



To Photonics21Secretariat
via eMail: secretariat@photonics21.org

Date: 23rd September 2021

Dear Photonics21 Secretariat

We herewith submit the nomination of the following Photonics21 Board of Stakeholder candidate
Resolute Photonics Ltd / Dr Richard Pitwon.

**- Letter of Nomination -
Photonics21 Board of Stakeholders
Election 2021**

Photonics21 Board of Stakeholders - Letter of Nomination

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

Resolute Photonics Limited

2. Full contact details of the affiliation nominated as BoS Member and invoice address

Resolute Photonics Ltd
Northover House, 132a Bournemouth Road
Eastleigh
SO53 3AL
United Kingdom

3. Name of the suggested BoS Representative

Dr Richard Pitwon

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 (candidates organization) will bring to the BoS¹

Resolute Photonics is an Irish and UK SME specializing in the design and integration of photonic subsystems for diverse applications including 5G, hyperscale data centre, HPC environments with R&D underway for sensor clusters for IoT, Industry 4.0. In addition Resolute will be developing the next generation of quantum photonic subsystems for future hyperscale data centres with (Quantum as a Service) with key industrial LSE partners in the data centre space.

In particular Resolute Photonics is strongly active in international standards development for emerging photonic and quantum technologies:

- International Electro-technical commission (IEC)
 - RP currently holds the chair of IEC international standards committee on fibre optic interconnecting devices and passive components (IEC / SC86B)
 - Secretary of IEC optical circuit boards standards group (TC86 / JWG9)
 - Principal UK member organization on international standards groups (IEC / BSI) for photonic integrated circuits, optical interconnect and electronic assembly
 - IEEE 802.3 Ethernet committee - Full voting member on optical Ethernet standards groups
 - ISO/IEC JTC1 WG14 Quantum Computing – Principal UK member
 - ITU-T Focus Group on Quantum Information Technologies
 - CEN/CENELEC Focus Group on Quantum Technologies

¹ 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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Resolute Photonics recently organised and ran three cross-SDO joint symposia on different aspects of standards for quantum technologies:

- [ITU/IEC/IEEE Joint Symposium on Standards for Quantum Technologies](#) on 23rd March 2021
- [ITU/IEC/IEEE Joint Symposium on Quantum Transport](#) on 28th April 2021
- [ITU/IEC/IEEE/ETSI Joint Symposium on Harmonisation of Terminology in Standards for Quantum Technology](#) on 23rd June 2021
- These were the first quantum events which the mainstream standards development organisations (SDO) jointly hosted.

Resolute Photonics is also a member of iNEMI and will be leading projects into optical interconnect for immersion cooling and on-board optical interconnect for co-packaged optics.

Resolute Photonics will leverage its very broad international standardisation and industrial trade association activities within Photonics21 to maximise European influence in the standardisation of emerging photonics technologies.

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

Dr Richard Pitwon is a director, scientist and engineer with more than 25 years transformational expertise in optical and photonic system interconnect, integration and architectures for hyperscale data centre, HPC, 5G and IoT data-communications applications.

He has extensive experience in managing international, multi-million-dollar collaborative research and development programmes within big industry and on many EU projects.

He will be a strong advocate for IP generation, protection and exploitation by industry within the EU, and himself holds 54 patents on diverse areas of optics and photonics.

He will focus on key technology fields, in which the EU SME and academic sectors are world-leading, and have the best chance of securing the competitive edge over other geographies. These include optical and photonic interconnect technologies, photonic integrated circuits, photonic assembly, board and chip-level optical interconnect, quantum integrated circuits, advanced materials including perovskite and BTO, neuromorphic nets, AI assisted sensors for healthcare, pollution and transport.

He is the chair of IEEE UK and Ireland Photonics chapter and founded the flagship [IEEE British and Irish Conference on Optics and Photonics \(BICOP\)](#), which has run successfully for 2 years.

He also recently founded and chairs the IEEE UK and Ireland Quantum Group. Both chapters will promote photonic and quantum engineering within the UK and Ireland.

He will bridge activities between Photonics21 and international counterpart organisations in the US and APAC through his close partnerships with international LSEs.

Photonics21 Board of Stakeholders - Letter of Nomination

Yours sincerely

A handwritten signature in black ink, appearing to read 'Richard Pitwon', is enclosed within a thin black rectangular border. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Dr Richard Pitwon
CEO
Resolute Photonics Ltd

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