



To Photonics21 Secretariat
via eMail: secretariat@photonics21.org

Dear Photonics21 Secretariat,

We herewith submit the nomination of the following Photonics21 Board of Stakeholders candidate
Vrije Universiteit Brussel / Lien Smeesters.

**- Letter of Nomination -
Photonics21 Board of Stakeholders
Election 2025**

Photonics21 Board of Stakeholders - Letter of Nomination

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

Vrije Universiteit Brussel

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).)*

Pleinlaan 2
1050 Brussels
Belgium

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

Lien Smeesters

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

Brussels Photonics (B-PHOT) at Vrije Universiteit Brussel (VUB) is a leading research and innovation center within the Faculty of Engineering, dedicated to advancing the field of photonics. With a team of 65 experts, B-PHOT is internationally recognized for excellence in photonics education, pioneering research, industrial valorization, and leadership in the European photonics community. The group has built a strong reputation for coordinating large-scale EU-funded projects, transferring advanced knowledge and technologies to industry, and shaping the European photonics research strategy.

For more than two decades, B-PHOT has collaborated with industry and research partners across diverse sectors, ranging from telecommunications, sensors, displays, food sorting, automotive, and manufacturing.

B-PHOT combines world-class expertise in spectroscopy, laser systems, and freeform optics with state-of-the-art facilities for prototyping and pilot production of optical components and systems. B-PHOT ambitions to drive innovation by bridging fundamental science with industrial applications, empowering companies to develop next-generation photonic technologies that address economic, societal, and environmental challenges. B-PHOT is recognized by the Flemish Government as "Photonics Spearhead for Industrial Research and Innovation"

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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because of their track record for transferring photonics expertise and innovation breakthroughs to companies. B-PHOT is also uniquely involved as coordinator of the EC-funded pan-European initiatives PhotonHub Europe and PhotonHub PHACTORY that support both SMEs and researchers with photonics innovation.

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

LIEN SMEESTERS is a professor at the Faculty of Engineering of the Vrije Universiteit Brussel (VUB), within the B-PHOT Brussels Photonics research group. She focuses on multidisciplinary research in optical design and spectroscopy, with the objective of developing novel spectroscopic detection systems. She addresses the full innovation chain: from optimizing spectroscopic sensing technologies and advancing the optical design of illumination and detection systems, to delivering proof-of-concept demonstrators and enabling industrial valorization.

Lien coordinates and contributes to **application-driven research projects in close collaboration with industry**. She has been involved in the European-funded ACTPHAST and ACTPHAST 4.0 projects and is currently active in PhotonHub Europe, **PhotonHub PHACTORY**, as well as within the Flanders Make **Digitalis European Digital Innovation Hub**. She leads the **PhotonHub Agrifood Outreach Workgroup**, which develops outreach strategies to raise awareness of photonics innovation in the agrifood sector. Lien also maintains strong connections with national cluster organizations such as Flanders Food and Flanders Make, and she regularly participates in trade fairs including AgriFoodTech, World of Technology & Science, and the Smart Farming conference.

She has collaborated with a wide range of **industrial and research partners**, including Picanol (BE), XenomatiX (BE), Hamamatsu Photonics (BE), Schröder (BE), Optimum Sorting (BE), Balam Ingenieria de Sistemas (ES), ON-LASER (ES), Mr Beam Lasers (DE), DVC Machine Vision (NL), PRUUV GmbH (DE), GoyaLab (FR), INLEAP Photonics (DE), Feinwerkoptik Zünd (CH), Ageon srl (IT), Linea Recta (BE), Van Hool (BE), and ECO España (NL).

Lien Smeesters has received several awards recognizing the quality and impact of her research, including the **Photonics21 Student Innovation Award** (2017) and the BiR&D Award for Science and Technology (2018).

Lien is a member of the **Extended Executive Board of Photonics21** and serves as **Deputy Chair of the Agriculture & Food Workgroup**, since 2023. In addition, she is active in the international photonics community as a member of the program committee of the OPTICA Applied Industrial Spectroscopy conference, co-chair of the SPIE Nonimaging Optics: Efficient Design for Illumination and Concentration conference, and co-chair of the upcoming OPTICA International Optical Design Conference 2027. She also **co-chairs the OPTICA Agriphotonics Technical Group**.

Lien aims to actively contribute to the Board of Stakeholders in defining priorities for future photonics research. She is particularly committed to aligning these priorities with societal

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needs, with a strong emphasis on the **agriculture and food sector**, while increasing the impact and visibility of photonics as a key enabling technology.