincás, President of the National Research, Development and Innovation Office
- 10:10 – 10:30 **Research system and areas of research excellence in Norway**  
Ms. Kristin Danielsen, International Director, Research Council of Norway
- 10:30 – 10:50 **A case of transnational coevolution of coevolution research**  
Professor Nils Christian Stenseth, University of Oslo  
Professor Eörs Szathmáry, Eötvös Loránd University
- 10:50 – 11:20 **Coffee Break & Poster Session**
- 11:20 – 11:40 **ELI-ALPS: Research infrastructure and research collaboration prospects**  
Professor Zsolt Fülöp, Institute for Nuclear Research, Hungarian Academy of Sciences
- 11:40 – 12:00 **ECCSEL: Research infrastructure and research collaboration prospects**  
Mr. Volker Röhling, ECCSEL secretariat
- 12:00 – 12:20 **Future research collaboration funding opportunities**  
Ms. Szonja Csuzdi, Head of Department, National Research, Development and Innovation Office
- 12:20 – 12:30 **The Research Centre for Natural Sciences**  
Professor György Pokol, Director, Research Centre of Natural Sciences, Hungarian Academy of Sciences
- 12:20 – 13:30 **Walking Lunch & Poster Session**

## Enabling technologies

13:30 - 14:00 **Introduction by co-moderators**

***Enabling Technologies in Hungary***

Prof. Gábor Stépán - Faculty of Mechanical Engineering, Budapest University of Technology and Economics

***Enabling Technologies in Norway***

Yngve Foss, special adviser - International department, The Research Council of Norway

14:00 - 14:10 **Industry 4.0 at MTA SZTAKI - research, development, and education**

Zsolt Kemény - Hungarian Academy of Sciences, Institute for Computer Science and Control (MTA SZTAKI)

14:10 - 14:20 **Digitalization of Manufacturing SMEs - Norwegian perspective**

Gabor Sziebig - UiT The Arctic University of Norway

14:20 - 14:30 **Virtual Reality, Simulation and Serious Games Supporting Training for Emergency Management**

Ilona Heldal - Department of Computing, Mathematics, and Physics, Western Norway University of Applied Sciences

14:30 - 14:40 **Smart safety management**

István Szőke - Institute for Energy Technology

14:40 - 14:50 **Digitalization, automation and robots: what does the future hold for humans?**

Alexandra Fernandes - Institute for Energy Technology

14:50 - 15:00 **Chatbots + Public Sector = Better Services**

Marita Skjuve - SINTEF Digital

**Coffee Break**

15:50 - 16:00 **Connecting points among critical infrastructures, challenges and solutions of interdependence**

György Szegedi - BHE Bonn Hungary Electronics Ltd.

16:00 - 16:10 **Untangling the complexity of network communications for next generation applications**

María Isabel Sánchez Bueno - Simula Research Laboratory

16:10 - 16:20 **Energy system model for day-ahead optimization and peak shaving**

Jonathan Fagerström - Institute for Energy Technology (IFE)

16:20 - 16:30 **The nuclear physics program at the Oslo Cyclotron Laboratory**

Sunniva Siem - University of Oslo

16:30 - 16:40 **Metamaterial based electromagnetic devices**

Zsolt Szabó - Budapest University of Technology and Economics

16:40 - 16:50 **Tensor network factorization and tailored coupled cluster method in quantum chemistry**

Örs Legeza - Department of Theoretical Solid State Physics, Institute for Solid State Physics and Optics, Wigner Research Centre for Physics

16:50 - 17:00 **Nanomaterials design, synthesis and application for Energy Production and storage**

Zhixin Yu - Department of Energy and Petroleum Engineering, University of Stavanger

## Environment

- 13:30 - 14:00 **Introduction by co-moderators**  
**Environment in Hungary**  
Prof. László Buday - Director, Institute of Enzymology Research Centre of Natural Sciences, Hungarian Academy of Sciences  
**Environment in Norway**  
Kristin Danielsen - International Director, The Research Council of Norway
- 14:00 - 14:15 **Improving Resilience of Transport Surface Infrastructure (Rail and Road) against Natural Hazards and Climate Change**  
Guri Natalie Jordbakke - The Institute of Transport Economics
- 14:15 - 14:30 **Wastewater biodegradation linked to bioenergy generation using genomic approaches**  
Gergely Maróti - Biological Research Center, Hungarian Academy of Sciences
- 14:30 - 14:45 **Chemical tracers as environmental reporters**  
Christian Dye - Institute for Energy Technology (IFE)
- 14:45 - 15:00 **Challenges of reducing soil erosion and improving water quality in a changing environment under Nordic conditions**  
Csilla Farkas - Norwegian Institute of Bioeconomy Research (NIBIO)
- 15:00 - 15:15 **Crop production systems in changing climate: research on impacts, responses, and options of adaptation, developing decision support tools**  
Gábor Illés - National Agricultural Research and Innovation Centre
- Coffee Break**
- 15:45 - 16:00 **GRACE: A model for integration of knowledge on climate change and policies**  
Taoyuan Wei - CICERO Center for International Climate Research
- 16:00 - 16:15 **Air quality and climate impact on built structures and cultural heritage – measurements and modelling**  
Terje Grøntoft - NILU-Norwegian Institute for Air Research
- 16:15 - 16:30 **Improving Biomass Productivity, Co2 Uptake and Pest/Pathogen Resistance of Short Rotation Energy Willow and Poplar by Polyploidy and Heterosis: Genome Optimization**  
Ferhan Ayaydin - Biological Research Centre, Hungarian Academy of Sciences
- 16:30 - 16:45 **Methodological development of riverine habitat assessment tools on an interdisciplinary basis**  
Sándor Baranya - Budapest University of Technology and Economics
- 16:45 - 17:00 **Multi-species fisheries in food web simulations**  
Ferenc Jordán - Danube Research Institute, Centre for Ecological Research, Hungarian Academy of Sciences

## Health

- 13:30 - 14:00 **Introduction by co-moderators**  
**Health in Hungary**  
Prof. Gábor L. Kovács - Chair, Szentagotthai Research Centre, University of Pécs  
**Health in Norway**  
Aleksandra Haugstad- Senior Advisor, Division for Health and Society, The Research Council of Norway
- 14:00 - 14:10 **Novel antibiotics from symbiotic peptides**  
Éva Kondorosi - Institute of Plant Biology, Biological Research Centre
- 14:10 - 14:20 **A massively parallelized, systematic method for efficient prediction of allosteric and prerequisite drug binding**  
Csaba Hetényi - University of Pécs
- 14:20 - 14:30 **Exploiting changes in the microbiome in cancer detection**  
Péter Bay - University of Debrecen / MTA-DE LEndület Laboratory of Cell Metabolism
- 14:30 - 14:40 **Cancer exosome miRNA biomarkers from serum – in silico veritas**  
Judit Pongrácz - University of Pecs
- 14:40 - 14:50 **Identification of novel therapeutic targets in hematological malignancies using next generation sequencing**  
Csaba Bödör - Semmelweis University, Department of Pathology and Experimental Cancer Research
- 14:50 - 15:00 **Multiple knock-out mouse models can provide key novel insights into dynamics of genome integrity**  
Beáta Vértessy - Department of Applied Biotechnology & Food Science, Budapest University of Technology and Economy
- 15:00 - 15:10 **Human induced pluripotent stem cell derived 2D and 3D in vitro neuronal networks: a technology platform for modeling Neurodegenerative diseases and developmental neurotoxicology**  
András Dinnyés - BioTalentum Ltd, and Szent Istvan University
- 15:10 - 15:20 **The graph of our mind**  
Vince Grolmusz - Eötvös University
- Coffee Break**
- 15:50 - 16:00 **Blood-brain barrier models in chip devices**  
Mária Deli - Institute of Biophysics, Biological Research Centre, Hungarian Academy of Sciences
- 16:00 - 16:10 **Single Cell Sequencing of Prefrontal Cortex Neurons: Cell specific transcriptome differences, novel drug targets and molecular mechanisms of cognitive disorders.**  
Gábor Juhász - CRU Hungary Ltd, Uni. Eötvös Loránd
- 16:10 - 16:20 **Research opportunities at the Oslo Cyclotron Laboratory**  
Andreas Gørgen - University of Oslo
- 16:20 - 16:30 **Particle detector development for medical applications**  
Gergely Gábor Barnaföldi - Institute for Particle and Nuclear Physics, Wigner Research Centre for Physics
- 16:30 - 16:40 **Redox homeostasis in the endoplasmic reticulum**  
Beáta Lizák - Semmelweis University
- 16:40 - 16:50 **Emerging Threats at the Human-Animal-Environment Interface: The Advantages of a One Health Approach**  
Carlos Das Neves - Norwegian Veterinary Institute
- 16:50 - 17:00 **How can we assess and anticipate the infection risk with emerging tick-borne zoonotic bacteria in big cities?**  
Gábor Földvári - Department of Parasitology and Zoology, University of Veterinary Medicine, Budapest

## Society

- 13:30 - 14:00 **Introduction by co-moderators**  
**Society related research in Hungary**  
Prof. Zsolt Demetrovics, - Dean, Faculty of Education and Psychology, Eötvös Loránd University
- Society related research in Norway**  
Bjørn Tore Kjellemo, Department Director, Division for Health and Society – Society session, The Research Council of Norway
- 14:00 - 14:15 **Social Sciences from a Multidisciplinary Perspective: Our Cooperation Skills Offering at the HAS Centre of Social Sciences**  
Tamás Rudas - Centre for Social Sciences of the Hungarian Academy of Sciences (HAS)
- 14:15 - 14:30 **Navigating the City: Architectural Communication and the Readable City**  
Borbála Jász - Department of Sociology and Communication, Budapest University of Technology and Economics
- 14:30 - 14:45 **Macro-regional identities and politics in Norway and Hungary**  
Péter Balogh - Institute for Regional Studies, CERS-HAS
- 14:45 - 15:00 **Inequalities in comparative perspective: presentation of Tarki Social Research Institute and a proposal for a joint Hungarian-Norwegian social research incubation project**  
István György Tóth - Tárki Social Research Institute
- 15:00 - 15:15 **Women's issues and gender perspectives**  
Li Ma - Nordic Women's University
- Coffee Break**
- 15:45 - 16:00 **Rediscovering ancient lives from papyri: introducing papyrology**  
Ágnes Tóthné Mihálykó - University of Oslo
- 16:00 - 16:15 **ALM-institutions as an infrastructure for the public sphere in a digital age: A comparative project between Norway, Hungary, Denmark, Sweden, Switzerland and Germany**  
Ragnar Audunson - OsloMet - Oslo Metropolitan University
- 16:15 - 16:30 **Memory of the WW2: The Role of the Former “Russian Airport” in Telling Stories about the Front in the South Vértés Region**  
István Sántha - Research Centre for the Humanities, Hungarian Academy of Sciences
- 16:30 - 16:45 **Research on secure 5G for IoT platforms**  
Boning Feng - OsloMet - Oslo Metropolitan University
- 16:45 - 17:00 **Cybersecurity as a Horizontal Issue In Public Service**  
Csaba Krasznay - National University of Public Service

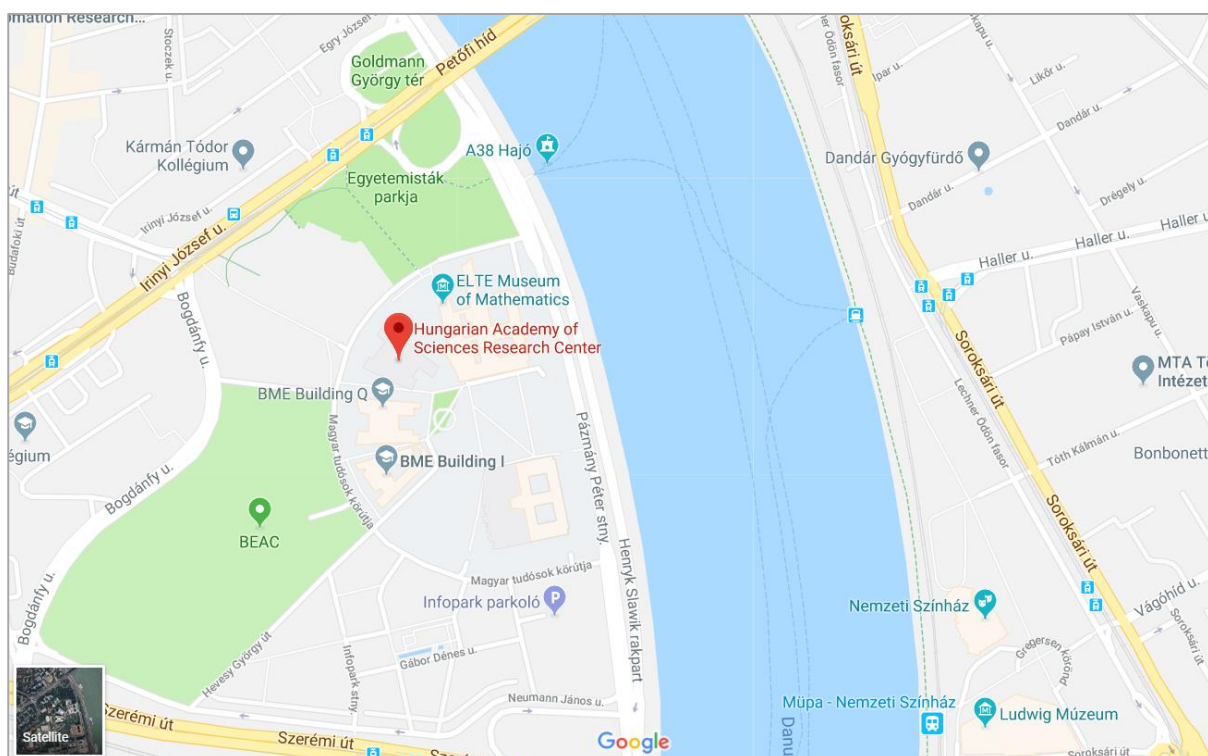
## Venue

**Hungarian Academy of Sciences, Research Centre for Natural Sciences**

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Magyar tudósok körútja 2.

1117 Budapest, Hungary



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