

Chapter/Affinity Group: PHO36

Reported by: Richard Pitwon



Key Achievements & member services in 2022

- [Joint Symposium on Quantum Technologies](#) on 13th – 14th September 2022 (R. Pitwon)
 - 2 day, in-person conference held at NPL, Teddington
 - Organised and chaired by **Richard Pitwon** on behalf of PHO36 and UK Quantum Group
 - Highly successful event with world-leading speakers in quantum and photonics
- [NPL Joint Symposium on Quantum Interconnects and Metrology](#) on 24th March 2022 (R. Pitwon)
 - Three-hour webinar organised and chaired by Richard Pitwon on behalf of PHO36 and UK Quantum Group
- **Horizons for Optical and Photonics Emerging Sciences (HOPES) webinar** (A. Kallepalli, A. Vasylenkova)
 - “Biological Application of optical tweezers” – Professor Phillip Jones (UCL) on 25th April 2022
- **Support for UCL and Kings College London team’s participation in [14th International Physicists’ Tournament in Columbia](#)** (A. Vasylenkova)

Plan of activities for 2023

- **STEM event for UK schools with London patent firm (possibly Big Bang Fair)**
- **Event support**
 - Technical, promotional support IEEE CPMT Society Japan (ICSJ 2022)
 - Technical and promotional support of ECTC 2023
 - Support ECOC 2023 in Glasgow
- **Gender balance precedent**
 - **9th Symposium on Hyperscale Optical Interconnect (ECOC 2023) in September 2023** to be first perfectly gender balanced photonics symposium

Focus areas (2022-2023)

2022 Goals	2022 KPIs met?	2023 Goals	Challenges to reach KPIs/ Resources
Run 2-day Joint Symposium on Quantum Technologies	Yes	STEM activity with patent firm	Organisation of pan-school event
Run web-symposium on quantum metrology	Yes	Event support	ICSJ 2022, ECTC 2023, ECOC 2023 (Glasgow)
HOPES webinar series	Partially (only one webinar hosted)	Organisation of first gender balanced photonics conference	At least 50% female speakers

PHO36 Highlights of 2022

UK UCL and KCL team visit to 14th International Physicists' Tournament in Columbia



UCL and KCL young physicist visit to 14th International Physicists' Tournament in Columbia



Joint Symposium on Quantum Technologies – NPL on 13th and 14th September

Keynote Speakers



Carol Monaghan MP



Prof Sir Peter Knight FRS
Imperial University



Mark Thompson
Psi Quantum

Chairs



Richard Pitwon
Resolute Photonics



Irshaad Fatadin
NPL

Invited Speakers



Toshiba Europe
Taofiq Paraiso



Glasgow University
Prof Robert Hadfield



Aegiq
Charlotte Ovenden



Bristol University
Reza Nejabati



ID Quantique
Giovanni Resta



Quantum Dice
Ramy Shelbaya



KETS
Jake Kennard



NPL
Christopher Chunnillal



BT
Catherine White



SEQC
Matthew Hutchings



ColdQuanta
Ryan Hanley



Fraunhofer CAP
Loyd McKnight



Bay Photonics
Andrew Robertson



UCL
Prof Mike Wale



NQCC
Jochen Wolf



Southampton University
Francesco Poletti



QUIX
Devin Smith



Birmingham University
Mike Holynski



NPL
John Devaney



NTUA
Giannis Giannoulis



Ligentec
Henry Francis



Quantic
Christopher Payne-Dwyer



Fraunhofer HHI
Martin Schell



Senko
Bernard Lee

Horizons of Optical, Photonics and Emerging Sciences

Find out more at photonics-ukireland.org/hopes

Biological Applications of Optical Tweezers

Prof Philip Jones UCL

1200-1330 BST on 25th April 2022

Activity & Progress Reporting- Section Autumn Meeting – 27th October 2022

PHO36 Highlights of 2022

UK UCL and KCL team visit to 14th International Physicists' Tournament in Columbia



The joint team of the **University College London** and **King's College London** took part in the **14th International Physicists' Tournament** which took place at the **Industrial University of Santander, Bucaramanga, Colombia**.

The team consists of Daniel Lipovics (captain), Nina Mulder-Qureshi, Bohdan Glisevic (UCL), Boglárka Somogyi and George Leonard (KCL).

Cross-SDO symposia on quantum standards

During 2021 and 2022, a series of symposia were organised, which were jointly hosted by the major international standards bodies.



- ITU/IEC/ISO/IEEE **Joint Symposium on Standards for Quantum Technologies** on 23rd March 2021
- ITU/IEC/ISO/IEEE **Joint Symposium on Quantum Transport** on 28th April 2021
- ITU/IEC/ISO/IEEE/ETSI **Joint Symposium on Harmonisation of Terminology in Standards for Quantum Technology** on 23rd June 2021
- ITU/IEC/IEEE **Joint Symposium on Quantum Photonic Integrated Circuits** on 5th November 2021
- IEC/ISO/CEN/CENELEC/BSI/IEEE **Joint Symposium on Quantum Interconnect and Metrology** on 24th March 2022
- IEC/BSI/ISO/IEEE/CEN/CENELEC **Joint Symposium on Quantum Technologies** at NPL on 13th and 14th September 2022

SDO experts were brought together to discuss where standardisation would be most useful for quantum technologies.



NPL Joint Symposium on Quantum Technologies

13th – 14th September 2022

NPL, Teddington, UK



Joint Symposium on Quantum Technologies

13th and 14th September 2022

