2ND INTERNATIONAL CONFERENCE ON MOISTURE IN BUILDINGS 2023

3-4 July 2023

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2nd International Conference on Moisture in Buildings 2023 (ICMB23)

3-4 July 2023

Keynote Speakers

Dr Robyn Pender

Dr Robyn Pender recently retired from the Building Climate Adaptation Team at Historic England, having been a Senior Building Conservation Advisor at HE/English Heritage since 2005. A physicist, she also has a postgraduate diploma in the conservation of wall paintings from the Courtauld Institute of Art, and her PhD research investigated the impact of external conditions on the transfer of moisture into and through coated building stone. She is a firm advocate of the need for specialists to engage in accessible communication. Her original team at then English Heritage brought together the new editions of the Practical Building Conservation series, and Robyn was volume editor for the Building Environment, Glass & Glazing, and Metals volumes.

Professor Alexandra Troi

Alexandra Troi is a professor of building physics simulation at Coburg University/Germany, where she teaches the master course on Digital technologies in conservation to architecture and conservation students. Her main research interest is in the energy retrofit of historic buildings. Professor Troi leads the research group on Energy retrofit of historic buildings within the Institute for Renewable Energy, where she acts as vice-head. They have been the operating agent of IEA SHC Task59 on Historic buildings towards NZEB and built a laboratory on hygrothermal building characterisation.

Professor Juha Pekkanen

Professor Juha Pekkanen is a professor of public health at the University of Helsinki and a part-time research professor at the Finnish Institute for Health and Welfare. His current focus is on environmental health, especially health effects of moisture-damage and indoor microbes. He is centrally involved in 'The Finnish IndoWor Air and Health Programme 2018–2028'.

Lynne Sullivan

Lynne Sullivan is an Architect who founded sustainableBYdesign, and who is now a Visiting Professor and design consultant, including as a Design Advisor for RIBA Competitions and the Design Council, and as a member of local and national Design Commissions and Review Panels. She chaired the review of Parts L and F whilst a Member of the Government's Building Regulations Advisory Committee, and authored and chaired several research projects for the Zero Carbon Hub 2009-2015. She chaired the Scottish Government's Expert Panel for "A Low Carbon Building Standards Strategy for Scotland", and chaired RIBA's Sustainable Futures Committee 2014-2017; also appointed RIBA Climate Change Ambassador on whose behalf she attended COP21 in Paris. She recently chaired the Buildings Mission Taskgroup as a member of the CLC's Green Construction Board, which she represented as a Steering Group member for the UK Green Building Council Whole Life Carbon Roadmap launched at COP26 in Glasgow. She was awarded an OBE for services to Architecture in 2011. She is also a Board member of the Passivhaus Trust, and Chair of the Good Homes Alliance and the National Retrofit Hub in its 2023 establishment phase.

Professor Juha Vinha

Juha Vinha has been establishing a building physics research area at Tampere University of Technology (currently Tampere University) in 1994 and has been working there in building physics research and teaching since then. Since 2013, he has been a full professor of building physics. In addition, he has been a docent of building physics at the University of Oulu since 2009. He has been a responsible leader or principal investigator in more than 230 research and development projects or sub-projects related to building physics. He has published almost 300 scientific publications and more than 200 research reports on building physics, and given more than 200 presentations at various scientific conferences and educational and professional events in the construction industry. He also organizes the Finnish Building Physics Conference in Tampere every other year, which has become one of the Finland's largest professional events in the construction industry.

Dr Anne Mette Madsen

Anne Mette Madsen is a senior researcher and group leader at the National Research Center of the working Environment in Denmark. She works with occupational and indoor exposure to microorganisms (fungi, bacteria, and viruses) and microbial compounds to identify problematic exposures and as a basis for interventions to reduce exposure. She investigates the associations between exposure to bioaerosols and occupational health. Her group works with the characterization of workers' exposure using e.g. MALDI-TOF MS and measures the inflammatory potential, antibiotic resistance, and endotoxin content of bioaerosols. She has published more than 100 papers on the topic.

Tabitha Binding

Tabitha Binding is Head of Education at Timber Development UK, she has worked with timber all her life beginning in the forest and ending in the Post Occupancy Evaluation of buildings. A deep understanding of moisture in timber and in buildings is essential when designing, specifying, building and retrofitting for healthy human occupancy. She has worked for Coed Cymru, Woodknowledge Wales, TRADA, the Timber Trade Federation and is strategically seconded to the New Model Institute for Technology & Engineering in Hereford who are undertaking research on their new campus building as a 'Living Lab'. Tabitha has sympathetically retrofitted her own home, an 1840s terrace house in mid-Wales and keeps the RH to 50/60%.

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Monday - 3 July 2023

8:15am - 9:00am	**Registration**		**Venue** Here East Main Auditorium
9:00am - 9:30am	**Opening and Welcome**		**Venue** Here East Main Auditorium
9:30am - 10:30am	**Keynote Speakers**	Dr Robyn Pender Prof Alexandra Troi	**Venue** Here East Main Auditorium
10:30am - 10:50am	**Coffee Break**		**Venue** Here East 1st Floor
10:50am - 12:10pm	**Parallel Sessions**		

Indoor Mould Growth

Venue Lecture Theatre 1

Chaired By Prof. Lennart Larsson (Lund University)

Memory based mould growth model using real-world datasets
Mr. Tom Weisner[1], Mr. Samuel Collier[1], Dr. Silviu Nistor[1]
1. HomeLINK Technologies Ltd

Xerophilic fungi have a taste for Danish art and cultural heritage
Mrs. Camilla Jul Bastholm[1], Dr. Jane Richter[2], Ms. Anette Aalling[3], Mr. Andreas Bjerre[3], Dr. Anne Mette Madsen[1]
1. The National Research Centre for the Work Environment, 2. The Royal Danish Academy, 3. The Art Museums of Skagen

Common sampling techniques for the assessment of indoor fungal growth
Mr. Spyridon Efthymiopoulos[1], Dr. Yasemin D. Aktaş[1], Dr. Hector Altamirano[2]
1. Department of Civil Environmental and Geomatic Engineering (CEGE), Epicentre Research Group, University College London, London, UK, 2. Institute for Environmental Design and Engineering, UCL

A critical review of analysis techniques for the assessment of the indoor fungal burden
Mr. Spyridon Efthymiopoulos[1], Dr. Yasemin D. Aktaş[1], Dr. Hector Altamirano[2]
1. Department of Civil Environmental and Geomatic Engineering (CEGE), University College London, London, UK, 2. Institute for Environmental Design and Engineering, UCL

Assessing the impact of air movement on hyphal growth
Ms. Morena Ferreira[1], Dr. Josep Grau-Bove[2], Dr. Hector Altamirano[3], Dr. Nigel Blades[4]
1. Institute for Sustainable Heritage, UCL, 2. University College London, 3. Institute for Environmental Design and Engineering, UCL, 4. National Trust for England, Wales and Northern Ireland

Moisture in Historic/Traditional Buildings

Venue Lecture Theatre 2

Chaired By Dr. Scott Orr (University College London)

Salts in the 16th century mural painting of The Last Judgment in the leper hospice in Rumst, Belgium
Mr. Vincent Crevals[1], Mr. Sebastiaan Godts[1], Dr. Julie Desarnaud[1]
1. Royal Institute for Cultural Heritage

Impact of Moisture Decay on Seismic Vulnerability: Haiti's Timber-Framed Vernacular Buildings
Mr. Kökcan Dönmez[1], Dr. Yasemin D. Aktaş[2]
1. Department of Earthquake Engineering, Kandilli Observatory and Earthquake Research Institute, Boğaziçi University, Istanbul, Turkey, 2. Department of Civil Environmental and Geomatic Engineering (CEGE), Epicentre Research Group, University College London, London, UK

Hygrothermal properties relationships in historic bricks
Prof. Staf Roels[1], Dr. Evy Vereecken[2], Mr. Marc Stappers[3], Prof. Wido Quist[4]
1. KU Leuven, Department of Civil Engineering, Building Physics and Sustainable Design, 2. Buildwise, 3. Cultural Heritage Agency, 4. Delft University of Technology

How salts affect the vapour permeability of old walls? Key differences between the vapour permeability of salty and non-salty masonries.
Mr. Valentin Juhasz[1], Mr. Miklos Gasz[2]
1. University of Strathclyde, 2. Core Conservation Ltd

Comprehensive Analysis of Moisture-Related Problems in Turkish Buildings: Identification, Characteristics, and Research Gaps
Dr. Gizem Izmir Tunahan[1], Dr. Hector Altamirano[2]
1. Dokuz Eylul University, 2. Institute for Environmental Design and Engineering, UCL

12:10pm - 1:10pm	**Lunch**	**Venue** Here East 1st Floor

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1:10pm - 2:45pm **Parallel Sessions**

Mould, Health and Ventilation

Venue
Lecture Theatre 1

Chaired By
Prof. Sani Dimitroulopoulou (UK Health Security Agency)

Microbial VOC emissions from mould growth on building materials under various relative humidity conditions
Dr. Wenping Yang[1], Ms. Stephanie So[1], Mr. Apoorv Shah[1], Mr. Gang Nong[1], Mr. Daniel Lefebvre[1], Dr. Maurice Defo[1]
1. National Research Council Canada

Aflatoxin biosynthetic pathway extrolites in airborne Aspergilli series Versicolores
Dr. Antoine Géry[1], Mr. Benoît Basset[2], Mr. Nathan Gounel[1], Mrs. Mathilde Gosselin[1], Dr. Estelle Richard[1], Dr. Virginie Seguin[1], Dr. Julie Bonhomme[1], Prof. David Garon[1]
1. Normandie Univ, Unicaen & Unirouen, ToxEMAC-ABTE, Centre F. Baclesse, 14000 Caen, France, 2. Normandie Univ, Unicaen & Unirouen, EcoTEA-ABTE, Bâtiment Sciences 2, Campus 2, 14000 Caen, France

Housing-related determinants of lung health in Nunavik, Canada
Dr. Yasemin D. Aktaş[1], Prof. Caroline Duchaine[2], Mr. Spyridon Efthymiopoulos[1], Mr. Patrick Miron[3], Dr. Boualem Ouazia[4], Dr. Marc Veillette[2], Dr. Larry Watt[5], Dr. Wenping Yang[6], Dr. Faiz Ahmad Khan[7]
1. Department of Civil Environmental and Geomatic Engineering (CEGE), Epicentre Research Group, University College London, London, UK, 2. University of Laval, 3. KMHB, 4. NRC, 5. Ungava Tulattavik Health Centre, 6. National Research Council Canada, 7. McGill University Health Centre

The relative humidity may strongly affect indoor air concentrations of VOC pollutants
Prof. Lennart Larsson[1], Mr. Johan Mattsson[2], Dr. Pawel Markowicz[1]
1. Lund University, 2. cTrap Ltd

An investigation into how Energy Performance Certificate variables relate to damp
Mrs. Gulala Aziz[1], Dr. Adam Hardy[1]
1. Leeds Beckett University

Method for monitoring the moisture response of a cross laminated timber (CLT) panel buildings
Dr. Gabriele Tamagnone[1], Prof. Robert Hairstans[1], Prof. James Martin[2], Dr. Vikki Edmondson[2]
1. New Model Institute for Technology and Engineering, 2. Northumbria University

Moisture in Existing Buildings & Retrofit

Venue
Lecture Theatre 2

Chaired By
Dr. Evy Vereecken (Buildwise)

Condition of the building envelope is associated with indoor dampness, mould and musty odour, as well as moisture measured in floor joists
Ms. Phoebe Tapiklis[1]
1. Motu Economic and Public Policy Research

Prevalence and extent of moisture damage in Finnish housing
Dr. Jonathon Taylor[1], Dr. Anniina Salmela[2], Dr. Martin Täubel[2], Prof. Anne Karvonen[2], Prof. Jukka Lahdensivu[1], Prof. Juha Pekkanen[2]
1.Tampere University, 2. THL

Energy and hygrothermal performance challenges in the renovation of a over 100-year-old wooden apartment building into a nearly zero-energy building
Prof. Targo Kalamees[1], Ms. Anni Evard[1], Mr. Endrik Arumägi[1], Mr. Siim Lomp[1]
1. Tallinn University of Technology

Incomplete resistance; mould growth and built in furniture in a 1930's Dublin clinker concrete apartment building.
Mr. Gearoid Carvill[1], Mr. Joseph Little[1], Mr. Andrew Lundberg[1]
1. TU Dublin

IWI Thermal Properties and the Risk of Condensation and Mould Growth Imposed upon Neighbors at a Party Wall Junction
Mr. Felix Thomas[1], Prof. Fiona Fylan[1], Prof. David Glew[1]
1. Leeds Beckett University

Freeze-Thaw Risk in Solid Masonry Walls: Impact of Climate Change over Europe and the Mediterranean subjected to RCP 4.5
Ms. Isabeau Vandemeulebroucke[1], Dr. Lola Kotova[2], Prof. Steven Caluwaerts[1], Prof. Nathan Van Den Bossche[1]
1. Ghent University, 2. Climate Service Center Germany

3:00pm - 4:00pm **Keynote Speakers**
Prof Juha Pekkanen
Mrs Lynne Sullivan
Venue
Here East Main Auditorium

4:00pm - 4:15pm **Coffee Break**
Venue
Here East 1st Floor

4:30pm - 6:00pm **Technical Aspects of Retrofit and Mould (Ventilation, Heating and Fabric)**
Julie Godefroy
Valentina Marincioni
Sarah Price
Simon Jones
Andy Sutton
Venue
Here East Main Auditorium
Chaired By
Hywel Davies (CIBSE)
Marcella Ucci (UCL)

2nd International Conference on Moisture in Buildings 2023 (ICMB23)

3-4 July 2023

Tuesday - 4 July 2023

10:00am - 10:30am **Keynote Speaker** Prof Juha Vinha

Venue Here East Main Auditorium

10:35am - 11:40am **Parallel Sessions**

Modelling of Moisture in Buildings 1

Venue Lecture Theatre 1

Chaired By Prof. Nathan Van Den Bossche (Ghent University)

Hygrothermal criteria for design of cross-laminated timber external walls
Dr. Villu Kukk[1], Prof. Targo Kalamees[1], Prof. Jaan Kers[1], Dr. Lin Wang[2], Prof. Hua Ge[3]
1. Tallinn University of Technology, 2. National Research Council Canada, 3. Concordia University

Hygrothermal risk assessment of external wall insulation (ewi) retrofit to non-traditional wall types in an Irish context-using the glaser method and numerical modelling
Mr. Gareth Mc Donnell[1], Mr. Joseph Little[1]
1. TU Dublin

Shading of flat roofs
Dr. Christian Bludau[1]
1. Fraunhofer Institute for Building Physics (IBP), Department of hygrothermics

Assessing wind-driven rain loads on traditional buildings using computational fluid dynamics and 3D digital documentation data
Mr. Adam Frost[1], Dr. Scott Orr[1], Dr. Josep Grau-Bove[1], Dr. Lyn Wilson[2]
1. University College London, 2. Historic Environment Scotland

Performance of Materials and Building Decay 1

Venue Lecture Theatre 2

Chaired By Dr. Marco Larcher (Eurac Research)

A Study of The Impact of Acrylic Based Surface Waterproofing on The Moisture Behaviour of Brick Masonry Through Dynamic Vapour Sorption (DVS) And Water Absorption Tests
Mr. Henry Zhu[1], Dr. Yasemin D. Aktaş[2], Prof. Dina D'Ayala[3]
1. Department of Civil Environmental and Geomatic Engineering (CEGE), UCL, 2. Department of Civil Environmental and Geomatic Engineering (CEGE), Epicentre Research Group, University College London, London, UK, 3. Professor

Solar Radiation Test of Surface Waterproofing Products with Various Chemical Compositions on Brick Masonry
Mr. Henry Zhu[1], Dr. Yasemin D. Aktaş[2], Prof. Dina D'Ayala[3]
1. Department of Civil Environmental and Geomatic Engineering (CEGE), UCL, 2. Department of Civil Environmental and Geomatic Engineering (CEGE), Epicentre Research Group, University College London, London, UK, 3. Professor

Hygrothermal limit curves and transient decay prediction for natural fibre insulation
Mrs. Eri Tanaka[1], Dr. Regina Schwerd[1], Mrs. Notburga Pfabigan[2], Mr. Johannes Tieben[2], Dr. Julia Bachinger[2], Dr. Daniel Zirkelbach[1]
1. Fraunhofer Institute for Building Physics IBP, Holzkirchen, 2. Holzforschung Austria, Vienna

Water Vapour Adsorption on Moisture Buffering Building Materials
Ms. Gloria Lo[1]
1. University of Strathclyde

11:40am - 11:55am **Coffee Break**

Venue Here East 1st Floor

11:55am - 1:00pm **Parallel Sessions**

Modelling of Moisture in Buildings 2

Venue Lecture Theatre 1

Chaired By Prof. Targo Kalamees (Tallinn University of Technology)

Comparative simulations on hygrothermal performance of calcium silicate and wood fiber as capillary active internal insulation materials
Mr. Xinyuan Dang[1], Prof. Hans Janssen[1], Prof. Staf Roels[1]
1. KU Leuven, Department of Civil Engineering, Building Physics and Sustainable Design

continued on next page

Performance of Materials and Building Decay 2

Venue Lecture Theatre 2

Chaired By Dr. Daniel Zirkelbach (Fraunhofer IBP)

A guide to predicting the redistribution of excess moisture in concrete floor slabs with moisture-sensitive flooring
Prof. Lars-Olof Nilsson[1], Mr. Anders Kumlin[2], Dr. Sture Lindmark[3], Mr. Mathias Lindskog[4], Dr. S. Olof Mundt-Petersen[5], Dr. Nilla Olsson[6], Dr. Mikael Oxfall[6], Mr. Johan Tannfors[5]
1. Moistenginst AB & Lund University, 2. Anders Kumlin AB, 3. FuktCom, 4. Fuktanalys AB, 5. Polygeon Sverige AB, 6. NCC Sverige AB

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Modelling of Moisture in Buildings 2

Flood capacity assessment of confined masonry school buildings for education disruption assessment
Dr. Ahsana Parammal Vatteri[1], Prof. Dina D'Ayala[2]
1. Post-doctoral research fellow, 2. Professor

The use of hygrothermal and bio-hygrothermal simulation to inform envelope design for residential buildings in southern Australia
Dr. Mark Dewsbury[1], Ms. Freya Su[1], Ms. Liqun Guan[1], Prof. Hartwig Kuenzel[2]
1. School of Architecture & Design, University of Tasmania, 2. Fraunhofer Institute for Building Physics

A numerical case study of a wall composed of pre-cast rapeseed concrete blocks
Dr. Maya Hajj Obeid[1], Dr. Lorena Freitas Dutra[1], Dr. Omar DOUZANE[1], Dr. Thierry Langlet[1]
1. University of Picardie Jules Verne, Laboratory of Innovant Technologies

Performance of Materials and Building Decay 2

A multi-functional hot box-cold box for heat, air and moisture studies on full-scale building components: feature overview and onset to validation
Dr. Evy Vereecken[1], Dr. Martin Prignon[1], Mr. Antoine Tilmans[1], Mr. Timo De Mets[1]
1. Buildwise

Hygrothermal characterization of a plaster with recycled materials used as interior insulation
Ms. Eleonora Leonardi[1], Dr. Marco Larcher[1], Dr. Daniel Herrera Avellanosa[1], Dr. Alexandra Troi[1]
1. Eurac Research

Durability performance of non-stabilized Compressed Earth Blocks against wind-driven rain
Mr. Rafail Panagiotou[1], Prof. Ioannis Ioannou[1]
1. Department of Civil and Environmental Engineering, University of Cyprus, 75 Kallipoleos Str., P.O. Box 20537, 1678 Nicosia, Cyprus

1:00pm - 2:15pm **Lunch and Poster Session**

Venue
Here East 1st Floor

Towards a more reliable characterisation of wind-driven rain spells: Analysis of actual drying intervals in the Region of Murcia (Spain)
Dr. Javier Domínguez-Hernández[1], Dr. José Pérez-Bella[1], Dr. Rafael Tobajas Alonso[1], Dr. Alberto Ayensa Pardos[2], Mr. Lucas Sanso Navarro[3]
1. Department of Construction Engineering, Engineering and Architecture School, University of Zaragoza, Zaragoza, Spain., 2. San Jorge University Foundation, Villanueva de Gállego, Spain., 3. Deparment of Construction engineering. Engineering and Architecture School, University of Zaragoza, Spain

Moisture content influence on heat losses in ventilated façade
Dr. Patricia Alonso[1], Prof. Vasco Freitas[2]
1. University of A Coruña, 2. Construct- LFC, Faculty of Engineering University of Porto

'Are changes to Part L and Part F of the Building Regulations increasing the dampness, and deterioration of our traditional and historic buildings built with solid walls causing health issues for those who occupy them'.
Mr. Anthony Gwynne[1]
1. Local Authority Building Control

Similarities, differences, and tendencies of water damage in the Nordic countries
Mr. Christian Mattsson[1], Dr. Birgitta Nordquist[1], Dr. Dennis Johansson[1], Dr. Petter Wallentén[1], Dr. Hans Bagge[1]
1. Lund University

Experimental investigation on Hygrothermal environment of spaces built with mortar and plaster layers of lime and cement.
Ms. Ayushi Singh[1], Dr. Rashmin Damle[1]
1. CEPT University, Building Energy Performance

The effect of natural and extreme weathering on the mechanical properties of structural timber mortise and tenon joints
Ms. Regina Dufu Muller-Uri[1], Ms. Yueyao Wang[1]
1. University College London

Two guides for the introduction to interior insulation
Dr. Ulrich Ruisinger[1], Ms. Heike Sonntag[1]
1. TU Dresden

The effect of underground chambers on the moisture balance of historical buildings in a hot and dry climate
Ms. Merve Karabeyeser[1], Dr. Hector Altamirano[2], Prof. Kalliopi Fouseki[1]
1. Institute for Sustainable Heritage, UCL, 2. Institute for Environmental Design and Engineering, UCL

Aflatoxin biosynthetic pathway extrolites in airborne Aspergilli series Versicolores
Dr. Antoine Géry[1], Mr. Benoît Basset[2], Mr. Nathan Gounel[1], Mrs. Mathilde Gosselin[1], Dr. Estelle Richard[1], Dr. Virginie Seguin[1], Dr. Julie Bonhomme[3], Prof. David Garon[1]
1. Normandie Univ, Unicaen & Unirouen, ToxEMAC-ABTE, Centre F. Baclesse, 14000 Caen, France, 2. Normandie Univ, Unicaen & Unirouen, EcoTEA-ABTE, Bâtiment Sciences 2, Campus 2, 14000 Caen, France, 3. Microbiology department, Caen University Hospital, 14000 Caen, France

Informing professional practice whilst evaluating hygro-thermal characteristics of traditional built assets.
Mr. Trevor Francis[1]
1. University of Wales Trinity Saint David

Moisture Compatibility of Portland Stones and other Oolitic Limestones
Ms. Sara Sesma Costales[1], Dr. yasemin aktas[2], Dr. Sudeshna Basugupta[3], Dr. Felat Dursun[4], Mr. Toby Cambray[5]
1. University College London, 2. Department of Civil Environmental and Geomatic Engineering (CEGE), University College London, London, UK, 3. Department of Earth Sciences, University College London, London, United Kingdom, 4. Department of Civil, Environmental and Geomatic Engineering, University College London, London, United Kingdom, 5. Institute for Environmental Design and Engineering, University College London, London, United Kingdom

Basic solutions for the renovation of lightweight brick walls of Estonian detached houses
Mr. Mihhail Suvalov[1], Mr. Siim Lomp[1], Prof. Targo Kalamees[1]
1. Tallinn University of Technology

2nd International Conference on Moisture in Buildings 2023 (ICMB23)

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Tuesday - 4 July 2023

2:15pm - 3:35pm **Parallel Sessions**

Modelling of Moisture in Buildings 3

Venue Lecture Theatre 1

Chaired By Mr. Joseph Little (TU Dublin)

The effect of brick properties on hygrothermal performance of solid walls
Dr. Christopher Tsang[1], Mr. Felix Thomas[1], Dr. Adam Hardy[1], Prof. David Glew[1]
1. Leeds Beckett University

Surface condensation risk pre- and post-retrofit at suspended timber ground floors and external wall junctions
Prof. David Glew[1], Mr. Felix Thomas[1], Dr. Christopher Tsang[1], Mr. Dominic Miles-Shenton[1]
1. Leeds Beckett University

Combining insights from HAM-simulations with case-specific knowledge
Ms. Kaat Janssens[1], Dr. Valentina Marincioni[2], Prof. Nathan Van Den Bossche[1]
1. Ghent University, 2. University College London

Evaluation of a new numerical method for solving hygrothermal transfer through walls in the context of a historical city centre
Ms. Margot Ruiz[1], Dr. Marion Bonhomme[1], Dr. Valéry Masson[2], Prof. Stéphane Ginestet[1]
1. LMDC, Université de Toulouse, INSA, UPS, Toulouse, France, 2. CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France

Representative data sets of wood-based materials created for moisture control analysis by hygrothermal simulation
Mrs. Beate Stöckl[1], Prof. Hartwig Kuenzel[2], Dr. Daniel Zirkelbach[1]
1. Fraunhofer Institute for Building Physics IBP, Holzkirchen, 2. Fraunhofer Institute for Building Physics

Monitoring of Moisture in Buildings

Venue Lecture Theatre 2

Chaired By Prof. Staf Roels (KU Leuven)

Lime-hemp as wall insulation: long-term monitoring system to investigate the hygrothermal performance
Mr. Timo De Mets[1], Mr. Antoine Tilmans[1], Dr. Elke Knapen[2]
1. Buildwise, 2. Faculty of Architecture and Arts, Hasselt University

Drying behaviour of masonry using quantitative infrared thermography
Mr. Luke Dickens[1], Dr. Luigi Di Sarno[2]
1. Department of Civil Engineeing and Industrial Design, Resilient and Sustainable Infrastructure group, University of Liverpool, 2. Department of Civil Engineeing and Industrial Design, Resilient and Sustainable Infrastructure group, University of Liverpool, Liverpool

Continuous measurement of moisture content in building materials with Time-Domain Reflectometry
Ms. Teresa Stingl Freitas[1], Prof. Ana Sofia Guimarães[1], Prof. Staf Roels[2], Prof. Vasco Freitas[1], Prof. Andrea Cataldo[3]
1. Construct- LFC, Faculty of Engineering University of Porto, 2. KU Leuven, Department of Civil Engineering, Building Physics and Sustainable Design, 3. Department of Innovation Engineering, University of Salento

Limitations of embedded relative humidity (RH) microsensors in monitoring the moisture content of damp masonries
Mr. Valentin Juhasz[1], Mr. Miklos Gasz[2]
1. University of Strathclyde, 2. Core Conservation Ltd

Hygrothermal Monitoring of Replacement Infill Panels for Historic Timber-Frame Buildings: Next Steps
Dr. Christopher Whitman[1], Dr. Riccardo Maddalena[2], Prof. Oriel Prizeman[1], Prof. Pete Walker[3], Mr. Iain McCaig[4], Ms. Joanne Williams[5], Mr. Nigel Gervis[6]
1. Welsh School of Architecture, Cardiff University, 2. School of Engineering, Cardiff University, 3. Department of Architecture & Civil Engineering, University of Bath, 4. Formerly Historic England, 5. Historic England, 6. Ty Mawr Lime Ltd

3:35pm - 3:50pm **Coffee Break**

Venue Here East 1st Floor

3:50pm - 4:50pm **Keynote Speakers**

Dr Anne Mette Madsen
Mrs Tabitha Binding

Venue Here East Main Auditorium

4:50pm - 5:10pm **Closing Session**

Venue Here East Main Auditorium

2nd International Conference on Moisture in Buildings 2023 (ICMB23)

3-4 July 2023

Organising Committee

Dr Yasemin D Aktas
Conference chairperson and responsible for publications

Dr Hector Altamirano
Scientific Committee chair

Dr Valentina Marincioni
Responsible for paper submission system and dissemination

Dr Peter Rickaby
Responsible for industry engagement

Dr Colin King
Responsible for industry engagement

Carla Aylmore
Coordinator for UKCMB communication

Scientific Committee

Dr David Allinson
Loughborough University, UK

Dr Julia Bachinger
Holzforschung, AUSTRIA

Prof Phil Banfill
Harriot Watt University, UK

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University of Bologna, ITALY

Prof Peter Brimblecombe
City University of Hong Kong, HONG KONG SAR

Prof Tor Broström
Uppsala University, SWEDEN

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ETH Zurich, SWITZERLAND

Dr Thibaut Colinart
Université de Bretagne Sud, FRANCE

Dr Peter Cox
Carrig Conservation International, IRELAND

Prof Miloš Drdácký
The Institute of Theoretical and Applied Mechanics CAS (ITAM), CZECHIA

Prof Caroline Duchaine
Université Laval, CANADA

Dr Lorena Freitas Dutra
Université de Picardie Jules Verne, FRANCE

Dr Sebastiaan Godts
Royal Institute for Cultural Heritage (KIK-IRPA), BELGIUM

Dr Ipek Gursel-Dino
Middle East Technical University (METU), TURKEY

Prof Lars-Erik Harderup
Lund University, SWEDEN

Prof David Hawksworth
Royal Botanic Gardens, UK

Dr Ioannis Ioannou
University of Cyprus, CYPRUS

Dr Pernilla Johansson
RISE Research Institutes, SWEDEN

Prof Targo Kalamees
Talinn University of Technology, ESTONIA

Dr Georgios Kokogiannakis
University of Wollongong, AUSTRALIA

Prof Hartwig Kuenzel
Fraunhofer-Institut für Bauphysik IBP, GERMANY

Prof Yuguo Li
Hong Kong University, HONG KONG SAR

Dr Barbara Lubelli
Delft University of Technology (TUDelft), NETHERLANDS

Dr Anne Mette Madsen
National Research Centre for the Working Environment, DENMARK

Dr Robyn Pender
Historic England, UK

Prof Vasco Peixoto de Freitas
University of Porto, PORTUGAL

Dr José M. Pérez-Bella
University of Zaragoza, SPAIN

Dr Ulrich Ruisinger
Dresden University of Technology, GERMANY

Dr Inge Rörig-Dalgaard
Technical University of Denmark (DTU), DENMARK

Dr Fernando Sarce
Alasala University, SAUDI ARABIA

Prof Mohd Talib Latif
Universiti Kebangsaan Malaysia (UKM), MALAYSIA

Dr Nathan Van Den Bossche
Ghent University, BELGIUM

Dr Evy Vereecken
Buildwise, BELGIUM

Dr Kai Wang
Shanghai Jiao Tong University, CHINA

Dr Wenping Yang
National Research Council Canada, CANADA

Dr Huibo Zhang
Shanghai Jiao Tong University, CHINA

ICMB23 Support Team

Jalal Ahmed
Hatice Kurukose Cal
Toby Cambray
Spyridon Efthymiopoulos
Ezgi Erturk
Kareem Jawabreh
Merve Karabeyeser
Athina Petsou
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