

Curriculum Vitae

Last name, First name: O'Hagan, John

Gender: Male

Nationality/ies: British

Overall Scientific Expertise:

Expertise in radiation metrology and risk assessment, specializing in optical and laser radiation safety for the last 15 years. Considerable experience of providing advice to governments, regulatory bodies, industry, healthcare, entertainment, academia and the public on the risks from optical radiation. This has included advice on exposure to the sun and artificial sources. Over the last 9 years, research has also included the beneficial effects of optical radiation on the health and wellbeing of people. I head a Group of 7 scientists and 2 engineers. My PhD was on laser risk assessment in the entertainment industry.

Professional Experience

Years employed from – to	Title of position	Employer – name and location	Areas of professional specialisation
2003-present	Group Leader, Laser and Optical Radiation Dosimetry Group	Public Health England and predecessor organisations (Health Protection Agency and National Radiological Protection Board) Chilton, Oxfordshire, UK	Advice to government on optical and laser radiation risks and benefit. Optical radiation metrology. Physics, photobiology, biophysics, engineering, lighting technology. Standards and legislation.
1995-present	Visiting Fellow	Loughborough University	Laser safety, training.
2001-2003	Group Leader, Laser Dosimetry Group	National Radiological Protection Board Chilton, Oxfordshire, UK	Advice to government on laser radiation risks. Laser radiation metrology. Physics, photobiology, biophysics, engineering, laser technology.
1994-2001	Group Leader, Southern Centre.	National Radiological Protection Board Chilton, Oxfordshire, UK	Responsible for non-ionising radiation services for the UK, and Head of a Group of Laser Protection Advisers and Radiation Protection Advisers. Radiation metrology, legislation and standards.
1989-1994	Team Leader, Southern Centre.	National Radiological Protection Board Chilton, Oxfordshire, UK	Responsible for the development of non-ionising radiation services for the UK. Radiation metrology, legislation and standards.
1975-1989	Researcher	National Radiological Protection Board Chilton, Oxfordshire, UK	Researcher in solid-state radiation dosimetry, non-ionising radiation dosimetry and neutron dosimetry. Physics,

			radiation metrology, electromagnetic field safety.
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Educational Background

Year	Degree awarded	Educational Institution – name and location	Areas of educational specialisation
1999	PhD	Loughborough University, Loughborough, UK	Engineering, risk assessment, physics, laser safety.
1983	BSc	Polytechnic of the South Bank, London, UK	Physics, electronics.
1978	HNC	Oxford Polytechnic, Oxford, UK	Applied Physics, optics, electronics

Memberships in Scientific Advisory Bodies/Committees/Panels (*if any*):

Director – International Illumination Commission (CIE), Division 6 “Photobiology and Photochemistry”
Member - International Commission on Non-Ionizing Radiation Protection Scientific Expert Group.
Chairman – British Standards EPL/76 Committee “Optical Radiation Safety and Laser Equipment”.
UK Expert – CENELEC CLC/TC76 Committee “Optical Radiation Safety and Laser Equipment”.
Head of UK Delegation; Convenor of Working Group 8 (Development and maintenance of basic standards);
Secretary to Working Group 9 (Non coherent sources); and UK Expert to Working Group 1 (Optical radiation safety) of IEC TC/76 Committee “Optical Radiation Safety and Laser Equipment”.
Member – British Standards L/00-/07 Panel of British Electrotechnical Committee Chairmen
Member – British Standards EL/001 Committee “Light and lighting applications”
Member – British Standards SVS/019/02 Committee “Tanning salon services”
Member – CEN TC 169 “Light and Lighting” Working Group 13 “Non-Visual Effects of Light on Human Beings”
Member – American National Standards Institute Z136.1 Standard Subcommittee 1 “Safe Use of Lasers”
Member – American National Standards Institute Z136.4 Standard Subcommittee 4 “Measurements and Instrumentation”
Member – American National Standards Institute Z136.6 Standard Subcommittee 6 “Safe Use of Lasers Outdoors”
Member – American National Standards Institute Z136.10 Standard Subcommittee 10 “Safe Use of Lasers in Entertainment, Displays and Exhibitions”
Member – American National Standards Institute Z136.1 Technical Subcommittee 1 “Laser Bioeffects and Medical Surveillance”
Member – American National Standards Institute Z136.1 Technical Subcommittee 4 “Control Measures and Training”
UK Representative of Division 6 of CIE “Photobiology and Photochemistry”
Trustee and Vice-Chairman – National Illumination Committee of Great Britain (body which is the UK member of CIE)
Member – Lighting Liaison Group (representatives of bodies interested in lighting).
Member – Safety Committee of the International Laser Display Association.
Adviser – Department of Health Scientific Advisory Committee on Nutrition Working Group on vitamin D.
Adviser – PHE independent Advisory Group on Non-ionising Radiation to produce a report of ultraviolet radiation and vitamin D.
Secretary, Sub-Group of the independent Advisory Group on Non-ionising Radiation to produce a report on the health effects of exposure to ultrasound and infrasound (2005-2010).
Member - Laser Emitters and Flight Safety Study Group of the International Civil Aviation Organization (1998-2003).

Memberships in Learned Societies (if any):

Institute of Physics – Chartered Physicist, FInstP
Institute of Physics and Engineering in Medicine – Chartered Scientist, MIPEM
Society for Radiological Protection – Chartered Radiation Protection Professional, MSRP

Association of University Radiation Protection Officers
British Medical Laser Association
European Optical Society
Laser Institute of America – Fellow, FLIA
Optical Society of America
SPIE (the international society for optics and photonics) – Senior Member
Illuminating Engineering Society of North America
National Illuminating Society of Great Britain (CIE-UK) – Vice Chairman and Trustee
International Laser Display Association
American Society for Photobiology
European Society for Photobiology
Society of Light and Light
Institution of Lighting Professionals

Memberships in Editorial Boards (if any):

None.

List of Publications:

36 peer-reviewed publications
2 book chapters
49 reports
58 conference proceeding papers
37 publications in magazines (not peer-reviewed)

Radiation (Ionising and Non-Ionising) and Health

Jill R Meara and John O’Hagan

IN Clay’s Handbook of Environmental Health, Twenty-First Edition, Ed: Stephen Battersby. Chapter 10
Human Physiology and Health, Section 3, pp 389-398. Routledge, London and New York, 2017. ISBN:
978-0-415-71671-0 (published July 2016).

Human responses to lighting based on LED lighting solutions

L. L. A. Price, M. Khazova and J. B. O’Hagan

Commissioned by the Chartered Institution of Building Services Engineers and the Society of Light and
Lighting

PHE Report: CRCE-RDD 01-2016, April 2016

Photobiological Risk Classification of Lamps and Lamp Systems—History and Rationale, David H.

Sliney, Rolf Bergman & John O’Hagan

LEUKOS, DOI: 10.1080/15502724.2016.1145551 (Published online 24 March 2016)

Low-Energy Light Bulbs, Computers, Tablets and the Blue Light Hazard

John O’Hagan, Marina Khazova and Luke Price

Eye, <http://www.nature.com/doi/10.1038/eye.2015.261>. 30, 230-233 (February 2016)

Occupational Ocular UV Exposure in Civilian Aircrew

Adrian C. Chorley, Katarzyna A. Baczynska, Martin J. Benwell, Bruce J. W. Evans, Michael P. Higlett,
Marina Khazova and John B. O’Hagan

Aerospace Medicine and Human Performance, Volume 87, Number 1, January 2016, pp. 32-39(8)

Measuring and Using Light in the Melanopsin Age

Robert J. Lucas, Stuart N. Peirson, David M. Berson, Timothy M. Brown, Howard M. Cooper, Charles A. Czeisler, Mariana G. Figueiro, Paul D. Gamlin, Steven W. Lockley, John B. O'Hagan, Luke L.A. Price, Ignacio Provencio, Debra J. Skene and George C. Brainard
Trends in Neuroscience. January 2014, Vol. 37, No. 1, pp 1-9.
<http://dx.doi.org/10.1016/j.tins.2013.10.004>

Safety of light emitting diodes in toys

M P Higlett, J B O'Hagan and M Khazova

Journal of Radiological Protection 32, 1, 51-72, March 2012 doi:10.1088/0952-4746/32/1/51

Assessment of Personal Exposures to Optical Radiation in Large Entertainment Venues

R Bonner, J B O'Hagan and M Khazova

Radiation Protection Dosimetry, 2012 Apr; 149(3): 225-37

Ultra-violet emissions from HMI daylight luminaires.

J B O'Hagan, M Khazova, C W Jones.

Lighting Research & Technology, 2011; 43: 249-257

Optical Radiation Emissions from Compact Fluorescent Lamps

M Khazova and J B O'Hagan

Radiation Protection Dosimetry 2008 131(4):521-525; doi:10.1093/rpd/ncn234