

Indoor Air Quality

Outdoor Indoor Air Quality Interactions: Current Issues

22nd June 2020 | Online

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IAQM

Institute of
Air Quality
Management

About the IAQM



We are the Institute of Air Quality Management, the professional body for air quality professionals. We are a membership organisation representing professionals working in the air quality sector.

The mission of the IAQM is to be the authoritative voice for air quality by maintaining, enhancing and promoting the highest standards of working practices in the field and for the professional development of those working in the sector.

The IAQM play an influential role in the Air Quality sector by producing useful and timely guidance on matters affecting air quality professionals and by responding to Government consultations.

We organise a busy CPD calendar each year, with attendance at the majority of events being free for members.

We also publish reports and journals concentrating on the science, modelling, policy and legal issues surrounding air quality.

This indoor air quality conference will provide a good insight into the issues from outdoor to indoor and in-transport exposure to air quality and a valuable online CPD opportunity.

This conference invites leading professionals in this sector to present on aspects of indoor air pollution including exposure and health impacts, monitoring, the role of different ventilation strategies and emissions from building materials.

Our sponsors



National Air Quality Testing Services' (NAQTS) mission is to provide independent, reliable, and holistic air quality information to inform choices and improve quality of life. We seek to improve awareness of indoor air quality through widespread public and commercial monitoring using our holistic, high-quality, air pollution monitoring technology: the NAQTS V2000. www.naqts.com



GRAMM are the European partner of EnvisionSQ developers of unique solutions dealing with air pollution including SmogStop Road Barrier which removes 50% NOx from traffic and SmogStop Filter for HVAC indoors.

www.smogstop.co.uk

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09:15 Conference open

09:30 Welcome – **Dr Claire Holman**, Brook Cottage Consultants

Setting the Scene

09:40 **Dr Vina Kukadia**, GCARE, University of Surrey - *Providing quality indoor air for health, wellbeing and productivity: Concerns and issues*

10:10 **Dr Jenni Lehtinen**, WSP Finland Oy - *VOC emissions from different construction materials and their effects on indoor air quality*

10:40 **Dr Clive Shrubsole**, Public Health England - *Indoor Air Quality guidelines for selected volatile organic compounds (VOCs) in the UK*

11:10 Break

11:40 **Nick Molden**, AIR Alliance - *Vehicle interior air quality, pollution exposure in the cabin and the opportunity for standardised ratings*

12:10 **Mark Harber**, Hoare Lea - *Design solutions to mitigate apartment overheating*

12:40 Sponsor presentation – **SmogStop Gramm Barriers**

12:45 Lunch

13:45 Welcome back – **Dr Claire Holman**, Brook Cottage Consultants

Monitoring and Case Studies

13:50 **Stuart Upton**, BRE - *IAQ monitoring – Equipment and protocols*

14:20 **Chris Rush**, Hoare Lea - *Indoor Air Quality monitoring in an office*

14:35 **Peter Walsh**, WSP - *Air Quality in and around Central London schools and nurseries*

14:50 **Clare Perkins**, Arup - *Materials Strategy for the Television Centre redevelopment*

15:05 Sponsor presentation – **National Air Quality Testing Services (NAQTS)**

15:10 Break

15:35 **Stuart Upton**, BRE - *Covid-19 Return to Work Ventilation Guidance*

15:50 **Dzhordzhio Naldzhiev**, UCL - *CIBSE TM 61. Total environmental performance and role of indoor air quality in design, construction and operation of buildings*

16:20 Plenary – **Dr Claire Holman**, Brook Cottage Consultants

16:30 Conference close



Dr Claire Holman, Conference Chair

Claire has worked in air quality management for 40 years since completing her PhD in tropospheric ozone formation. For most of her career she has worked as a consultant and is currently Directive of Brook Cottage Consultants which she established in 2013. Claire is Chair of the Indoor Air Quality sub-committee of the Institute of Air Quality Management (IAQM) and a visiting researcher at UCL. She has advised local authorities on a range of air quality issues including drafting supplementary planning guidance. She has contributed to the development of the IAQM professional guidance and been a member of several government committees.



Dr Vina Kukadia, GCARE, University of Surrey

Vina is Research Development Manager, Global Centre for Clean Air Research (GCARE), University of Surrey.

Before that, she was Associate Director and Head of Air Pollution, BRE. Vina has over 25 years' experience in research and consultancy in the fields of stack emissions, air pollution dispersion in urban areas, ingress into buildings, ventilation, indoor air quality and construction-related pollution. She has produced more than 250 publications, including practical industry guidance, peer-reviewed papers and client-reports, and contributed to the UK Air Quality Strategy, building regulations, and air quality plans.



Dr Jenni Lehtinen, WSP Finland Oy

Jenni works as a Chemist and a Team Leader in an accredited Finnish Indoor Air Quality Laboratory. She has studied VOCs since 2002 and her field of research has included airborne VOCs and VOC-related odours in different environments and areas of industries, as well as the occupational hygiene and health aspects of VOCs.

Currently her research interests in laboratory work include analytical chemistry and VOC emission studies on indoor materials using test chambers and cells.



Dr Clive Shrubsole, Public Health England

Clive is an Environmental Public Health Scientist within the Air Pollution Group at Public Health England. He supports work assisting national and local government to reduce the health effects of air pollution, providing expert research and advice on indoor and outdoor air pollution and interventions aiming to improve air quality.

Clive is an Honorary Senior Research Associate at UCL, responsible for creating the indoor air quality module on the MSc Health Wellbeing and Sustainable Buildings. He is a committee member of the UK indoor Environments Group and on the editorial board of Buildings & Cities, a peer-reviewed research journal as well as numerous cross-government committees and groups.



Nick Molden, AIR Alliance

Nick set up Emissions Analytics in 2011 in order to understand real-world fuel economy and emissions from vehicles, prior to founding the AIR Alliance in 2017. The concept was to find a way to characterise vehicles in a relatively short test, and be able to conduct a large number of comparable tests independently of government and the industry.

Nick is Chairman of the European standardisation CEN Workshop 90 on collecting real driving emissions data, which has led to the publication of the AIR Index by the AIR Alliance, of which he is a co-founder. He is also chairman of CEN Workshop 103 on standardising the collection of vehicle interior air quality data, with a particular focus on particle ingress and carbon dioxide build-up.



Mark Harber, Hoare Lea

Mark is a Chartered Engineer with the IMechE and has 15 years of experience operating as a Building Services Consultant. He is an Associate Director at Hoare Lea LLP and leads one of the multi-disciplinary teams in our London Office. His experience in the residential sector is varied and ranges across high-end / high rise developments, private rental schemes and affordable residential accommodation on behalf of housing associations.

Mark's involvement in a number of residential projects has meant that he has gained an in depth knowledge of the challenges faced in mitigating apartment overheating and is keen to share some of his design solutions.



Stuart Upton, BRE

Stuart is a Senior Consultant at BRE, with over 40 years' experience in air pollution and related areas. He has produced >250 publications, including practical industry guidance, peer-reviewed papers and client reports in the UK and internationally. He has run numerous complex experimental programmes including: investigating the ingress of air pollutants into buildings; measurement of air pollution in homes, schools, offices, hospitals and aircraft cabins and flight decks; ventilation measurements in various environments; testing/development of ambient/personal aerosol samplers and dust/flux gauges.



Chris Rush, Hoare Lea

Chris is a Consultant and Air Quality Group Lead at Hoare Lea. Along with work at the planning stage, including Environmental Impact Assessments, he has more recently been involved in the testing and assessment of indoor air quality (IAQ) and furthering understanding of how building design contributes to IAQ in the detailed design stages and operation.

Chris has previously been closely involved with the IAQM Early Career Group Committee, a member of the IAQM IAQ working group, an IAQM committee members and also a member of the CIBSE working group. He is a Chartered Environmentalist and has an MSc in Air Pollution Management and Control.



Peter Walsh, WSP

Peter is a Technical Director at WSP, specialising in indoor air quality and air quality monitoring, with 28 years' experience in sampling and analysis of environmental contaminants, including monitoring dioxins and furans in challenging environments.

Peter has operated in regulatory roles on the emissions from industrial process, including enforcement of conditions on air quality, odour management and abatement. Peter lead a second-hand smoke in prisons study which lead to the banning of tobacco smoking in prisons, and was part of the WSP team auditing and monitoring air quality at central London schools and nurseries, influencing the GLA future policy on air quality around educational establishments.



Clare Perkins, Arup

Clare is a Materials Scientist in the Arup Materials Consulting, with 25 years of experience in providing materials advice to both Arup worldwide and external clients. She specialises in functional construction materials, failure investigations and testing, and all aspects of their environmental impacts. Functional materials are widely used, may not have high visual or structural impact, but none-the-less play an essential role in building performance.

Clare has worked on a wide range of projects on the sustainability of construction materials, including materials that are responsibly sourced, have low impact, are healthy and safe and resource-efficient. She has particular experience in the field of healthy materials which is growing rapidly due to increasing interest in health and wellbeing of building occupants.



Dzhordzhio Naldzhiev, UCL

Dzhordzhio is a doctoral researcher at UCL IEDE. His work covers the relationship between indoor air quality, ventilation strategies and the energy performance of buildings. His work explores emissions (VOCs) from construction products and aims to provide a better understanding of retrofitted indoor environments.

Dzhordzhio is a Chartered Engineer, qualified Low Carbon Consultant with CIBSE and an accredited Passivhaus Designer. Prior to his doctoral programme, he worked in the private sector advising construction teams on energy efficiency, sustainability, and building performance. He is contributing towards guidance development on indoor air quality as a committee member of the CIBSE Air Quality Group, CIBSE Natural Ventilation Group, the UK Indoor Environment Group, and ASTM D22.05 Committee on Indoor Air Quality.

