

(Draft v109 EN, 16-NOV-2011)

# SEMWO 2011

## Space Economy In The Multipolar World

2nd International Space Conference

November 16-18, 2011

Vilnius, Lithuania

[www.space-lt.eu](http://www.space-lt.eu)

Under the Patronage of



MINISTRY OF ECONOMY



MINISTRY OF TRANSPORT  
AND COMMUNICATIONS  
OF LITHUANIA



### Organizers

Lithuanian  
Space Association



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Space Science  
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### Guests of Honour

- **Karol J. Bobko**, Astronaut, Commander of Space shuttle Discovery and Atlantis, USA
- **Igor Volk**, Cosmonaut, Commander of reusable spacecraft Buran, Russia

### Keynote Speakers

- **Eligijus Masiulis**, Minister of Transport and Communications of the Republic of Lithuania
- **Simon P. Worden**, Director, NASA Ames Research Centre, USA
- **Zhiheng Fu**, Vice President, China Great Wall Industry Corporation, China
- **Roman Yakimenko**, Head of International Business Coordination Division, Roscosmos, Russia (TBC)
- **Udo Becker**, Head of the Product Development and GSTP Division, European Space Agency, The Netherlands
- **Shinichi Nakasuka**, Professor, Tokyo University, Japan

# PROGRAMME

*November 16, 2011*

Venue: Radisson Blu Hotel Lietuva. Address: Konstitucijos avenue 20, Vilnius  
Conference Room Lambda

## Seminars and Workshops on Small Satellites

**9:00-10:00 Registration, Welcome Coffee**

**10:00-11:30 Session SW1**

Chair: *Abe Bonnema*

- **An Approach to Capacity Building Using Nano-satellites - Nano-satellite Mission Idea Contest+**  
- *Rei Kawashima, University Space Engineering Consortium, Japan*  
- *Shinichi Nakasuka, Tokyo University, Japan*
- **CanSat Competition of South America**  
- *Fredy Arturo Calle Bustinza, National University of Engineering, Peru*
- **Space-related Education in Norway. CanSat Competitions**  
- *Thomas Gansmoe, Norwegian Centre for Space-related Education, Andoya Rocket Range, Norway*

**11:30-12:00 Coffee Break**

**12:00-14:30 Session SW2 Workshop on Satellite's Components**

Chair: *Thomas Gansmoe*

- **Workshop on Satellite's Components**  
- *Elisa Ferrari, University of Bologna, Italy*  
- *Jens Frederik Dalsgaard Nielsen, Aalborg University, Denmark*  
- *Jan Schulte, ÅAC Microtec, Sweden*  
- *Abe Bonnema, ISIS, the Netherlands*

**Problem-oriented Processing and Database Creation for Ionosphere Exploration.  
UHF-Communication System for Small Satellite with D-Star Support.  
MicroSAT Universal Platform for Earth Observation "LEOS-50"**

- *Dmitri Bogdanov, Berlin Institute of Technology, Germany*

**14:30-15:00 Registration to Press Conference**

Conference Room Delta

**15:00-16:00 Press Conference of the Guests of Honour**

Conference Room Delta.

Moderator: (TBD)

**19:00-19:30 Registration to Get Together Event and SEMWO Conference**

Conference Room Delta

**19:30-21:00 Get Together Event (*Invitations and tickets only*)**

Conference Room Delta

Dress code: *Smart Casual.*

# November 17, 2011

Venue: Radisson Blu Hotel Lietuva, Conference Room Alfa. Address: Konstitucijos avenue 20, Vilnius.

**8:00-9:00 Registration, welcome coffee**

**Opening of the Poster Session and the Exhibition of Satellites, Components and Rocket Models**

**9:00-9:30 Opening of the Conference**

Moderator: *Rolandas Maskoliūnas*

**9:00-9:30 Opening of the Conference**

Welcome address dedicated to:

- 50-th anniversary of first human flight in to the Space;
- tribute to Lithuanian first pilot-cosmonaut, test pilot of “Buran” Rimantas Stankevičius;
- launching of the first Lithuanian satellite project.

*Andrius Kubilius, Prime Minister of Lithuania (TBC)*

*Karol J. Bobko, Astronaut, Commander of Space shuttle Discovery and Atlantis, USA*

*Igor Volk, Cosmonaut, Commander of reusable spacecraft Buran, Russia*

*Algimantas Stankevičius, son of Lithuanian Cosmonaut Rimantas Stankevičius, Lithuania*

*Vidmantas Tomkus, Director of Lithuanian Space Association (LSA), Lithuania*

**9:30-10:45 Joint Session J2.1. Part 1.**

**Space Economy in the Multipolar World. Keynote Speakers**

- **Lithuania enters Space industry**  
- *Eligijus Masiulis, Minister of Transport and Communications of the Republic of Lithuania*
- **The Large Capability of Small Satellites**  
- *Simon P. Worden, Director of NASA Ames Research Centre, USA*
- **European Space Research and Development: The Case of ESA's General Support Technology Programme (GSTP)**  
- *Udo Becker, Head of the Product Development and GSTP Division, European Space Agency, The Netherlands*
- **Lithuania Towards Space Technologies.Challenges and Benefits**  
- *Rimvydas Vaštakas, Vice-minister of Transport and Communications of the Republic of Lithuania*

**10:45-11:15 Coffee Break. Continuing of the Poster Session and Exhibition**

**11:15-13:00 Joint Session J2.1. Part 2.**

**Space Economy in the Multipolar World. Keynote Speakers (continuation)**

- **Space Research and Industry of Russia (TBC)**  
- *Roman Yakimenko, Head of International Business Coordination Division, Roscosmos, Russia (TBC)*
- **China's Space Research and Industry: Organization, National Programs and Commercial Activities**  
- *Zhiheng Fu, Vice President of China Great Wall Industry Corporation, China*
- **Micro/Nano-satellite Research, Technologies and Applications: Japanese Development History and Future Vision**  
- *Shinichi Nakasuka, Professor of Tokyo University, Japan*

**13:00-14:30 Lunch**

**13:30-14:30 Press Conference of Keynote Speakers**

Conference Room Delta. Moderator: *Rolandas Maskoliūnas*

**14:30-15:45 Joint Session J2.2. Space History: from Shuttle Programs to Robotic Missions.**

- **Space Shuttle Program from Early Development to Operational Missions**  
- *Karol J. Bobko, Astronaut, Commander of Space shuttle Discovery and Atlantis, USA*
- **“Buran” Program and Lithuanian Factor in it**  
- *Igor Volk, Cosmonaut, Commander of reusable spacecraft Buran, Russia*
- **Lithuanian Space: from K. Simonavičius to LitSat. Lithuanians' Contribution to Space Programs**  
- *Saulius Lapienis, Lithuanian Innovation Centre, Space Science and Technology Institute, Lithuania*

### **15:45-16:15 Joint Session J2.3 Part 1.**

#### **Development of Small Satellites Networks and Space Clusters**

- **Results of FP7 Space 2010 call “Facilitating Access to Space for Small Scale Missions”. QB50 Consortium**  
- *Cem Ozan Asma, Von Karman Institute, Belgium*
- **Innovation Competitions to Foster Space Applications Development**  
- *Andreas Dippelhofer, Anwendungszentrum GmbH Oberpfaffenhofen, Germany*

### **16:15-16:30 Coffee Break. Continuing of the Poster Session and Exhibition**

### **16:30-18:00 Joint Session J2.3 Part 2.**

- **Polish Space Activities**  
- *Marek Banaszekiewicz, Space Research Centre at the Polish Academy of Sciences, Poland*
- **Outcomes of FP7 Project NordicBaltSat. Estonian Satellite Project**  
- *Urmas Uska, Enterprise Estonia*
- **Towards Electric Solar Wind Sail Interplanetary Mission**  
- *Urmas Kvell, Tartu Observatory/University of Tartu*
- **Latvian Space Activities. Venta-1 Satellite**  
- *Eva Daigina, Venspils High Technology Park, Latvia*
- **How to Become Part of Space-related Collaborative Networks in Europe. Possible pathways for Lithuania**  
- *Linas Eriksonas, Europarama, Lithuania*
- **Lithuania – to Keep Pace: National Space Programme**  
- *Viktoras Mongirdas, FP7 Space NCP, Agency for Science, Innovation and Technology (MITA), Lithuania*

### **20:00-22:00 Thursday Night Conference Party (Invitations and tickets only).**

**Meeting time: 18:45. Meeting place: Reception of Radisson Blu Hotel Lietuva . Bus departing time: 19:00**

Dress Code: *Smart Casual*

Hot meal included

## **November 18, 2011**

Venue: Radisson Blu Hotel Lietuva, Conference Room Alfa. Address: Konstitucijos avenue 20, Vilnius.

### **8:30-9:00 Registration, Welcome Coffee**

#### **Continuation of the Poster Session and Exhibition. Opening of Brokerage Event (Conference Room Beta)**

### **9:00-10:30 Joint Session J3.1 Satellite Applications**

**Chair: Michal Moroz (TBC)**

- **On the Growth of More Application Focussed Nano-satellites**  
- *Abe Bonnema, ISIS, the Netherlands*
- **"Resurs-P" Russian Space System. Conditions, Perspectives and New Opportunities.**  
- *Sergei Efimov, Evgenia Tiulevina, - Samara Space Centre, Russia*
- **Opportunities of Samara Space Centre for Piggyback Launching of Micro/nano Satellites: Present and Future**  
- *Andrey Sidorenko, Igor Belokonov, Samara State Aerospace University, Russia*
- **Venta-1 and MaxValier Satellites Based on the QuadSat Bus**  
- *Indulis Kalnins, University of Applied Sciences Bremen, Germany*
- **Satellite Application Development Trends and Business Models**  
- *Stephan Pascall, Europlan UK Ltd., United Kingdom*

## **10:30-11:00 Coffee Break**

## **11:00-12:30 Joint Session J3.2: Components of Nano-satellites**

**Chair: Domantas Bručas**

- **CubeSat Activities at Aalborg University Space Centre**  
- *Jens Frederik Dalsgaard Nielsen, Aalborg University, Denmark*
- **University Space Program in Peru. Nano-Satellite Chasqui Project, Russian Project RadioSkaf 3, CanSat of South America**  
- *Glen Darío Rodríguez Rafael, Fredy Arturo Calle Bustinza, National University of Engineering, Peru*
- **Rapid Integration Architecture: A Small Satellite component library for modular spacecraft design**  
- *Jan Schulte, AAC Microtec, Sweden*

## **12:30-13:30 Lunch**

## **13:30-15:00 Joint Session J3.3: Microgravity Experiments and Planetary Probes**

**Chair: Jan Schulte**

- **Planetary Probes of Venus and Mars Missions**  
- *Viktor Vorontsov, Chief Designer, Lavochkin Association, Russia*
- **Human Brain in Microgravity: How to Monitor Non-invasively Intracranial Pressure, Compliance and Cerebrovascular Autoregulation**  
- *Arminas Ragauskas, Kaunas University of Technology, Lithuania*
- **REDEMPTION Experiment of ADR (Active Debris Removal) at ESA Programme REXUS/BEXUS. The Robotics Space Laboratory of UNIBO: Almascope, Cubesat for ABS/Rapid, HPH.com and other projects**  
- *Marcello Valdatta, University of Bologna, Italy*
- **Lithuanian LitSat Satellite Including Re-entry Orbital Lab**  
- *Domantas Bručas, Space Science and Technology Institute, Lithuania*

## **15:00-15:30 Coffee Break**

## **15:30-16:15 Joint Session J3.4: Advanced Launcher Systems**

**Chair: Arminas Ragauskas**

- **Aerospace Transportation and Establishing of Commercial Space Market: Prospects for Central Europe**  
- *Michal Moroz, kosmonauta.net, Poland*
- **Integration of the Belarusian Research and Development into International Micro/Nano-satellite Programmes**  
- *Vladimir Saetchnikov, Belarusian State University*

## **16:15 Closing of the Poster Session, Exhibition and Brokerage Event**

### **Excursions (optional, by personal reservation only):**

Vilnius Old Town, Trakai Castle, Liepiškės Satellite Teleport

**Organizers reserve the right to modify the programme and/or substitute speakers**

# SEMWO 2012

## Space Economy in Multipolar World

3rd International Space Summit, Conference and Fair

[www.space-lt.eu](http://www.space-lt.eu)

**First Announcement**  
**October 24-26, 2012 Vilnius, Lithuania**

**SEMWO** was established in 2010 by the **Lithuanian Space Association (LSA)** with the aim of attracting Space competencies from the entire world to a comfortable platform in Vilnius, Lithuania – the geographical centre of Europe – for meeting, discussing, exchanging of experience, exhibiting, matchmaking and broadcasting of brands and the unique content.

### Organized Events

SEMWO'10, 6-8 October 2010, Crowne Plaza Hotel, Vilnius, Lithuania, [www.space-lt.eu](http://www.space-lt.eu)

SEMWO 2011, 16-18 November 2011, Radisson Blu Hotel, Vilnius, Lithuania, [www.space-lt.eu](http://www.space-lt.eu)

### Expected Participants

Astronauts, Politicians, Researchers and Engineers, Economists, Lawyers, Business People, Investors, Representatives of National Space Agencies and Companies, Exhibitors of the Satellites and their technologies, Journalists, Students and other participants interested in Space and high technology from all continents and Space faring nations and countries.

### Structure of Topics

Space: Politics, History, Economy, Business, Technology, Open Source Solutions.

### Structural Parts

- Press conferences of the Guests of Honour and Keynote Speakers
- Oral and poster presentations
- Seminars on satellites and workshops on their components
- Exhibition-fair of the rocket models, satellites and their components and services
- Matchmaking/brokerage events
- Webinars and other online content

### Formats of Attendance

- Sponsor
- Oral Speaker
- Workshop Presenter
- Poster Presenter
- Exhibitor
- Brokerage Event Participant
- Webinar Participant
- Participant
- Combination of above listed

**SEMWO 2012 is an excellent opportunity to present** your institution or company, your brands, products and services for:

- speakers and few hundreds of Conference attendants;
- thousands of target visitors of LSA portal [www.space-lt.eu](http://www.space-lt.eu) and profiles of social networks;
- millions of potential addresses through local and international media.

**The structure of the event, the topics of the sessions and participation terms will be described in the **Call for Papers**. Marketing and dissemination campaign and **Sponsorship and Partnership Opportunities** will be described in the **Call for Sponsors**.**

**All Calls** will be announced starting from **December 2011** at LSA portal [www.space-lt.eu](http://www.space-lt.eu).