



Dear Photonics21 Secretariat

We herewith submit the nomination of the following Photonics21 Board of Stakeholder candidate
Foundation for Research and Technology - Hellas (FORTH) / Stavros Pissadakis.

**- Letter of Nomination -
Photonics21 Board of Stakeholders
Election 2018**

Photonics21 Board of Stakeholders - Letter of Nomination

1. Full legal name of the affiliation nominated as BoS Member (candidate's organisation):

Foundation for Research and Technology - Hellas (FORTH), Institute of Electronic Structure and Laser (IESL)

2. Full contact details of the affiliation (street, postal code, country) nominated as BoS Member and invoice address (in case the candidate is elected, the affiliation needs to pay an annual service fee according the Photonics21 Terms of Reference §5 (10)):

Foundation for Research and Technology - Hellas (FORTH), Institute of Electronic Structure and Laser (IESL), N. Plastira 100, Vasilika Vouton, Heraklion 70013, GREECE

3. Name of the suggested BoS Representative (the personal candidate)

Dr Stavros Pissadakis

4. Information about the BoS candidate and the BoS representative

a) Description of the activities and information about the expected contribution and value added the nominated BoS member (candidates organization) will bring to the BoS¹

The [Foundation for Research and Technology – Hellas \(FORTH\)](#), is a major research organization in Greece (est. 1983), its mission being to pursue high quality basic and applied research among a broad scientific area. The [Institute of Electronic Structure and Laser \(IESL\)](#) that centers its research activities in the fields of Lasers and Applications, Materials Science, Microelectronics and Devices and Theoretical-Computational Physics. FORTH-IESL is the main laser research centre in Greece and has a strong international presence. The Institute's personnel counts ~229 members, including 61 senior researchers (some in joint appointments with the Univ. of Crete), about 111 post-docs and graduate students, and more than 50 technical support and administrative staff. The Laser and Applications Division at FORTH-IESL is the main laser research centre in Greece and has a strong international presence with diverse activities spanning the fields of atomic/chemical physics, pump-probe studies, laser ablation and micro-/nano-processing, fibre optics, biomedical applications of lasers. In addition IESL, provides short and medium term training opportunities to doctoral students from EU, within the Marie-Curie scheme.

FORTH-IESL is a leading research institute in European level, participating in hundreds of EU funded projects. FORTH-IESL has been operating as a European Research Infrastructure (Ultra-violet Laser Facility-ULF) for more than twenty four years, and is currently supported through the Access to Research Infrastructures Activity of the Human Research Potential Programme of the EC. FORTH-IESL is/was also a member of the Extreme Light Infrastructure (ELI), the Joint Undertaking ENIAC, the NFFA-EUROPE, IPERION-CH/MOLAB, ACTPHAST & ACTPHAST 4.0, and, of the EUSMI facility type consortia. Highlighting, FORTH-IESL research-

¹ The candidate is aware and accepts that according to the Photonics21 Terms of Reference a service agreement and a service fee invoice is to be signed / paid with the Photonics21 association.

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ers have been recipients of starting (TRICEPS) and advanced (PHOTOMETA) ERC grants, while participated/ing in several other FET, STREP, NoE, CA, Marie Curie and IP projects, including Photonics4-Life, MULTIRAD, Matter-Waves, FASTDOT, ASPICE, MatterWave, QTEA, ESA-OBST, MIR-BOSE, and NPRP-Engineered light for biomedical and energy harvesting applications. Researchers of FORTH-IESL have been also coordinated or participated in projects with NATO, ESA, DARPA and EOARD, while being in the boards of ELI, ESFRI, COST etc. FORTH-IESL also processes several contracts with private/industrial sector, including those with L'OREAL on the use of non-linear photopolymerisation on flesh tissue processing, and with Acropolis Museum for laser cleaning of the Parthenon Marbles. Throughout the research work carried out in FORTH-IESL five companies have been spin-off in the fields of laser processing, hyper-spectral imaging, photonic materials and others.

FORTH-IESL has been a founding member of ETP Photonics21 since year 2005, constantly represented into the BoS until 2018, while its members actively involved in most of the ETP Working-groups. Further, FORTH-IESL was the catalyst for the establishment of the first Platform for Photonics in Greece (Photonics^{GR}), and for the first photonic cluster based in Athens, "H-Phos". For further promoting know-how transfer and commercialization activities, also in cross-cutting fields, PRAXI-Help-Forward-Network operates under the auspices of FORTH, while being activated in European and national level.

- b) Description of the activities and information about expected contribution and value added the BoS Representative (candidate / person) will bring to the BoS.

Stavros Pissadakis (Ptychion Physics, Univ. Crete, Greece 1994; Ph.D., ORC, Univ. Southampton, UK 2000; Senior Member OSA 2016)



I am a Director of Research in the Foundation for Research and Technology-Hellas (FORTH), Institute of Electronic Structure and Laser (IESL), Greece, with a 25 years research endeavor in Photonics, serving this scientific field and the relevant community from several academic and management positions in Greece, Italy and UK. I have personally established the [Photonic Materials and Devices Laboratory \(PMDL\)](#) in FORTH-IESL, demonstrating the development of hybrid photonic devices by engaging diverse optical and material technologies, from the proof-of-principle level, up to the relevant field demonstration. During its lifespan, PMDL has contributed several, significant first findings in basic and applied Photonics, including advanced optical fiber sensors, photosensitivity studies, magnetofluidics, and, light localization schemes; resulting in 200 journal and conference publications, while including 40 invited contributions. PMDL research work has been frequently highlighted by OSA, SPIE, MRS and other technology scouting organisations; as well as, by the national/international press. The same time a research budget of more than 1.8MEuros was attracted under PMDL auspices, while participating in prestigious EU and industrial research projects and consortia in Photonics Science and Policy; currently supporting the LaserLab Europe and ACTPHAST 4.0 EU projects.

My long involvement in the ETP Photonics21 (Ph21) started since its inauguration day, contributing in the first Strategic Research Agenda and in the Working-Groups (WGs) 5, 6 and 7. I have being a deputy and active member in the Ph21 Board of Stakeholders (BoS), constantly

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representing FORTH-IESL in lieu of Prof. Costas Fotakis; most importantly, I have closely followed and involved into the dynamics of the ETP Ph21 for more than thirteen years. Exploiting this invaluable experience, I had the privilege to trigger the formation of a similar Thematic Technological Platform for Photonics in Greece (Photonics^{GR}), being President of its Executive Board between 2008 and 2016; also, I have assisted the business plan elaboration of the first Greek Cluster of Photonics “H-Phos”.

I aspire to continue and intensify my efforts in the field of Photonics in national, European and international level, for bringing forward new scientific ideas, judiciously translate know-how from laboratory to industry, contribute in efficient research policies and educate young people.

There are several, great challenges prompting the continuation of my activities within the BoS of Ph21, related to the Ph21 organisation itself, the strong character of FORTH-IESL as a world class photonic institution and European facility, and the representation of Greece as a vigorous player in the European Photonics landscape. If I will be elected in the BoS of Ph21 I plan to:

- 1) Maintain and strengthen the links of FORTH-IESL in the European Photonics and Ph21, as a top-class and multi-disciplinary, basic and applied research institution, while generating new opportunities through industrial and academic collaborations and strategic coalitions. Highlight the great strengths of FORTH-IESL as a keyrole European research partner and facility provider in regional and European level, covering crucial parts of the generic value chain of Photonics in terms of basic science, new materials, processing, and devices development; also acting as an cross-cutting, innovation incubator.*
- 2) Actively shape trends within the BoS and the WGs of Ph21 and especially those of 5, 6 and 7. I will continue to contribute ideas and priorities related to optical fiber sensing and routing devices into the WGs 5 and 6, while bringing feedback from national/regional players in the value chains of Agro-Food, Bio, Energy and Metrology.*
- 3) I will work for bringing Greek photonic and end-user companies, as well as, research institutions closer to Photonic Technologies and Innovation opportunities steered and generated within ETP Ph21, fostering their efficient penetration into new value chains and corresponding markets, but also strengthening the Platform itself. Use the ETP Ph21 experience and mechanisms as a catalyst for easing the hurdles for photonic innovation, and in parallel, increase the impact and visibility of the Platform in national and regional level. In the same spirit, a point of great and mutual significance will be the simultaneous advocacy of the Greek photonic cluster “H-Phos” and the national platform “Photonics^{GR}” in the BoS of Ph21, keeping all sides updated on dynamics and priorities.*
- 4) I would like to exploit my past and present involvement into cornerstone EU projects such as those of LaserLab Europe, ACTPHAST, ASPICE and ERC, together with my experience in the formation and management of Photonic Platforms and Clusters in National level, so to assist the development of mechanisms and synergies where Photonic Knowledge of the highest quality to be generated, and, become easily accessible to companies, while simultaneously feedback educational/training schemes of all levels.*

*In short, my vision is summarized in the “**Photons for Progress and Prosperity**”, in complementarity to the PPP tool, where private and public sectors will be directly benefited from the advance and added-value of Photonics in institutional, national and European scale.*