# Lazeriai: mokslas ir technologijos

# Lasers: Science and Technology

14-oji nacionalinė konferencija skirta Lietuvos valstybės atkūrimo šimtmečiui

14th National Conference Dedicated to the centenary of Lithuania

2018 • VILNIUS

#### Konferenciją globoja:





Konferenciją organizuoja:







#### Konferencijos rograma

8:30 – 9:00	Dalyvių registracija
9:00 – 9:30	Konferencijos atidarymas
	Lietuvos Respublikos Prezidentė Dalia Grybauskaitė (laukiamas patvirtinimas)
	Remigijus Šimašius, Vilniaus miesto meras
	Algis Petras Piskarskas, Lietuvos lazerių asociacijos prezidentas
	Gintaras Valušis, Nacionalinio fizinių ir technologijos mokslų centro direktorius
	Augustinas Vizbaras, UAB Brolis semiconductors įkūrėjas, mokslininkas;
	Konferencijos moderatorius
09:30 – 10:00	Lietuvos aukštųjų technologijų rinkos ir investicijų apžvalga
	Alvydas Žabolis, Žabolis ir partneriai, Lietuva
10:00 – 10:30	40 metų puslaidininkiniams lazeriams
	Markus-Christian Amann, Walter Schottky institutas,
	Miuncheno technikos universitetas, Vokietija
10:30 – 11:00	Silicio fotonika: fotoniniai integriniai grandynai
	Roeland Baets, Gento universitetas, UGent-IMEC, Belgija
11:00 – 11:20	Kavos pertraukėlė
11:20 – 11:50	Atominiai laikrodžiai ir sinchronizuotų modų lazeriai
	Steve Lecomte, CSEM, Šveicarija
11:50 – 12:20	Lazerinių šaltinių technologija nuo 1 μm iki 100 μm
	Ralf Meyer, Walter Schottky institutas,
	Miuncheno technikos universitetas, Vokietija
12:20 - 13:30	Pietūs ir stendinė paroda I aukšto fojė
13:30 – 14:00	Vienfotoniai šaltiniai
	Gediminas Juška, Tyndallo nacionalinis institutas, Airija
14:00 – 14:30	Silicio slėnio verslo ir investicijų patirtis
	Dag Syrrist, rizikos kapitalo investuotojas, Jungtinės Amerikos Valstijos
14:30 – 14:50	Kavos pertraukėlė
14:50 – 16:00	Diskusija
	Iššūkiai ir galimybės mažųjų šalių aukštųjų technologijų įmonėms konkuruoti
	pasauliniu mastu. Valstybės, švietimo ir verslo ekosistemos vaidmuo
	Moderatorius - Vaidotas Beniušis,
	Baltic News Service (BNS) vyriausiasis redaktorius
15:00 – 01:00	Vakaro programa ir vakarienė
	Vilnius Grand Resort viešbučio teritorija ir lauko kupolas
	www.vilniusgrandresort.lt

2018 m. rugpjūčio 24 d., penktadienis

Nacionalinis fizinių ir technologijos mokslų centras, Saulėtekio al. 3, Vilnius

Programa gali neženkliai keistis. Konferencija vyks anglų kalba. Daugiau informacijos: Informacija dalyviams.pdf (pridedama)

<sup>\*</sup>Registracija į konferenciją būtina.

## **Conference Programme**

Registration
Opening ceremony
HE the President of the Republic of Lithuania Dalia Grybauskaitė
Remigijus Šimašius, Vilnius City Mayor
Algis Petras Piskarskas, President of Lithuanian laser association
Gintaras Valušis,
Director of national center for Physical sciences and technologies
Augustinas Vizbaras,
UAB Brolis semiconductors co-founder, Conference moderator
Overview of Lithuanian high-tech market and investments
Alvydas Žabolis, Žabolis and partners, Lithuania
40 years of semiconductor lasers
Markus-Christian Amann,
Walter Schottky institute, Technical University Munich, Germany
Silicon Photonics: Integrated photonic circuits
Roeland Baets, Ghent University, UGent-IMEC, Belgium
Coffee break
Atomic clocks and mode locked lasers
Steve Lecomte, CSEM, Switzerland
Laser source technology: from 1 μm to 100 μm
Ralf Meyer, Walter Schottky institute, Technical University Munich, Germany
Lunch and poster session (ground floor foyer)
Single-photon sources
Gediminas Juška, Tyndall national institute, Ireland
Silicon Valley experience: business and investments
Dag Syrrist, Investor, United States of America
Coffee break
Discussion:
Challenges and opportunities for high-tech companies from small countries to
compete globally. The role of government, education and business ecosystem.
Moderator - Vaidotas Beniušis, Baltic News Service (BNS) chief editor
Evening program and dinner
Vilnius Grand Resort territory and outside premises www.vilniusgrandresort.lt

#### **Speakers**



Roel Baets, Ghent Univeristy-Imec, Belgium.

Roel Baets is a professor in the Photonics Research Group at Ghent University. He is also associated with IMEC. Roel Baets is director of the multidisciplinary Center for Nano-and Biophotonics (NB Photonics) at UGent, founded in 2010. He is a Fellow of the IEEE, the EOS and the OSA. Roel Baets has published over 600 publications with an h-index over 60. He has guided over 30 PhD students over his career. Roel Baets has mainly worked in the field of integrated photonic components. He has made contributions to research on photonic integrated circuits, both in III-V semiconductors and in silicon, as well as their applications in telecom, datacom, sensing, biosensing and medical devices.



Markus-Christian Amann, Walter Schottky Institut Technische Universität München, Germany.

Prof. Amann (b. 1950) has held the Chair of Semiconductor Technology at the Walter Schottky Institute since 1998. His research field is optoelectronic components and III-V compound semiconductor technology. In this field, he focuses on innovative semiconductor lasers for sensor technology and broadband communication applications in the near and mid-infrared range as well as terahertz radiation sources. After completing his studies in electrical engineering at TUM, Prof. Amann received his doctorate in 1981. From that year until 1994, he played a key research role at Siemens AG, becoming a member of the senior management team for the development of laser diodes. Prior to becoming a full professor at TUM, he headed up the Chair of Technical Electronics at the University of Kassel until 1998.



Ralf Meyer, Walter Schottky Institut, Technische Universität München, Germany.

Ralf Meyer was born in Oldenburg, Germany, in 1963. He studied physics at the RWTH Aachen, Germany, where he received his diploma degree with in 1990 and PhD in 1994. His research expertize is II-V semiconductor technology with a particular focus on MOVPE technology for advanced optoelectronic devices. Since 1998, Ralf Meyer is the head of the III-V technology group at the Walter Schottky Institut (Technische Universität München, Germany) which is dedicated to the development and realization of a variety of different types of light emitters in the wavelength range from 1 to 250  $\mu$ m based on III-V semiconductors. Two companies were founded by PhD students of this chair and both are actively cooperating with the chair since years.

#### **Speakers**



### Steve Lecomte, CSEM, Switzerland.

Steve Lecomte is Section Head of the Time and Frequency Section of the Centre Suisse d'Electronique et de Microtechnique (CSEM) in Neuchâtel. He occupies this position since 2007. Prior to this he was research engineer for two years at the Observatory of Neuchâtel, contributing to the development of an optically-pumped cesium thermal beam clock. He received the PhD degree in 2005 from ETH for his work on multi-GHz repetition rate optical parametric oscillators and passively mode-locked solid-state lasers performed in the group of Prof. Ursula Keller. The PhD thesis followed two years as scientific assistant in the group of Prof. Günter, also at ETH, and Physics studies at the University of Neuchâtel from which he graduated on 1999.



Gediminas Juška Tyndall National Institute, Cork, Ireland

Gediminas Juska is a Researcher at Tyndall National Institute, Cork, Ireland. His main research interests are in engineering and spectroscopic characterisation of site-controlled quantum dots (QDs), QD-based devices for potential quantum information processing applications. He received his PhD in Physics in 2013 from University College Cork with the thesis titled 'Pyramidal quantum dots: single and entangled photon sources and correlation studies'. He has been continuing the successful project as a Postdoctoral Researcher at Tyndall. Dr. Juska is the author of 24 papers in peer-reviewed journals (including two Nature Photonics publications as the first author), co-author of 63 communications.



#### **Speakers**



### Dag Syrrist USA

Twenty-eight years in the venture capital industry. Extensive Trans-Atlantic and US investing in early and venture-stage companies. Raised and co-managed \$175 million in three funds across multiple industry and technology cycles as General Partner with Vision Capital. Extensive environmental venture equity and debt investing, regulatory, environmental and public policy experience as Vice President with Technology Funding, a \$325 million venture group with 4 equity and 3 venture debt funds. Co-founded Global BSN, corporate sustainability network of 15 Fortune 200 companies.

Served on local, regional, and national policy, technology and environmental boards. extensive corporate, Federal, State and public advisory groups and boards. Member of US National Technology Policy initiative under Clinton / Gore administration (1993-1997). Testified before US Senate Committee on Environment and Public Works.



#### Alvydas Žabolis Zabolis Partners, Lithuania

Coordinates all business activity and is responsible for core services at Zabolis Partners where he supervises business development and provides guidance to all teams. Alvydas holds a physics degree from Vilnius University, and started his career at Eksma, a producer of laser equipment, where he continues to serve as a board member for the company. Alvydas has 25 years of experience in investment banking, private equity, executive management, corporate advisory, and M&A. He has led a large number of major privatizations, M&A deals, buyout transactions, and financing initiatives since the early 1990s. In 2002 he co-founded Zabolis Partners.

