



To Photonics21Secretariat  
via eMail: [secretariat@photonics21.org](mailto:secretariat@photonics21.org)

or via Mail:  
c/o VDI Technologiezentrum GmbH  
ST / QS  
Attn: Barbara Kehrer, Ursula Tober, Markus Wilkens  
VDI Platz 1  
40468 Düsseldorf  
Germany

Dear Photonics21 Secretariat

We herewith submit the nomination of the following Photonics21 Board of Stakeholder candidate (organization) / representative (person).

**- Letter of Nomination -  
Photonics21 Board of Stakeholders  
Election 2019**

## Photonics21 Board of Stakeholders - Letter of Nomination

*§ 5 BOARD OF STAKEHOLDERS (6) b....A candidate nomination will always contain the name of the candidate organisation together with its proposed BoS Representative, and voting on a candidate implies voting on this combination.*

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

TU Dresden, Institute of Materials Science (Institut für Werkstoffwissenschaft)

**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 Service Fee. The Service Fee will be considered an asset of the Photonics 21 AISBL in accordance with its statutes (article 12,c).*

**TU Dresden  
Institut für Werkstoffwissenschaft  
Helmholtzstr. 7  
01069 Dresden  
Germany  
phone: +49 351 463-42481**

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

Prof. Dr.-Ing. Christoph Leyens, Director of Institute of Materials Science, TU Dresden & Director of Fraunhofer IWS

**4. Information about the BoS candidate and the BoS representative**

*Extract Photonics21 Terms of Reference<sup>1</sup>: “§ 5 BOARD OF STAKEHOLDERS; ...(6) Election of BoS Members: “Description of the activities of, and information about the added value and contribution to the BoS by both the nominated BoS member 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 BoS<sup>2</sup>**

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<sup>1</sup> Photonics21 Terms of reference are available at [http://www.photonics21.org/download/general\\_inf/TermsOfReference/ETPPhotonics21TermsOfReference.pdf](http://www.photonics21.org/download/general_inf/TermsOfReference/ETPPhotonics21TermsOfReference.pdf)

<sup>2</sup> 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.

## Photonics21 Board of Stakeholders - Letter of Nomination

As one of the eleven Universities of Excellence in Germany, TU Dresden is one of the premier academic and research institutions for undergraduate and postgraduate technical education and internationally renowned research in a wide range of technical topics. Materials and engineering are among the top focus themes of the University. Within the DRESDEN-concept – a research alliance between TU Dresden and Dresden-located non-university partners – TU Dresden together with Fraunhofer IWS are driving forces for multi-disciplinary research, bridging between fundamental and applied research to application with a clear focus on the translation of materials, laser and surface technology research to industrial applications. Both institutions are involved in fundamental and applied R&D in the fields of laser joining, laser cutting, laser heat treatment, laser-assisted coating (laser cladding and laser-arc) as well as additive manufacturing, jointly running labs and forming mixed teams with members from TU Dresden and Fraunhofer IWS.

While TU Dresden is mainly engaged in fundamental research on highest scientific level, Fraunhofer IWS has a proven track record of cutting edge research in laser applications while being an attractive partner for industrial research, spanning from TRL 4-8. Steered by Prof. Leyens in personal union, TU Dresden and Fraunhofer IWS bring a strong national and international academic and industrial network of materials engineers and laser experts to the BoS.

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

Prof. Dr.-Ing. Christoph Leyens studied physical metallurgy and materials technology at RWTH Aachen, Germany, where he earned his diploma in 1993, his Ph.D. in 1997 and his habilitation in 2005. He is currently a full Professor for Materials Engineering and director of the Institute of Materials Science at the Technische Universität Dresden, Germany, and director of the Fraunhofer Institute for Material and Beam Technology, Dresden.

Prof. Leyens has covered a wide range of research topics with a focus on high temperature and lightweight materials, functional materials, surface technology, coatings and additive manufacturing. His major research interest is focused around the process-materials-property relationship of structural and functional engineering materials with a strong emphasis to industrial applications. He is a strong promoter of two “worlds”: materials and laser technology. Prof. Leyens has published more than 250 papers, seven books and holds eleven patents. He is initiator and coordinator the 90 Million Euro R&D project »AGENT-3D«, Europe’s largest single project on additive manufacturing. Out of a total of 120 partners, the consortium comprises more than 100 companies, aiming at the industrial implementation of AM as an enabling technology for advanced manufacturing. Considered as one of Europe’s leading expert in laser-based additive manufacturing of metals, Prof. Leyens is adjunct professor at RMIT University Melbourne, Australia, and University of Waterloo, Canada. He is also a visiting Fellow of SIMTech, Singapore. Prof. Leyens is spokesman of the Thematic Network Materials Science and Engineering of acatech (National Academy of Science and Engineering).

## Photonics21 Board of Stakeholders - Letter of Nomination

### *Final information from the Photonics21 secretariat:*

- *We recommend limiting the BoS nomination letter to 3-4 pages max.*
- *Letters of nominations can either be submitted*
  - *A) electronically ([secretariat@photonics21.org](mailto:secretariat@photonics21.org)) - **PREFERRED***
  - *B) by post mail to:*

*VDI Technologiezentrum GmbH  
ST/QS  
B. Kehrer/ U. Tober/ M. Wilkens  
VDI-Platz 1  
40468 Düsseldorf  
Germany*

*It is highly recommended to consult the Photonics21 Terms of Reference before submitting the nomination.*

- *Please note that the deadline for providing BoS nominations to the Photonics21 Secretariat is the **21<sup>st</sup>. September 2019**. This is also valid for postal submission.*