



Dear Photonics21 Secretariat

We herewith submit the nomination of the following Photonics21 Board of Stakeholder candidate, AIMEN representative Pablo M. Romero.

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

## 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):**

AIMEN - Asociación de Investigación Metalúrgica del Noroeste

### **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)):**

Asociación de Investigación Metalúrgica del Noroeste  
C/Relva 27 A, 36410 Porriño  
Pontevedra, Spain

(Same address for invoice)

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

Pablo M. Romero

### **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>**

AIMEN is an applied research center devoted to advanced manufacturing, materials science and process engineering. The contribution to the technical and scientific excellence in various industrial sectors (transport, chemical, energy, food, medical...) is backed by a sustained record of R&D, Technology Transfer and Deployment activities for over five decades.

The commitment of AIMEN with technical development, knowledge transfer and industry competitiveness is accredited by a long track of successful cooperations with companies, from SMEs to Multinationals.

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<sup>1</sup> Photonics21 Terms of reference are available at [https://www.photonics21.org/download/about-us/structure/ETP\\_Photonics21\\_Terms\\_of\\_Reference\\_C3.pdf?m=1513688127&?m=1499877714](https://www.photonics21.org/download/about-us/structure/ETP_Photonics21_Terms_of_Reference_C3.pdf?m=1513688127&?m=1499877714)

<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.

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AIMEN holds the technical secretariat of the Spanish Platform for Photonics (Fotónica21, mirror in Spain for Photonics21), being in charge of the group coordination, communication and establishment of research priorities at a national level.

Industrial Photonics and Laser-Based Manufacturing has been defined as priority strategic lines, cross cutting all activities, and including optical sensors, robot vision, micro and macro processing, metrology, etc. Consequently, AIMEN is continuously increasing their investments, personnel and efforts in the last fifteen years in photonics related activities. The result today is a solid research infrastructure, including leading edge industrial-class laser processing equipment, strong knowledge base, multidisciplinary research teams composed mainly by young researchers, steady growth in the volume and quality of scientific production, and in industrial results (prototypes, patents and commercial products resulting from industrial projects).

The activity of AIMEN in the field of industrial and applied photonics include, mainly:

- Laser Based macro-manufacturing with high power, high brilliance laser sources.
- Laser micro and nanoprocessing, surface functionalization and precision micromanufacturing.
- Novel laser based equipment: development of advanced processing equipment for new applications, materials, wavelengths, harsh environments, etc...
- Photonic devices for industrial process control and monitoring, particularly multi or hyperspectral sensing and imaging, high speed photonic sensors with embedded processing capabilities, and process monitoring in new or extended spectral ranges
- Hyperspectral systems for maritime, agricultural and security applications.
- Computer vision, robot vision and advanced hardware (optics, sensors) and software (image processing, classification) for real time image aided automation
- Photonics sensors: optical sensors for chemical, biological and physical sensing, based on modified optical fibres, OLAE, waveguides, plasmonics and other photonic sensing platforms.

AIMEN wishes to contribute to strengthen the link between the science-technology system and the industry, playing an active role as independent organization devoted to technological advance, also representing the interest of over one hundred of associated SMEs, mostly users or demanders of photonic technologies from a wide range of industrial sectors. AIMEN has an important specific weight in the implementation of the Spanish and Regional agendas of industrial development in Advanced Manufacturing. AIMEN can offer also strategic support in the search of European- Regional synergies, tools and mechanisms for implementation.

AIMEN is also an active member of the National Cluster of Photonics (SECPHO) and holds the secretariat of the Spanish Technology Platform of Photonics, Fotónica21.

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

*½ - 1 page description suggested*

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The candidate proposed by AIMEN is Pablo Romero, Research Strategy Manager for Laser Applications. He has 20 years of research experience in materials technology and process engineering, and has been responsible for the starting, guiding and development of the main research lines of AIMEN in laser materials processing, from laser welding to laser assisted forming and ultrafast laser processing.

He currently manages the Spanish Technology Platform of Photonics, Fotónica21, holding the Technical Secretariat and activity coordination. He is also vocal of the Technical Committee of Standardization on Laser Safety (AENOR CTN-209) and delegate for IEC TC76.

His track as a researcher include publications in peer reviewed journals, six patents and the participation in collaborative and contract projects, related with industrial photonics. He has been coordinating national and international projects in laser materials processing. In particular, he has been involved in the last years in laser microprocessing, high precision digital manufacturing and laser based direct writing technologies for flexible manufacturing routes for applications ranging from medical devices to energy. He has coauthored peer reviewed papers and patents on processing of flexible optoelectronics, carbon nanomaterials and nonlinear laser effects for optostructuring.

His work in research policy and strategy has been related largely with advanced manufacturing, having contributed to the strategic agendas and programs of regional, national and European clusters, agencies and platform, like Photonics21 (from WG-2), EFFRA, 4M or Manufutures, through an active participation in work groups and documents.

Through his admission in the Board of Stakeholders of Photonics21, his contribution will not only provide the expertise of a researcher with years of experience in applied and industrial development, technology transfer and standardization. The BoS will also gain an enthusiastic professional committed with the task of planning the common future of the research in lasers, optics and photonics, with a broad view on the links between academia, research organizations, industry and market.

His past work with manufacturing SMEs with large innovation potential makes his experience particularly useful to foster the large, unleashed competence enclosed in the atomized European photonics innovative industry, in particular to strengthen the European supply base for photonics industry, through effective demonstration activities and TRL strengthening driven development plans, supported by the European Research community.

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

- *We recommend limiting the BoS nomination letter to 3-4 pages max.*
- *Letters of nominations should be either submitted via the Photonics21 website*

<https://www.photonics21.org/bos-election/index.php>

or via e-mail to [secretariat@photonics21.org](mailto:secretariat@photonics21.org) .

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

## Photonics21 Board of Stakeholders - Letter of Nomination

- *Please note that the deadline for providing BoS nominations to the Photonics21 Secretariat is the **21<sup>st</sup> September 2018**.*