

CIE/ICNIRP ONLINE TUTORIAL ON THE MEASUREMENT OF OPTICAL RADIATION AND ITS EFFECTS ON PHOTOBIOLOGICAL SYSTEMS

Invited experts will provide pre-recorded presentations for this online tutorial, these will be available for viewing from August 14.

The tutorial contents will cover fundamental concepts relating to measurement of optical radiation and evaluating their measurement uncertainties, and the effects of optical radiation on photobiological systems. The preliminary line up of topics includes the following (note: subject to change):

General Topics
<i>Introduction and welcome</i> – Tony Bergen (AU), Luc Schlangen (NL)
<i>Looking to the future - what are pressing research needs?</i> – Jennifer Veitch (CA)
<i>Wrap-up: Summary and conclusion</i> – Tony Bergen (AU), Luc Schlangen (NL)

<u>Division 6 Topics</u> <u>(Photobiology and Photochemistry)</u>	<u>Division 2 Topics</u> <u>(Physical Measurement of Light and Radiation)</u>
<i>Why do we do the measurements, what do we need to measure?</i> – John O'Hagan (GB)	<i>Fundamentals of measurement, terms, units and traceability</i> – Peter Blattner (CH)
<i>Fundamental processes in photobiology</i> – Nigel Cridland (GB)	<i>Fundamentals of measurement uncertainty</i> – Tony Bergen (AU)
<i>Action spectra and dose-response relationships in human photobiology</i> – Frank de Gruijl (NL)	<i>Types of detectors and detector technologies</i> – Dong-Hoon Lee (KR)
<i>Introduction to ICNIRP exposure limits</i> – Sharon Miller (USA)	<i>Types of spectrometers, their characterization, calibration and use</i> – Ralf Zuber (DE), Peter Sperfeld (DE)
<i>Blue Light Hazard - What does it really mean?</i> – John O'Hagan (GB)	<i>Other types of measurement equipment</i> – Anders Thorseth (DK)
<i>Rod-, cone- and melanopsin-based metrology (CIE S 026) to quantify light for its non-visual responses</i> – Luc Schlangen (NL)	<i>Wearable light sensors</i> – Vineetha Kalevala (MY)
<i>Circadian and sleep effects of short wavelength light</i> – Christian Cajochen (CH)	<i>Gathering personal light exposure data</i> – Juliëtte van Duijnhoven (NL)
<i>The Importance of spectral bandwidth in determining action spectra and safety measurements – with special emphasis on the inactivation of SARS-CoV-2 by sunlight</i> – David Sliney (USA)	<i>Worked example of measurements to IEC 62471/CIE S 009 Photobiological safety of lamps and lamp systems</i> – Leslie Lyons (GB)
<i>Radiance, blue-light hazard and retinal thermal hazard</i> – Karl Schulmeister (AT)	<i>Photobiological safety of (LED) lamps and lamp systems: informative parts within the IEC 62471/CIE S 009 revision</i> – Hiroshi Shitomi (JP)
<i>Photobiological safety of (LED) lamps and lamp systems: normative parts within the IEC 62471/CIE S 009 revision</i> – John O'Hagan (GB)	<i>How to report measurements: the importance of a uniform language</i> – Mariëlle Aarts (NL)

The pre-recorded presentations will be followed by live online Q&A sessions: August 25 for the Division 6 Topics and August 26 for Division 2 Topics.

The Q&A Sessions will be held twice on each day, starting at 12:00 and 17:00 CEST – making these accessible across all time-zones.

Questions can be submitted to the tutorial panel in advance of the Q&A Session.