



To Photonics21Secretariat
via eMail: secretariat@photonics21.org

Dear Photonics21 Secretariat

We herewith submit the nomination of the following Photonics21 Board of Stakeholders candidate
European Optical Society / Patricia Segonds

**- Letter of Nomination -
Photonics21 Board of Stakeholders
Election 2023**

Photonics21 Board of Stakeholders - Letter of Nomination

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

European Optical Society

2. Full contact details of the affiliation (street, postal code, country) nominated as BoS Member and invoice address *(In accordance with the Terms of Reference §5, which the Affiliation acknowledges having received, an Annual Service fee will be invoiced every year during the first quarter to the BoS Member. By signing the present letter, the BoS candidate agrees to pay this Membership Fee. The Fee will be considered an asset of the Photonics 21 AISBL in accordance with its statutes (article 12b).)*

Contact details of the affiliation:

European Optical Society
Institut d'Optique Graduate School
2, avenue Augustin Fresnel
91127 Palaiseau cedex, France.

Invoice address:

European Optical Society
Länsikatu 15
FI-80110 Joensuu, Finland

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

Patricia SEGONDS

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 (candidate's organisation) will bring to the BoS¹

The European Optical Society, EOS, is a non-profit society, and an umbrella organization for 17 national learned optical societies all around Europe (www.europeanoptics.org). EOS has over 4500 individual and societal members, both from the academic side and from the industry side. Its mission is to bring together and encourage the cooperation of all with an interest in optics, optoelectronics and related scientific fields, to make practical use of research results, and to support the industrial exploitation of optics. To this end, EOS awards prizes, organizes international conferences, scientific, technical and cultural meetings, training courses, exhibitions, etc. For instance, its yearly annual meeting, EOSAM, is a scientific conference covering all aspects of photonics and is attended by over 500 top researchers from Europe and worldwide. Each year, EOSAM moves into a different location in Europe. EOS also

¹ The candidate is aware and accepts that according to the Photonics21 Terms of Reference (§ 5 (10) a membership fee - as determined by the General Assembly of the Association - needs to be paid to the Photonics21 association.

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runs an open-access peer-reviewed scientific journal, the “*Journal of the European Optical Society – Rapid Publication*, JEOS-RP”: <https://jeos.edpsciences.org/>.

EOS is a natural exchange and networking place for the optics and photonics community. Representatives of the 17 national learned societies regularly meet within the EOS Scientific Advisory committee. Similarly, an EOS Industrial Advisory Committee meets on a regular basis. Members of these committees exchange their views on the current state and future of photonics.

Although the “natural” working area of EOS is Europe, EOS also maintains numerous contacts and shares projects with other learned societies from outside Europe such as Optica, SPIE, Japanese Society of Applied Optics, Optical Society of Korea, Optical Society of Japan, Chinese Optical Society, Taiwan Photonics Society... EOS has also a seat at the bureau of the International Commission for Optics, category 1 member of the International Science Council.

EOS will thus bring to the BoS its deep knowledge of the European and Worldwide landscape of learned societies. EOS will also echo the needs and expectation raised in concertation with its academic and industrial members.

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

Patricia Segonds received in 1988 the Ph.D. degree in condensed matter physics from the University of Grenoble, France, then a post-doctoral fellowship in Magnetic phase-transitions, at the Ohio State University, USA.

In 1989, she joined the Centre de Physique Moléculaire et d'Optique, as an Associate Professor, at the University of Bordeaux. During 9 years, she taught ray, wave and laser optics and wrote with her colleagues 7 books on ray optics and thermodynamics (DUNOD). Her research has focused on third order nonlinearities arising from Kerr effect and ultrafast all-optical switching in doped glasses. She was interested in the determination of the value of their non-linear index and the coefficients of their third order electrical susceptibility.

In 1998, she got a position at the University of Grenoble, France. After 9 years of research work at the “Laboratoire Interdisciplinaire” de Physique, she joined the NEEL Institute at its creation and is now Professor. Her current research expertise is in the study of linear and nonlinear optical properties of bulk and periodically structured crystals. Her interest is the generation of energetic and continuously tunable parametric light from non-resonant phase-matched quadratic frequency conversion processes. Recently, she extended these studies to the generation of tunable Terahertz parametric light. She is also interested in the implementation of new configurations of optical parametric oscillators.

Since 2012, she has been elected at the board of directors of the European Optical Society (EOS). First in charge of EOS student clubs, she then joined the EOS Executive board, first as treasurer, then as president elect. She is now EOS president since September 2022.

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Besides her expertise in nonlinear optics, Patricia Segonds will bring to the BoS her understanding in the structuration of the learned optical societies within and outside Europe, her perception in the role they could play in the fields of popularization of science, continuous training, further dissemination of optics and photonics. As EOS President she has the ideal observation position to detect the hot research topics and anticipate their potential interests for the industry.