



Dear Photonics21 Secretariat

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

Mohand ACHOUCHE
III-V Lab

- Letter of Nomination -
Photonics21 Board of Stakeholders
Election 2018

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§ 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):

III-V Lab

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)):

1, Avenue Augustin Fresnel
91767 Palaiseau cedx
France
Invoice address (same as contact address)

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

Mohand ACHOUCHE

4. Information about the BoS candidate and the BoS representative

Extract Photonics21 Terms of Reference¹: “§ 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 BoS²

III-V Lab is an industrial Research Laboratory created in 2004 by Alcatel-Lucent (now Nokia) and Thales. Nokia is one of the leaders in communication technologies (mobile, fixed, IP and Optical technologies), applications and services, while Thales is a major electronic systems company acting in areas such as defence, aerospace, security and safety, information technology, and transportation. In 2010, III-V Lab was extended with the entrance of the “Laboratoire d’Electronique et de Technologie de l’Information” (LETI) from CEA in the capital, as well as 20 people from the LETI, opening the way to hybrid III-V on Si integration. CEA is one of the largest public research organisations in France, acting mainly in the fields of low carbon energies, information technologies, health technologies, large research infrastructures and global security.

¹ 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

² 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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Under the guidance of its members, III-V Lab conducts R&D activities in the field of micro/nano-electronics and photonics semiconductor components for different applications: telecoms, defence, security, safety, space etc.

Located in Palaiseau near Paris, its facilities include 2,000 m² of clean rooms. Its staff is composed of around 100 permanent Researchers, plus around 20 PhD Students.

III-V Lab has also the capacity to set up pilot lines to produce epitaxial wafers, components, modules or subsystems. Such capacity is particularly adapted to address in a flexible way the rapid evolution of the market, offering to its members or partners industrial companies an early access to the components for their system development and even preliminary deployment. In particular III-V Lab is linked to a network of European high-tech SMEs in various fields (telecom, datacom, security, sensors, health-care, Industrial lasers) providing them with the most up-to-date semiconductor components for integration in their prototypes / products.

As a provider of key photonic components for applications interesting all Workgroups, III-V Lab is an acknowledged player in the field of Photonics, with strong cooperation links with Industry, SMEs and public research organisations, and strong interaction with the E.U. and French Authorities. Since the beginning of Photonics21, III-V lab has been strongly involved in WG5 "Security, Metrology and Sensors" and WG6 "Design and Manufacturing of Components and Systems". Denis Mazerolle former III-V Lab representative at the Board of Stakeholders of Photonics 21 has decided early 2018 to leave the company. We believe III-V Lab with this new nomination could continue to contribute actively with its comprehensive strategic vision to the photonics community.

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

Since 2015, Mohand Achouche is the managing Director of III-V Lab where its main mission is to define R&D strategy with mother companies (Nokia, Thales and CEA), entity management (staff, cost structure, etc) and define valorization scheme of disruptive components and technologies.

He received a PhD degree from Paris VII (Jussieu) University in 1996. His research activities started in 1993 at National Centre of Telecommunication Research (CNET, Laboratoire de Bagneux) on the fabrication and characterization of HEMT transistors for high speed circuits applications.

During 1997-2000, he was with Ferdinand Braun Institute (FBH-Berlin) working on power amplifiers based on GaAs HBTs for mobile communications.

In 2000, he joined Alcatel Research and Innovation where he was first involved in 40Gb/s photodiodes. In 2004, he was in charge of a research team on photoreceivers for high speed optical communication systems, microwave photonics links and sensors. During 2011-2015, he was the head of III-V lab Opto-Electronic Integrated Circuit (OEIC) department, where he has the highly challenging mission to build the next generation transceivers for telecom and data communication applications, by bringing together high speed ASICs activities with photonic integrated circuits (PICs).

Mohand Achouche experience and position will benefit to Photonics 21 Board of Stake Holders through the following:

- His strong experience in industrial R&D of photonic components and subsystems from design, manufacturing to system experiments

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- His leadership position within III-V Lab one of the major industrial laboratory in Europe on photonic components and subsystems
- His involvement with III-V Lab's shareholders Nokia Bell Labs, Thales Research and Technology and CEA-Leti in defining the R&D strategy
- His experience in research valorization through transfer activities to new III-V Lab's start-ups
- His strong links with photonics industry in general, from large groups to SMEs
- His cooperation experience with academia and public research
- His global vision of the photonics components research and industry, nurtured by frequent participation to international workshops in the US and in Asia; such vision to enlarge the inputs to Photonics 21 strategy and roadmaps.

Worth mentioning is the involvement of III-V Lab in the different photonics 21 workshops and associated roadmaps consolidation during the preparation of H2020 multiannual strategic roadmaps 2014-2020 working programmes. Mohand Achouche contributed in the preparation and consolidation of WG6 topics and challenges of photonics integrated circuits design and manufacturing both on long term priorities (RIA) and higher TRL actions such as pilot lines (IA).

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.

- *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 **21st September 2018.***