



K-HEALTH
inAIR

Healthy Indoors: Innovation and Research in Air Quality

22-23 June 2026
Valladolid, Spain



Funded by
the European Union

K-HEALTHinAIR FINAL SCIENTIFIC EVENT

22nd-23rd June 2026 (Monday and Tuesday)

Venue

[Royal Academy of Medicine and Surgery of Valladolid \(RAMYCVA\)](#)

Palacio de los Vivero (Av. Ramón y Cajal, 1, 47003 Valladolid).

Healthy Indoors: Innovation and Research in Air Quality is an international scientific conference that will bring together researchers, health professionals, policymakers and key stakeholders to discuss the latest advances in indoor air quality (IAQ) research and its impact on health and wellbeing.

Organised within the framework of the European project [K-HEALTHinAIR](#), the conference will provide an open scientific forum welcoming contributions beyond the project, fostering interdisciplinary dialogue between science, technology, public health and policy. Over two days, the programme will address key topics such as continuous monitoring using low-cost sensors, exposure to chemical and biological pollutants, health effects in different indoor environments, and the role of artificial intelligence and data-driven approaches in supporting IAQ management.

The event will combine scientific sessions, oral presentations and poster contributions, policy-oriented roundtables and stakeholder discussions, as well as a special session focused on community and school engagement, highlighting the value of citizen science and early awareness of indoor air quality.

The conference will take place on 22–23 June 2026 at the Royal Academy of Medicine and Surgery of Valladolid, a historic venue that will serve as a meeting point to stimulate new collaborations, share knowledge and advance sustainable strategies to improve indoor air quality in Europe and beyond.

Thematic sessions

- Indoor Pollutants and Microbiome Dynamics: Sources, occurrence and behaviour of indoor pollutants.
- Low-Cost Sensors and Continuous IAQ Monitoring: Advances in sensor technologies for indoor air quality monitoring.
- Health Outcomes and Clinical Evidence Related to IAQ: Health effects associated with indoor air quality, including respiratory and allergic outcomes, exposure–response relationships, vulnerable populations, and the integration of environmental monitoring with epidemiological and clinical research.
- Data Analytics, Artificial Intelligence and Standardised Methodologies for IAQ Assessment: Artificial intelligence and data-driven approaches for indoor air quality analysis, predictive modelling, risk assessment, and the development of harmonised and standardised methodologies for IAQ evaluation.
- Policy, Roadmap and Stakeholder Perspectives for IAQ: Regulatory frameworks, policy developments, implementation strategies, stakeholder engagement, and long-term perspectives to support effective indoor air quality management and sustainable research and innovation.

Programme

Day 1 - Monday 22/06/26	Day 2 - Tuesday 23/06/26
8:30 – 9:45 Registration & coffee	
9:45 – 10:30 Opening ceremony	9:00 – 10:30 Session 3 – Low-Cost Sensors and Continuous IAQ Monitoring
10:30-11:35 Local high schools' event	10:30 – 11:15 Coffee break + poster session
11:35 – 12:30 Diploma presentation for young researchers and cultural visit	11:15-12:30 Session 4 Data Analytics, Artificial Intelligence and Standardised Methodologies for IAQ Assessment
12:30-13:30 Lunch time + poster session.	12:30-13:30 Lunch time + poster session
13:30-15:20 Session 1 Indoor Pollutants and Microbiome Dynamics	13:30-15:30 Session 5 Policy, Roadmap and Stakeholder Perspectives for IAQ
15:20-15:35 Coffee break	15:30-16:00 Congress Closure
15:35-17:15 Session 2 Health Outcomes and Clinical Evidence Related to IAQ	
18:30 Guide tour Valladolid	
20:00 Social dinner	

SESSIONS' DESCRIPTION

 Monday June 22nd

Opening Ceremony

9:45-10:30

- José Feroso — Coordinador del proyecto K-HEALTHinAIR
- Sergio Sanz — Subdirector General de CARTIF
- Javier García Frade — Presidente de la Real Academia de Medicina y Cirugía de Valladolid
- Juan Manuel Arnáiz — Jefe del Servicio Territorial de Sanidad. Junta de Castilla y León
- Jesús Julio Carnero — Alcalde de Valladolid
- Alicia Armentia — Ethical advisor K-HEALTHinAIR y catedrática en la Universidad de Valladolid

Session 0 – Indoor Air Quality in Educational Spaces (Young researchers' session)

Moderator:

Sandra Rodríguez Sufuentes (CARTIF Technology Center)

Keynote Speaker:

Alicia Armentia

Ethical advisor of K-HEALTHinAIR and Professor at the University of Valladolid

10:30-10:50

Why do we need to investigate?

Oral presentations:

Emma Chicano de Vega, Zoe Mai, Patricia Méndez Mancera, Rodrigo Sánchez Bocos (David Moldés Plaza)

IES Condesa Eylo Alfonso (Valladolid)

10:50-11:05

Indoor Air Quality in Educational Spaces: Impact of Sensor-Guided Active Ventilation

Mateo López López, Marcos Benito Alonso and Joel Tak Sanz. Noemi Rodríguez

IES Emilio Ferrari (Valladolid)

11:05-11:20

Investigation of air quality in the classroom over a month

Aleksander Badyda and Adam Karpowicz

11:20-11:35

Primary School number 38 in the name of Irena Sendler (Warsaw, Poland)

Air quality data analysis in 3 classrooms of the selected primary school in Warsaw, Poland

Session 1 – Indoor Pollutants and Microbiome Dynamics

Moderator:

Artur Badyda (Warsaw University of Technology, WUT)

Keynote Speaker:

Stefan Schumacher (Institut für Umwelt & Energie, Technik & Analytik e.V. (IUTA))

Air Cleaning Technologies for Particles, Gases, and Microorganisms: Principles, Effectiveness, and Limitations

13:30-14:00

Oral presentations:

Alberto Rodriguez

CIEMAT

Assessment of VOCs in Urban Transitional Environments: seasonal monitoring in a metro station and public market in Barcelona

14:00-14:15

Maria Sol Montaluisa

Universidad de Valladolid (UVa)
Integrated Plant-Microbe Mechanisms Driving VOC Removal in Botanical Filtration Systems

14:15-14:30

Gonzalo Sánchez
ICP-CSIC

Broad-Spectrum Photocatalytic Air Disinfection for Healthcare Indoor Environments: From Pathogen Inactivation to Real Hospital Validation

14:30-14:45

Adam Muszyński and Artur Badyda
Warsaw University of Technology (WUT)
Microbes and PAHs in Indoor Air of Polish Schools 14:45-15:05

Marta Sacristán
Universidad de Valladolid (UVA)
Impact of Summer Outdoor Pollution and Heatwaves on Bedroom Indoor Air Quality in Social Housing 15:05-15:20

Session 2- Health Outcomes and Clinical Evidence Related to IAQ

Moderator:
Josep Roca (Fundació de Recerca Clínic Barcelona - Institut d'Investigacions Biomèdiques August Pi i Sunyer (FRCB-IDIBAPS))

Keynote Speaker:

Alicia Armentia
Allergy Unit
Hospital Universitario Río Hortega. University of Valladolid. Spain 15:35-16:00
Allergy in Children to Illicit Drugs, Tobacco and Alcohol

Oral presentations:

Maria del Mar Barbero
Universidad Politécnica de Madrid 16:00-16:15
Does a high air infiltration rates improve at indoor air quality?

Hanns Moshhammer
Medical University of Vienna 16:15-16:30
Environmental Determinants of Physical and Cognitive Health in Schoolchildren

Alba Gómez-López
Fundació de Recerca Clínic Barcelona - Institut d'Investigacions Biomèdiques August Pi i Sunyer (FRCB-IDIBAPS) 16:30-16:45

Household Air Quality in Chronic Obstructive Respiratory Diseases: Actionable Insights for Clinical Practice

Carla Martins

National School of Public Health, NOVA
University of Lisbon

Attributable Burden from Indoor Air Pollution Across Four European Countries: A Multi-Centre Study

16:45-17:00

Josep Roca

Fundació de Recerca Clínic Barcelona - Institut d'Investigacions Biomèdiques August Pi i Sunyer (FRCB-IDIBAPS)

Oscillometry in Chronic Respiratory Diseases: Towards Improved Standardization for Clinical Practice

17:00-17:15

Tuesday June 23th

Session 3- Low-Cost Sensors and Continuous IAQ Monitoring

Moderator:

Maria Figols (InBiot Monitoring)

Keynote Speaker:

Sotirios Papathanasiou

GO AQS

*Low-Cost Air Quality Sensors 101: The Tech,
the Truth, and the Trade-offs*

9:00-9:30

Oral presentations:

Dominik Heß

MANN+HUMMEL GmbH

*Air Purifiers as a means to improve air
quality in challenging environments.*

9:30-9:45

Ilknur Ayri

İzmir Institute of Technology
*Assessment of Indoor Environmental Quality
in a Windowless University Classroom
with Low-Cost Multi-Sensors in İzmir, Tü-
rkiye*

9:45-10:00

Francisco Javier Rey Martínez

Universidad de Valladolid

*Evaluation and Monitoring of Indoor Envi-
ronmental Quality in the Pathology Depart-
ment at Río Hortega University Hospital
(Valladolid)*

10:00-10:15

Maidá Domat

Universidad de Oviedo

10:15-10:30

Design and Deployment of a Low-Cost Sensor Network for Continuous Indoor-Outdoor Air Quality Monitoring

Session 4- Data Analytics, Artificial Intelligence and Standardised Methodologies for IAQ Assessment

Moderator:

Sotirios Papathanasiou (GO AQS)

Keynote Speaker:

Mario Lovric

Institute for Anthropological Research

11:15-11:45

Data Analytics, Artificial Intelligence, and Standardized Methodologies for IAQ Assessment

Oral presentations:

Maria Figols

InBiot Monitoring

11:45-12:00

Impact of Occupancy Dynamics on Indoor CO₂ Forecasting Across Real-World Scenarios

Prospero García-Gallardo

HIT: Healthy indoor Technology
"Focus 1%" approach to indoor air quality: translational application of targeted air purification technologies

12:00-12:15

Miguel Escribano

InBiot Monitoring

12:15-12:30

Architectural guardrails for AI-mediated IAQ assessment: real-time reasoning, intent-adaptive outputs across WELL, GO IAQS, WHO and EPBD

Session 5- Policy, Roadmap and Stakeholder Perspectives for IAQ

Moderator:

Natalia Allegretti (Global Health Conector)

Keynote Speaker:

Alexander Borg

The Lisbon Council

*Charting the Course to Healthier Indoors:
The IDEAL Cluster Roadmap for IAQ in Eu-
rope and Beyond*

13:30-14:00

Oral presentations:

Leticia Pérez

Kveloce

*From awareness to action: K-HEALTHi-
nAIR's strategic Approach to stakeholder
engagement and policy translation for In-
door Air Quality*

14:00-14:15

Giorgos Panaras

Aristotle University of Thessaloniki

*Net4CleanAir: A COST Action for Indoor Air
Cleaning Technologies*

14:15-14:30

Roundtable session

Alexander Borg (The Lisbon Council)

Leticia Pérez (Kveloce)

Natalia Allegretti (Global Health Conector)

Armando Ruiz (Asma y Alergia España)

Juan Manuel Arnáiz (Servicio Territorial de
Sanidad de Valladolid)

Dr Cloé Desmet (European Commission
Joint Research Centre)

14:30-15:30