

#### The Swedish Technology Platform in Optics and Photonics



#### Nyhetsbrev från PhotonicSweden och Svenska OptikSällskapet

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# PhotonicSweden

#### The Swedish Technology Platform in Optics and Photonics

THORLASS

HAMAMATSU
PHOTON IS OUR BUSINESS

PhotonicSweden members

























Kära Optik och Fotonik-vänner!

Normalt vid denna tid på året brukar man titta tillbaka och summera det gångna året. Det gör vi delvis i detta nyhetsbrev – som till exempel i rapporten från *Optik och Fotonik i Sverige 2017*. Framgången fortsätter för detta koncept.

Men vi tittar framför allt framåt – nästa års Optik och Fotonik i Sverige blir Northern Optics & Photonics 2018. Då utökar vi den geografiska täckningen till att även omfatta de övriga nordiska och baltiska länderna. Evenemanget äger rum på Lunds Universitet under tiden 12 - 14 september. Något att genast notera i almanackan. Vi kan utlova ett ännu mer späckat program av lysande föreläsare, briljanta utställare och strålande mötestillfällen. För dem av er som vill se ännu längre in I framtiden, rekommenderar jag Photonic21s Vision Paper Europe's age of light – How photonics will power growth and innovation som också beskrivs i detta nyhetsbrev. Photonics21 har tillfrågat 1700 företag och forsknings-organisationer om fotonikens framtid – sett från både tillverkare och användares perspektiv. Resultatet är, inte oväntat, att fotonikens/optikens allestädes närvarande påverkan ger företagen inom denna sektor fantastiska möjligheter. Möjligheter som måste förvaltas väl – kunskap inom området måste genereras via förstklassig och bred utbildning, innovationskraft måste tas tillvara och stödjande strukturer måste ges finansiella medel att kunna vara just stödjande. Den europeiska fotoniken är imponerande, och har ett starkt stöd från EU. Den PPPP (Public-Private-Partnership-Photonics) som finns har utvärderats som den bästa PPP som finns inom EU. Denna PPPP domineras naturligt nog av tyska och franska företag, och dessvärre är det svenska engagemanget för svagt. PhotonicSweden arbetar hårt för att Sverige skall finnas med i detta sammanhang och jag vill återigen uppmana våra företagsmedlemmar att bli mer aktiva direkt (helst) eller indirekt via just PhotonicSweden – vi är till för

Slutligen, som ett nyårslöfte, hoppas jag att alla ni som medlemmar går in på vår websida, gör er hemtama med den, kritiserar oss om vad som kan bli bättre och registrerar er och era kompetenser så att vi kan få en bra och viktig dokumentation av nätverkets totala kompetens.

Framtiden är (julgrans)ljus

God Jul och Gott Nytt År önskar Magnus



#### Optics and Photonics in Sweden 2017 (OPS) 18-19 October in Stockholm, Kista



Kongress i Kista på Electrum 18-19 oktober. Utställarantalet blev det största med 28st utställare att jämföra med 27st 2016.

2014 infördes även parallella sessioner uppdelat på akademiska- respektive industriella presentationer i ett försök att även attrahera industrirepresentanter. Årets resultat baseras därför med största sannolikhet på ett lyckat genomförande på Chalmers 2014, KTH 2015 och Linköping 2016. Konferensen hade två keynote speakers, Malgorzata Kujawinska och Zeev Zalevsky 16 st akademiska respektive 16 st industriella presentationer, 153 deltagare samt 26 st pitch-talks från utställarna.

Pris för bästa fotonikföretag delades i år ut till Thorlabs Sweden AB och priset hämtades av Ole Rosenqvist och Jonas Olsson, som också höll en presentation om företaget.

Första dagen avslutades med en postersession med snacks varvid alla deltagare under drygt en timme kunde gå runt och ta del av olika forskningsresultaten som presenterades på postrarna samt ta del av vad alla utställare hade att visa upp och en middag på Electum.

PhotonicSweden vill tacka alla som deltagit och bidragit till en lyckad konferens, samt ett speciellt tack till alla utställare och sponsorer som gjort evenemanget ekonomiskt möiligt att genomföra.

Nästa års konferens 2018 kommer att bli en större evenemang med deltagare från hela norden.







#### Optics and Photonics in Sweden 2017 (OPS) 18-19 October in Stockholm, Kista















**Associated members** 













PhotonicSweden partners





#### **Exjobbspris 2017**

PhotonicSweden members



































#### Vinnaren är:

1st prize:
David Frantz, Lund University

Master Thesis on "High Contrast Imaging Through Scattering Media Using Structured Illumination Fourier Filtering" "



Från vänster: till höger David Frantz, Lund University, Kristoffer Svendsen, Lund University

2<sup>nd</sup> prize:

Kristoffer Svendsen, Lund University

Master Thesis on "In-line Phase-contrast Tomography using Betatron X-rays Produced by a Laser-Plasma Accelerator".

Ordförande för exjobbskommitén, Mikael Sjödahl, överlämna priset och gratulerade på konferensen Optics & Photonics in Sweden/2017

Priser är sponsrad från





# THORLABS

The Optics and Photonics Company of the Year 2017

#### **Thorlabs Sweden AB**



From left to right: Magnus Breidne, chairman PhotonicSweden, Ole Rosenqvist, vice CEO Thorlabs AB, Jonas Olsson, CEO Thorlabs AB

Thorlabs Sweden AB, a subsidiary of Thorlabs Inc., designs and manufactures a wide range of advanced optical systems, including Optical Spectrum Analyzers, Fabry-Perot interferometers, Beam Expanders, Objectives, and Collimation Packages, for worldwide distribution to companies and universities. With a modern cleanroom and specialized testing capabilities, Thorlabs Sweden AB is well suited for manufacturing and testing of high-end optical systems.

Located in Mölndal, just outside Gothenburg, the 40-person Thorlabs Sweden team is responsible for sales and technical support for the entire Thorlabs portfolio, which consists of over 20,000 items, in Scandinavia, the Baltic, and Poland.

During many years Thorlabs Sweden has developed advanced optical products on a high technical level and quality. These products get sent to companies and laboratories worldwide with high class optical solutions. Thorlabs Sweden has always great focus on the customer, which guaranteed a constant growth and profitable efficiency. This makes Thorlabs Sweden AB a good example on how Photonics in Sweden can compete in an international environment.

PhotonicSweden shows with the prize for *the Best Optics and Photonics Company 2017* how successful Swedish companies can be in the field of photonics.

#### Register as personal or corporate member on our website

PhotonicSweden members





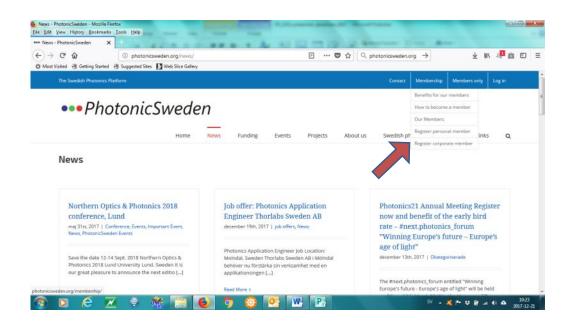
PhotonicSweden has a new tool on the website. It is now possible to register as a member to access the "Members only" area:

Personal members register here: <a href="http://photonicsweden.org/membership/register-personal-member/">http://photonicsweden.org/membership/register-personal-member/</a>

Corporate members register here: <a href="http://photonicsweden.org/members-only/corporate-members/">http://photonicsweden.org/members-only/corporate-members/</a> (can register up to 3 contact persons)

By filling in their profile and expertise, our members will be able to find each other, find experts and partners for cooperation, etc. After registration, the members can access the "Members only" area by logging in to the website. It is important that you as a member update and complete your profile! It is a collective effort to increase the networking between actors in photonics in Sweden. It will work if as many as possible of our members collaborate. At term, it will also be a way for us to have a continuously updated member register.

In the "Members only" area you can find e.g. a list of photonics companies and information on photonics calls (EU and Swedish calls).



#### **Northern Optics & Photonics 2018 in Lund**



It is our great pleasure to announce the next edition in the series of Northern Optics conferences that brings together optical scientists from the Nordic and Baltic countries. The previous meetings were held in Uppsala (2000), Espoo (2003), Bergen (2006), Vilnius (2009), and Helsingør (2012) and Imatra/Lappeenranta region (2015).Northern Optics & Photonics 2018 (NOP 2018) will be arranged on 12-14 September 2018 in Lund, Sweden. The conference is organized by the Swedish Optical Society and PhotonicSweden in conjunction with the Lund University and Lund Laser Centre and sponsored by optics/photonics societies of Sweden, Finland, Denmark, Norway, and Baltic countries.

There will be two parallel sessions one is devoted to presentations from academia and one to industry presentations. Keynote speakers will highlight European research and developments.

A poster session will provide an additional opportunity to display to the most recent developments and achievements. It will also give an overview of Optics and Photonics in Scandinavia and the Baltic countries and offer a good platform for creating new collaborations.

An exhibition and a session with company presentations will be held in parallel to the technical sessions to provide industry, institutes and associations an opportunity to display their products and services and bridge the gap between science and industry.

#### **Northern Optics & Photonics 2018 in Lund**

#### **Call for abstracts**

Send all submissions in an electronic form in Microsoft Word format or Adobe PDF format Please provide your name, affiliation, telephone number and Email address on all submissions as well. You can submit your abstracts by sending them to this email address: <a href="mailto:nop2018@photonicsweden.org">nop2018@photonicsweden.org</a>

For questions and further information please contact Petra Bindig at petra@photonicsweden.org

Here you can download the abstract template: Abstract-template-NOP2018 Abstract-template-NOP2018

The conference is organised by the Swedish Optical Society and PhotonicSweden in conjunction with the Lund University and Lund Laser Centre and sponsored by optics/photonics societies of Sweden, Denmark, Finland, Norway, and Baltic countries.

#### Topics for the academic sessions (but not limited to ):

- Photonics in Life Sciences
- Photonics for Communication
- Photonics in Manufacturing
- Photonics in Environmental Technology
- Optics and Spectroscopy
- Photonic components and Integrated Optics
- Advanced Photonic Materials

#### <u>Topics for the industrial sessions (but not limited to):</u>

- Photonics in Transportation
- Photonics in Advanced Manufacturing and Applications
- Photonics in Life Quality
- Photonics in Energy and Environment
- Remote and Laser Sensing
- Optical Systems and Applications
- Vision Systems
- Components and Systems for Telecommunication
- Optical Metrology

#### **Important dates and deadlines:**

**Deadline for abstract submission:** 1 May 2018

Notification to authors: 18 May 2018

Publication of the Programme: 15 June 2018

Registration / Author registration: opens 18 May 2018 closes 4 September 2018

More info: http://photonicsweden.org/northern-optics-photonics-2018-conference-lund/

#### **Digital Sweden**

#### Start for Digital Sweden – Joint Advocacy of the Swedish ICT!

Digital Sweden is gathering the Swedish ICT sector to more efficiently influence the research and innovation agendas in Europe and the associated calls of Horizon 2020 and of "FP9", the next framework programme of the European Commission (EC). The needs and interests of the Swedish ICT industry should influence the relevant European organisations at the basis of the EC's R&D&I programmes, the European Technology Platforms (ETPs) and Public Private Partnerships (PPPs). Better designed calls will attract more Swedish actors, especially from industry.

Vinnova is financing Digital Sweden as a continuation of previous so-called "Advocacy Platforms" in several separate and initially uncoordinated areas related to ICT. It has been very much thanks to Vinnova themselves and the advocacy platform for ECS led by the present director of PhotonicSweden, and his colleagues but especially P-E Martinsson from FindIT in Sandviken, if the idea of joining the efforts in one single advocacy platform for ICT can now get the start signal. The coordinator of Digital Sweden is Martinsson and he will work about 70% in the beginning.

Sweden is a little country and cannot really afford to have a detuned representation in most European ETPs and PPPs. Advocacy in Brussels takes time to build up and requires the establishment of networks based on trust and confidence. Digital Sweden will continue to develop such long-term and coordinated networks based on a number of already established key actors but will also fill some holes.

#### The main goals of Digital Sweden are:

- To streamline the Swedish influence on EU's ICT work programmes.
- Highlight and promote the Swedish ICT both nationally and internationally.
- Stimulate an increased cooperation (for advocacy) between ICT areas in Sweden.

Support and stimulate the Swedish participation in international RDI programmes, primarily within ICT.

The actors behind Digital Sweden are the Strategic Innovation Programmes (SIP) related to ICT and their partners:

<u>Smartare elektroniksystem</u>, SES, in English Electronics Components and Systems (ECS). *PhotonicSweden* is part of ECS and will have excellent opportunity to participate.

Process Industrial IT and Automation, PiiA.

#### Produktion 2030.

Sakernas Internet, <u>IoT Sverige</u> (Internet of Things Sweden).

Big Data, BD (not quite a SIP, see e.g. <a href="https://www.sics.se/projects/big-data-analytics">https://www.sics.se/projects/big-data-analytics</a>)

<u>Smart Built Environment</u> (Supportive).

#### **Photonics21 Annual Meeting 2018**



Photonics21 Annual Meeting Register now and benefit of the early bird rate – #next.photonics\_forum "Winning Europe's future – Europe's age of light"

The #next.photonics\_forum will be held on 8th and 9th March 2018 in the Museum of Fine Arts/Musées Royaux des Beaux Arts and the Bluepoint Conference Centre in Brussels.

The annual event continues the further strategy development of the Photonics Public Private Partnership in preparation of the new EU framework programme. On the second event day the European photonics community will launch the strategy process for a new photonics multiannual roadmap for the next 10 years. As inspiration for this strategy process the symposium on the first day will cover some high level ignite talks providing a global view on European Entrepreneurship and Innovation Ecoysystems, Digitisation and Internet of Things as well as a lively debate between the new and old economy.





#### Online Registration

Benefit of the early bird rate and register now via the online registration.

#### **Event Locations**

The symposium and networking dinner on 8th March 2018 will be held in the Museum of Fine Arts:

Musées Royaux des Beaux-Arts, Rue de la Régence 3, 1000 Brussels

The workshops sessions on 9th March 2018 will be held in the conference centre Bluepoint Brussels:

Bluepoint Brussels, Boulevard Auguste Reyers 80, 1030 Brussels

Download an overview how to get to the event locations .

You will find any further details in the sponsoring package.

#### **Photonics21 Vision Paper**



### Photonics21 Vision Paper "Europe's Age of Light! How photonics will power growth and innovation" published

The Photonics21 Vision Paper "Europe's Age of Light! How photonics will power growth and innovation" presents the vision of the European photonics community for 2030. The report was prepared as outcome of 8 thematic strategy workshops with the European photonics community and outlines the great challenges facing Europe and the world. 8 missions present a vision of how photonics technologies which are already in the innovation pipeline today can solve these challenges by 2030 and beyond to turn this vision into reality.

European leadership inphotonics will deliver these benefits in 2030:

- Instant diagnosis of major diseases
- Quality food from farm to fork
- Accident and congestion-free road transport
- A truly circular economy
- A million new jobs
- 10% higher productivity
- Zero downtime in a terabit economy
- Photonics as a flagship science for innovation

The Photonics21 vision document serves as input to the preparation of the ninth EU framework programme and was presented to MEPs and representatives of the European Commission on 28th November 2017 alongside a Photonics21 breakfast session in the European Parliament.

You can download the pdf version.

If you would like to receive one or more hard copies of the document please write us an e-mail to secretariat@photonics21.org by indicating your postal address and the amount of copies you would like to receive.

#### **Nordic Workgroup Meetings**

#### 1<sup>st</sup> Nordic Workgroup Meeting, 29<sup>th</sup> May-2017, Oulu, Finland

For the first time **Photonics Finland** and **PhotonicSweden** were collaborating in arranging a joint Nordic Workgroup Meeting between our countries equivalent to Photonic21 workgroups WG1-WG7 on May 29th, at Radisson Blu hotel in Oulu, the day before the conference Optics & Photonics Days in Finland (OPD2017) started. Over 40 participants were registered for this meeting in Finland.



The topics in Oulu, Finland were:

- Why do we need workgroups?
- Presentation of participants (short pitch talks),
- Photonics21 stakeholder Harri Kopola (VTT) to talk about coming next 3 years calls,
- Discussions about workgroups impact on Photonics post 2020,
- Nordic collaboration in future calls
- Nordic Business-2-Business possibilities
- Round table discussions

Even though each WG were not fully occupied, all WG's discussed in a round table arrangement. We believe this meeting was a good way to collaborate in Photonics between our Nordic countries! Our Workgroup arrangements are the same as Photonics21's. Read more about Workgroups here: <a href="http://www.photonics21.org/AboutPhotonics21/">http://www.photonics21.org/AboutPhotonics21/</a> workgroups.php

#### **Nordic Workgroup Meetings**

#### 2<sup>nd</sup> Nordic Workgroup Meeting, 17<sup>th</sup> October-2017. Kista, Sweden

On the 17th of October 2017 PhotonicSweden invited members of PhotonicSweden, PhotonicsFinland and representatives from Norway to the 2nd Nordic Workgroup Meeting. 20 participants attended this meeting. Several topics were discussed on how to promote Photonics in the Nordic countries to have a stronger voice when meeting Photonics21 workgroups.

For this reason we plan to have the next Nordic Workgroup Meeting the day before Ph21 Annual Meeting in Brussels on 8th of March 2018.



#### Programme for joint WG1-WG7 Nordic Workgroup Meeting

- Welcome and Introduction
- Summary from 1st Nordic Workgroup Meeting in Oulu
- How to strengthening Nordic Photonics
- H2020 calls on Photonics, presented by CEO Thorbjörn Ebefors, Spinverse AB
- How Actphast can support Photonics Innovation, Jyrki Saarinen
- Collaboration for H2020 calls
- Collaboration Business-2-Busuness
- Funding possibilities for a Nordic Photonics pavilion at Photonics West
- A summary list of Nordic Photonics Companies and organisations
- WG1-WG7 representation at Photonics21 at Ph21 Annual Meeting 2018
- Panel discussion

## PhotonicSweden

#### The Swedish Technology Platform in Optics and Photonics

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#### Ordinarie ledamöter

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Magnus Breidne, Projektchef på IVA
Björn Broberg, Docent i fotonik, serieentreprenör
Carlota Canalias, Ass. Professor at KTH, Laser Physics Group
Ulf Dahlberg, Saab Group AB
Bengt Jervmo, FLIR Systems, Manager Platform components
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Mikael Sjödahl, Professor LTU
Peter Strömberg, Utvecklingschef Fixturlaser—Acoem AB

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