

# **2<sup>nd</sup> International Conference on Research, Technology and Education of Space**

**February 25-26, 2016**

**Budapest,**

**BME building 'I', Hall IB 026**

Address: Magyar tudósok krt. 2., Budapest, H-1117, Hungary

## **Conference Program**

### **February 25**

#### **13:30–13.50 Opening**

*János Józsa*, Rector of Budapest University of Technology and Economics (BME)

*Fruzsina Tari*, Hungarian Space Office, Ministry of National Development

*Franco Ongaro*, Director of Technical and Quality Management (D/TEC), and Head of ESTEC in Noordwijk, the Netherlands

*László Pap*, National Council for Telecommunications and Information Technology of Hungary

*János Solymosi*, President of Hungarian Astronautical Society

#### **13:50–15:00 Section of Science and Technology I/A**

**Keynote talk:** Future Missions and Technologies

*Franco Ongaro*, European Space Agency

Space weather research and forecast services using CubeSats

*Balázs Zábori*, Centre for Energy Research, Hungarian Academy of Sciences

#### **14:40–15:00 Coffee break**

#### **15:00–16:30 Section of Science and Technology I/B**

The Communication and Spectrum Monitoring System of Smog-1 PocketQube-Class Satellite

*Levente Dudás*, Department of Broadband Infocommunications and Electromagnetic Theory, BME

Design Aspects of Future Astrochemistry Nano-Satellite Mission above LEO

*Gábor István Varga*, ESA-ESOC

The study of the midlatitude ionospheric response to geomagnetic activity in Széchenyi István Geophysical Observatory

*Kitti Alexandra Berényi*, Geodetic and Geophysical Institute, Hungarian Academic of Science

**Keynote talk:** Designing space design — from objects to

organizations (a cybernetic perspective)  
*Tibor Balint*, Royal College of Art, London

**16:30–16:50 Coffee break**

**16:50-17:00 Opening the Section of Education and Outreach**

*Kálmán Kovács*, Chair of Space Forum of BME

**17:00–18:30 Section of Education and Outreach (in Hungarian)**

Activity of the EUMeTrain project

*Mária Putsay*, Hungarian Meteorological Service

Space Generation in Hungary

*Dorottya Milánkovich*, Space Generation Advisory Council

Ten Years of the Simulated Mars Rover Model Competition

*Pál Gábor Vizi*, Wigner RCP, Hungarian Academy of Sciences

Programs for talented students at the Hungarian Astronautical Society

*Sándor Frey*, Hungarian Astronautical Society

The Years of Comets 2013-2016, Comet Project in Budapest High Schools

*Zsuzsa Horváth*, Kosztolányi Dezső High School, Budapest

Analogue work with ExoMars project: science-technology synergy and implementation to university Education

*Ákos Kereszturi*, Research Centre for Astronomy and Earth Sciences, Hungarian Academic of Science

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**February 26**

**9:30–9:40 Opening of the second day**

*László Vajta*, Dean of Faculty of Electrical Engineering and Informatics, BME

*László Bacsárdi*, Secretary General of Hungarian Astronautical Society

*Mino Rathnasabapathy*, Executive Director of Space Generation Advisory Council

**9:40–10:55 Section of Science and Tecnology II/A**

**Keynote talk:** The SpaceFlow Project – To drive chemistry discovery in space towards sustaining and extending human life and Exploration  
*Richard Jones*, Flow Chemistry Society

Using Multi-hop Sensor Networks on the Surface of Solar System Bodies

*Árpád Huszák*, Department of Networked Systems and Services  
Quantum-based solutions in Low Earth Orbit Satellite Networks  
*András Kiss*, Institute of Informatics and Economics, BME  
University of West Hungary  
Application of the Fleet of Micro Sized Space-Motherships (MSSM)  
Deploying Nano, Pico Space Devices and Robots (NPSDR) in Space  
*Pál Gábor Vizi*, Wigner RCP, Hungarian Academy of Sciences  
Ionospheric related research and development at the Geodetic and  
Geophysical Institute  
*Veronika Barta*, Geodetic and Geophysical Institute, Research Centre  
for Astronomy and Earth Sciences, Hungarian Academy of Sciences

**10:55–11:10 Coffee break**

**11:10–13:00 Section of Science and Technology II/B**

**Keynote talk:** Small Satellites: Status, Opportunities and  
Challenges

*Rainer Sandau*, International Academy of Astronautics

Comparison of algorithms using spherical harmonic analysis – the  
BME-SHS program

*Márton István Kemény*, Department of Geodesy and Surveying, BME  
Psychological status monitoring by acoustic-phonetic analysis of  
crew talk

*Gábor Kiss*, Department of Telecommunication and Media  
Informatics, BME

Psychology – Language Technology – Space Research

*Bea Ehmann*, Institute of Cognitive Neuroscience and  
Psychology, Research Centre for Natural Sciences, Hungarian  
Academy of Sciences

**12:50–13:00 Closing remarks**

**14:00–19:00 European Space Generation Workshop**

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**February 27**

**9:00–19:00 European Space Generation Workshop**