

## The FOTONIKA-LV conference

### “Achievements and Future prospects”

(The FP7-REGPOT-2011-1, Nr. 285912 project FOTONIKA-LV

“Unlocking and Boosting Research Potential for Photonics in Latvia – Towards Effective Integration in the European Research Area”)

Riga, 23-24 April, 2015

Venue: Latvian Academy of Sciences

Dedicated to the 5<sup>th</sup> Anniversary of Association FOTONIKA-LV

### April 23

10.00-10.15	<b>Welcome.</b> Welcome words from invited honoured guests - Members of Saeima (Atis Lejins, Veiko Spolitis, Ivars Zarins); <a href="#">Minister for Economics Dana Reizniece-Ozola</a> , Chair of SSC of the project and the Chair of <a href="#">Latvian Council of Science Andrejs Silins</a> , Vice President of the Latvian Academy of Sciences, Vice-rector for Research of the University <a href="#">Indriķis Muiznieks</a>
<b>10.15-11.30</b>	<b>Key note lectures session, Chair Dr.Phys.Arnolds Ubelis</b> <b>Advances in quantum sciences and space sciences</b>
10.15-10.50	Quantum Sciences: Invited keynote speaker: <b>Dr. Arthur Matveev</b> <a href="#">Max Planck Institute for Quantum Optics</a> , Munich, Germany, Advances in quantum Sciences - will be specified
10.50-11.25	Space sciences: Invited keynote speaker: <b>Dr. Andris Vaivads</b> <a href="#">Swedish Institute of Space Physics, Sweden</a> Advances in space sciences: Shocks in space plasma
11.30-12.00	COFFEE BREAK
<b>12.00-14.00</b>	<b>1<sup>st</sup> Plenary: Chair Prof. Andrejs Silins</b> <b>Photonics - Key enabling technology in the EU</b> <b>Photonics related science and technology domains in Latvia</b>
12.00-12.30	<b>Carlos Lee.</b> The European Photonics Industry consortium (EPIC) Photonics – key enabling technology in Europe
12.30-13.00	<b>Arnolds Ubelis.</b> Summary of outcomes of the project: FP7-REGPOT-2011-1. FOTONIKA-LV, Nr. 285912, Unlocking and Boosting Research Potential for Photonics in Latvia – Towards Effective Integration in the European Research Area
13.00-13.30	<b>Arnolds Ubelis, Janis Alnis, Ilgmars Eglitis, Gunars Silabriedis.</b> Photonics, Quantum Sciences, Space Sciences and Related Technologies in Latvia - contribution of FOTONIKA-LV project and the capacity of research structures in the domain in Latvia

13.30-14.00	<b>Vidvuds Beldavs, Aigars Atvars.</b> Photonics, Quantum Sciences, Space Sciences and Related Technologies in Latvia - capacity of research driven SMEs - contribution of FOTONIKA-LV project to applied research activities
14.00-15.00	LUNCH BREAK
<b>15.00-16.00</b>	<b>2<sup>nd</sup> Plenary, chair Mats Nordlund</b> <b>Photonics- EU key enabling technology in Estonia and Lithuania</b>
15.00-15.40	<b>Arnolds Ubelis, Aigars Atvars, Aigars Ekers ???.</b> Insight in photonics, quantum sciences, space sciences and related Technologies in Estonia and Lithuania: Contribution from Academy and Industry
15.40-16.00	Discussion: How to intensify collaboration inside Baltics photonics community and how to extend cooperation across Baltic sea region and across EU borders.
16.00 -17.15	TRAVEL TO BALDONE ASTROPHYSICAL OBSERVATORY
<b>17.15-19.00</b>	<b>Poster session on the Project outcomes Chair. Dr.Phys.Janis Alnis</b> <i>(More than 20 posters expected)</i>
19.00-22.00	SOCIAL EVENT
22.00-23.00	RETURN TO RĪGA

## April 24

<b>10.00-11.45</b>	<b>3<sup>rd</sup> Plenary: <u>chair</u> Vidvuds Beldavs</b> <b>Photonics and space sciences - advancements in Latvia – contribution of FOTONIKA-LV project</b>
10.00-10.15	<b>Ilgmars Eglitis.</b> Baldone Astrophysical Observatory: Upgrade, Progress and Results in Observation and Research
10.15-10.30	<b>Kalvis Salmis, Jorge del Pino,</b> Fundamental Geodynamic Observatory – Active Member of International Satellite Laser Ranging Service and International GPS service (IGS). The capacity of upgraded SLR LS-105 System Station (ILRS code name 1884 Riga) – Results of observation and research
10.30-10.45	<b>Maris Abele, Janis Vjaters.</b> Design of multipurpose instrument for ranging of satellites and space debris and for remote sensing in atmosphere
10.45-11.00	<b>Janis Balodis, Ansis Zarins, Augusts Rubans, Diana Haritonova, Janis Kaminskis.</b> Digital Zenith Camera – a new Astrometry Instrument for Precision Measurements in Geodesy
11.00-11.15	<b>Gunars Silabriedis, Janis Balodis.</b> Geodesy and Geoinformatics in Latvia
11.15-11.30	<b>Vladislavs Bezrukovs.</b> Radioastronomy in Latvia
11.30-11.45	<b>Ilgonis Vilks.</b> Space Sciences, Astronomy and Astrophysics in Latvia – publicity based on high level science for decades.
11.45-12.15	COFFEE BREAK

12.15-14.15	<b>4<sup>th</sup> Plenary: <u>chair</u> Dr.Phys Aigars Atvars</b> <b>Advances in photonics and quantum sciences – contribution of REGPOT FOTONIKA-LV project</b>
12.15-12.30	<b>N.Porfido, S.Birindelli, F.Tantussi, F.Fuso, Nikolay Bezuglov, Martins Bruvelis, and <u>Aigars Ekers</u>.</b> Nonlinear effects in optical pumping upon resonant excitation of ultra-slow beam of cold Cs atoms
12.30-12.45	<b><u>Teodora KIROVA</u>, Arturs CININS, Martins BRUVELIS, D. K. EFIMOV, Kaspars MICULIS, Nikolay BEZUGLOV, Aigars EKERS, Marcis AUZINS AND I. I. RYABTSEV.</b> Consequences of Multiple Dressed States Formation in Atomic Nondegenerate Hyperfine Levels
12.45-13.00	<b>Uldis Berzinsh, Janis Blahins, Aigars Apsītis, Dag Hanstorp.</b> Ion beam instrument GRIBA success story of the Project
13.00-13.15	<b>Roman Viter, Arnolds Ubelis.</b> Development and application of photonic materials for optical sensors/biosensors
13.15-13.30	<b>Janis Alnis, Ilja Fescenko.</b> Quantum optics laboratory
13.30-13.45	<b>Janis Blahins, Aigars Apsitis, Viesturs Silamiķelis, Arnolds Ubelis.</b> Contribution of the project in the development of assets for applied research to ensure collaboration with research driven SMEs in photonics domain
13.45-14.00	<b><u>Janis Alnis</u>, Arnolds Ubelis, Ilja Fescenko, Janis Blahins, Aigars Apsītis, Viesturs Silamiķelis.</b> Advances in quantum sciences – source for the initiatives in sophisticated applications
14.00-14.15	<b>Karlis Gross.</b> Multidisciplinary collaboration in biomaterial research
14.15-15.00	LUNCH BREAK
15.00-17.00	<i>Concluding session with roundtable, Chair: <b>Vid.Beldavs</b></i>
15.00-15.20	<b>Arnolds Ubelis.</b> Readiness and capacity of FOTONIKA-LV in the implementation of HORIZON 2020 mission and participation in relevant calls for proposals
15.20-15.40	<b>Mats Nordlund.</b> How to extend cooperation across EU borders  Invited speaker: Director, Innovation Advisory Partners ( <a href="http://www.innovationadvisorypartners.com/">http://www.innovationadvisorypartners.com/</a> ) Dr. Nordlund has a unique background from executive positions in academia and industry in Europe, USA, and Russia. He spent 15 years in industry, first as Director of Corporate Technology Strategy and Acquisition at Saab AB, a major aerospace company, and later as Director of Research and Development for Emerson Process Management – Level and Marine. In his academic career, Dr. Nordlund recently served three years as Vice President of Research Programs at Skoltech, a new university being established in Moscow in partnership with MIT. In the 1990s, he launched and managed the System Design and Management (SDM) program at MIT. Dr. Nordlund has also served on several national and international (EU) panels in innovation and research, including the High Level Expert Group that in 2005 laid the ground for the ERC.
15.40-17.00	Round Table discussion
18.00	RECEPTIONS

<i>Conference Local Organising Committee</i>	<i>Scientific Program Committee</i>
Arnolds Ūbelis – Chair Dina Bērziņa – Head of the Conference Secretariat Darta Ubele – assistant Sandra Smalina Aigars Apsitis Aigars Atvars Vidvuds Beldavs Ilgmars Eglitis Kalvis Salmins Gunars Silabriedis Edgars Smalins Ilja Fescenko	Prof. Andrejs Silins – Chair Dr. Maris Abele Dr. Janis Alnis Prof. Andris Ambainis Prof. Dainis Dravins Dr. Aigars Ekers Dr. Ludwig Grunwaldt Prof. Dag Hanstorp Dr. Sune Svanberg Dr. Arnolds Ubelis Dr. Janis Balodis