

where the medical & engineering professions collaborate & innovate



CALL FOR PAPERS

WHY "HYGEIA 2026"

The Hellenic Chapter of ASHRAE, in collaboration with the Technical Chamber of Greece (TEE), and under the auspices of the Hellenic Ministry of Health and endorsed by ASHRAE, invites engineers, architects, researchers, and professionals to submit abstracts for the "HYGEIA 2026" International Conference, to be held on the island of Kos in Greece on May 27-29, 2026. The official language of the Conference is English.

"The conference will explore cutting-edge developments at the intersection of the medical and engineering fields, fostering interdisciplinary collaboration for a holistic approach to health (Yyεία/Hygeia)" said Costas Balaras, Conference Chair.

WHO is "HYGEIA"

Hygeia (Ύγιεία in ancient Greek) was the goddess of health, cleanliness, and sanitation, and a key figure in ancient Greek medicine. She was the daughter of Asklepios, the god of healing, and part of a divine family devoted to health and well-being, which also included Panacea (universal remedy), Iaso (recovery), Aceso (healing), and Aglaea (beauty and splendor).

Unlike her father, who was associated with curing illness, **Hygeia symbolized the preservation of good health and the prevention of disease**—principles that are deeply relevant to modern concepts of public health and sustainable building design. Her name endures in the modern word "**hygiene**", emphasizing her lasting legacy in the intersection of medicine, environment, and daily life.

WHY KOS

Kos is the third largest island in the Dodecanese group after Rhodes and Karpathos. It's a popular destination amongst travellers. The island offers everything you can wish for. Locals are hospitable, the beaches are sublime, the villages are picturesque and there are plenty of historic sites to explore.

There is only one historical personality who has associated his name with Kos throughout the centuries: Hippocrates of Kos, also known as Hippocrates the Great, the Father of Medical Science.

Hippocrates was a great pioneer of his time, an enlighter who represented scientific rationalism as opposed to metaphysics and superstition. He believed that every event has a natural cause, and that medical conditions are governed by natural laws. The great medical school of Kos taught that diseases have a natural cause: the balance interface of a body's parts. Nutrition plays an important role in sickness and health alike. About up to the 16th century, Hippocratic medicine dominated medical science.



AN INTERNATIONAL EVENT CALL FOR PAPERS

All interested authors are invited to submit papers to be considered for presentation in the International Conference "HYGEIA 2026". Submitted contributions should be original research papers, not submitted or considered for publication elsewhere.

Authors should submit an abstract of no more than 400 words by September 30, 2025.

If accepted, full papers will be due February 2, 2026. A typical manuscript is limited to 10 pages.

Submitted abstracts and papers will undergo double peer-review by the Conference Scientific Committee.

Authors of accepted papers are responsible for their travel and accommodation. An author must register and present his paper during the Conference in person, one mandatory author registration per paper, in order to be included in the final program and the paper in the Conference Proceedings that will be published in an electronic media publication with open access (e-Proceedings book with an ISBN number).

At least one author of each accepted paper must register and attend the conference in person to present the work. One registration per paper is required. Only papers that are presented will be included in the final conference program and published in the open-access electronic proceedings (with ISBN). Authors are responsible for their own travel and accommodation arrangements.

HOW TO SUBMIT

Authors can submit abstracts and the corresponding papers at https://example.gr and the corresponding papers at https://example.gr





where the medical & engineering professions collaborate & innovate



THE CONFERENCE TOPICS

The Conference will present the state of the art in building design, construction, commissioning, operation & maintenance as well as emerging new technologies & materials. The conference topics include, but are not limited to:

INDOOR ENVIRONMENTAL HEALTH & WELL BEING

- ▶ First step home
- ▶ Last step hospital

INDOOR ENVIRONMENTAL HEALTH - HOSPITALS

- Operating rooms
- → ICUs
- Patient rooms
- ◆ Medical & paramedical spaces
- Administrative spaces-offices
- General public spaces

DESIGNING HEALTHY BUILDINGS

- Building systems design & installation
- Indoor Air Quality
- ◆ Thermal comfort
- Sound and light pollution
- Psychological metrics
- Integrated fitness centers
- Commissioning
- Operations & Maintenance
- Case studies
- Quantification (e.g. DALYS)

MANAGING INDOOR POLLUTANTS

- Existing hazards
- Emerging threats
- Metrics
- Monitoring

REGULATIONS, STANDARDS, GUIDELINES, DESIGN GUIDES

- ▶ Medical
- Engineering

FILTERS, SENSORS, CONTROLS

- Requirements
- Applications
- Accreditation

INFECTION AND OUTDOOR RISK MANAGEMENT

Managing & Future-proofing

MEDICAL EQUIPMENT

- Requirements
- ◆ Installations
- Operation & Maintenance

WATER & WASTE TREATMENT

- **▶** Extraordinary Requirements
- Case studies

RESILIENCE, ENERGY EFFICIENCY & DECARBONISATION

- Requirements
- ▶ Power
- Medical gases
- Balancing requirements & tradeoffs

DIGITAL UNIVERSE

- AGI
- ◆ AR/VR/XR
- ▶ IT Highways
- ◆ AI tools
- Predictive modeling
- Real time monitoring
- Open data platforms
- Data privacy

BUILDING SYSTEMS INSTALATIONS

- **→** Commissioning
- Operations & Maintenance
- Case studies



CONFERENCE THEMES & SPECIAL SESSIONS

OCCUPANT BEHAVIOR & USER-CENTERED DESIGN

- Behavioral responses to environmental controls (ventilation, thermal comfort, lighting)
- Designing for neurodiverse users or aging populations
- Patient and staff satisfaction metrics
- Post-occupancy evaluation in hospitals, care homes, and clinics

PUBLIC HEALTH & BUILT ENVIRONMENT INTERSECTIONS

- Built environment and pandemic preparedness
- Urban density, ventilation, and disease transmission
- Heat resilience and vulnerable populations
- ◆ Community-level health metrics

THERAPEUTIC DESIGN

- Biophilic design principles in healthcare
- Green walls, indoor plants, and access to daylight
- Impacts on recovery times, mental health, and productivity
- Sensory design

ROUND TABLE - OPEN DISCUSSION

 How does a Holistic Approach for Better Health affect Energy Efficiency and Decarbonization Efforts





where the medical & engineering professions collaborate & innovate



INTERNATIONAL SCIENTIFIC COMMITTEE

- Constantinos Balaras, Ph.D. FASHRAE, Research Director, National Observatory of Athens, Hellas
- Dimitris A. Charalambopoulos, M.Sc. Mechanical Engineer, D.A. Charalambopoulos & Assocs, Engineering Consultants, Hellas
- Prof. William P. Bahnfleth, Ph.D., P.E. FASHRAE, FASME, FISIAQ ASHRAE Presidential Member Dept. of Architectural Engineering The Pennsylvania State University, U.S.A.
- Thomas Phoenix, P.E., FASHRAE ASHRAE Presidential Member Chair, National Institute of BUILDING SCIENCES, U.S.A.
- Chuck Gullege III, PE, FASHRAE

 ASHRAE Presidential Member

 Mechanical engineer, Director of Engineering
 Construction, Environmental Air Systems LLC,

 NC, U.S.A.
- Stephanie Taylor, M.D., M. Arch Harvard Medical School InciteHealth Fellow Medical Advisor ThinkLiteAir, U.S.A.
- Drury B. Crawley, Ph.D.

 FASHRAE, BEMP, FIBPSA, AIA

 Director, Building Industry Development,

 Bentley Fellow, Bentley Systems, Inc., U.S.A.

- Doug Cochrane, P.Eng., LEED AP Director-at-Large, ASHRAE Board of Directors Independent HVAC Consultant, Canada
- Prof. Aleksandar Andelković, Ph.D.
 Director of Energy Innovation Center, Dpt. of
 Energy & Process Engineering, Faculty of
 Technical Sciences, University of Novi Sad,
 Serbia
- Prof. Marko Ignjatović, Ph.D. Mechanical Engineer, University in Niš, Faculty of Mechanical Engineering, Niš, Serbia
- John McKeon, M.D. CEO of Allergy Standards Ltd, Principal at Indoor Air Innovation and Research (iAIR) Institute, Ireland
- Prof. Irini Koronaki
 School of Mechanical Engineering
 National Technical University of Athens,
 Hellas
- Prof. Milena Blagojevic Architect, Department of Design, LABA Firenze, Italy
- M. Dennis Knight, P.E., FASHRAE ASHRAE Presidential Member Mechanical engineer, Whole Building Systems, LLC, Founder, Principal, U.S.A.



where the medical & engineering professions collaborate & innovate



IMPORTANT DATES:

• September 30, 2025: Abstract Submission Deadline

(Submit your abstract electronically to <u>HYGEIA2026@ashrae.gr</u>) Submitted abstracts before July 31, 2025 will be eligible for a 5%

discount on registration fees.

• October 12, 2025: Notification of abstract acceptance

• February 2, 2026: Paper Submission Deadline

(Submit your paper electronically to HYGEIA2026@ashrae.gr)

• March 9, 2026: Notification of decision / comments for full papers

Initial Draft Program

• March 30, 2026: Final Paper Submission Deadline

(Submit your paper electronically to HYGEIA2026@ashrae.gr)

• April 2, 2026: Provisional Program

April 20, 2026: Final Notification of decision
April 27, 2026: Registration deadline for Authors

(only registered speakers will be included in the final program)

May 11, 2026: Final Program
 May 27 - 29, 2026: CONFERENCE

ENQUIRIES

All enquiries should be directed to: HYGEIA2026@ashrae.gr

Additional information can be found at the event's site "www.ashrae.gr/HYGEIA2026.php"

Constantinos Balaras, Ph.D.

FASHRAE, Research Director, Group Energy Conservation, Institute for Environmental Research & Sustainable Development, National Observatory of Athens, Hellas

Dimitris A. Charalambopoulos, M.Sc.

Mechanical Engineer, B.Sc., M.Sc. Member TEE, MASHRAE ASHRAE Environmental Committee "HYGEIA2026" General Chair ASHRAE HELLENIC CHAPTER Treasurer