

Preliminary program dated March 13, 2023

10th EUROPEAN CONFERENCE ON HEALTHCARE ENGINEERING

PALAIS DES CONGRÈS DE PARIS

June 14th - 16th, **2023**

63rd IHF STUDY & TRAINING DAYS

www.eche-paris2023.com







June 14th - 16th Paris

Committees

IHF President

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Philippe STALLIVIERI, Vice-president IHF, GHU Paris-Psychiatrie et Neurosciences.

François XAINTRAY, Board member IHF, Hôpitaux Universitaires de Strasbourg.

ORGANISING COMMITTEE

Philippe STALLIVIERI, Coordinator, vice-president IHF, GHU Paris-Psychiatrie et Neurosciences

Vanessa GESLIN, GHU Paris-Psychiatrie et Neurosciences

Innovation **area**

Several forums will be held on Thursday 15 June and in the morning of Friday 16 June during which manufacturers and consultants will present their products and services.

Exhibitors' area

Welcome and opening of the exhibition on Wednesday 14 June at 9.00 am

Engineering and hospital construction professionals: suppliers, design offices, architects and consultants present their products and services in the exhibitors' area, a place for exchanges and meetings, open every day at the following times:

WEDNESDAY 14 JUNE / 9AM - 8PM THURSDAY 15 JUNE / 8.00 AM - 7.30 PM FRIDAY 16 JUNE / 8:00 AM - 2:00 PM

Why participate?

- ► TO EXCHANGE on the major issues of hospital engineering,
- TO TRAIN AND GET INFORMATION on current trends, methods and tools,
- TO SHARE feedback from French and international experiences,
- TO DISCOVER the latest conceptual and technical innovations,
- TO MEET with European hospital engineers, industrials partners and consultants in the sector,
- ► TO VISIT architectural and technical achievements.

Target audience

Engineers, architects, technicians, directors of health care institutions and engineers, architects, consultants, companies and industrialists involved in the design, construction, management and technical operation of health care and medico-social institutions:

- technical, maintenance and operation managers, public contracting authorities,
- private contracting authorities, project managers, architects,
- project management assistants, design offices,
- construction economists, programmers,
- construction companies, industrial companies, facilities managers.

The IHF's training organisation is Datadock certified (IDD: 0070328) and QUALIOPI certified (n°2021/95720.1) for its training activities.

Editorial

Ingénieurs Hospitaliers de France is greatly honoured to have been chosen to organise the 10th European Conference on Healthcare Engineering. The association hopes to offer the best possible welcome to our European colleagues and arrange an outstanding event that promises to mark a new milestone in the development of European healthcare engineering.

This biennial conference was founded by the European arm of the International Federation of Healthcare Engineering (IFHE EU). We previously had the pleasure of hosting the event back in 2011, and this 10th edition will take place in Paris in conjunction with the 63rd IHF Study and Training Days (IHF STD) at the Palais des Congrès of Paris from 14 to 16 June 2023.

Difficult events in Europe (COVID-19 pandemic, climate, war in Ukraine, universal access to healthcare, etc.) are further complicating the major challenges currently facing healthcare engineering: sustainable development and reducing carbon emissions, life cycles and overall cost, the development of digital and artificial intelligence, involving users in the design of healthcare spaces. They are now influencing the more traditional themes of managing maintenance and operation and the design of the healthcare built environment from prevention through to end of life support.

All of these critical issues will be discussed by leading speakers from IFHE EU member countries during two plenary sessions and eight themed workshops. They will be featured in articles published in the Book of the proceedings, a printed brochure given to all participants on their arrival at the conference, which will remain a reference publication.

A trade fair including suppliers, industry figures, designers, consultants, etc. and specific forums will allow visitors to discover innovations and enjoy discussion and debate with other professionals.

Finally, there will be multiple spaces and opportunities for friendly interaction during this event, as a key objective of this European conference is for figures from the European healthcare engineering sector to share and discuss topics, as well as network with their European colleagues.

Ingénieurs Hospitaliers de France is counting on you, European healthcare engineering professionals, to make this conference a benchmark European platform for debate and discussion. We look forward to meeting you in Paris, which - like other European capitals - will also be able to showcase its diverse cultural, artistic and architectural heritage.

Bruno CAZABAT, president IHF Jacques ROOS, vice-president IHF, vice-president IFHE EU

General **agenda**

Wednesday June 14 th		Thursday June 15 th			Friday June 16 th
		8:30-10:00	Workshop no.1 Smart hopitals and digitalization Workshop no.2 Estate management	8:30-10:00	Workshop no.7 Energy and engineering Workshop no.8 Project management
9:00-11:30	IFHE EU Council meeting	10:00-10:30	Break on the exhibition	10:00-10:30	Break on the exhibition
11:30-12:00	Visit of the exhibition	10:30-12:00	Workshop no.3 Energy management Workshop no.4 Architectural and technical design	10:30-12:00	Forums
12:30	Lunch break	12:00-13:00	Visit of the exhibition	12:00-13:00	Visit of the exhibition
14:00-14:15	Opening	13:00	Lunch break	13:00	Lunch break
14:15-15:45	Plenary session no.1 Hospital architecture	14:00-15:30	Forums	14:00-17:00	Technical visits
15:45-16:30	Break on the exhibition	15:30-16:30	Break on the exhibition		
16:30-18:00	Plenary session no.2 Management	16:30-18:00	Workshop no.5 Sustainability Workshop no.6 Project ownership		
18:00-19:00	Symposium	18:00-19:00	IHF's General Assembly		
19:00-20:00	Inauguration	20:00	Official reception		

PLENARY SESSIONS

WEDNESDAY JUNE 14TH - PLENARY SESSIONS

14:00-14:15

OPENING

14:15-15:45

PLENARY SESSION NO.1: HOSPITAL ARCHITECTURE

A plenary session with presentations of two emblematic projects representing current trends in European hospital architecture, including the design of Tower 7 on the site of the famous and prestigious Liège Sart Tilman University Hospital by VK Architects & Engineers. Followed by a presentation of the design of the new North Hospital of Hôpitaux de Paris with an approach that could be called revolutionary, signed by Renzo Piano Building Workshop associated with Brunet Saunier Architecture.

Tower 7 - Liège University Hospital, centrepiece of strategic thinking coupled with a multidisciplinary scientific approach Pascale VELGHE (Senior Architect, VK Architects & Engineers) Stéphane VERMEULEN (Director of Healthcare, VK Architects & Engineers)

Man, machine and beauty

Jérôme BRUNET (Chairman, Brunet Saunier Architecture) Antoine CHAAYA (Partner / Director, Renzo Piano Building Workshop)

University Hospital of Saint Ouen, Greater Paris North: technical integration in a resilient project

Sophie BOISSELON (Project Director, INGEROP) Julien CAILLET (Chief Engineer, APHP Paris Hospitals)

16:30-18:00

PLENARY SESSION NO.2: MANAGEMENT

Digitalization, the COVID-19 crisis, and societal and environmental trends bring with them changes and new management methods adopted by the technical and engineering departments of care facilities to address the challenges. Three examples in Europe illustrate the various issues.

How COVID-19 will impact the future of Project Management and the work of healthcare technicians Daniela PEDRINI (President of Italian Society for Healthcare Engineering and Architecture (S.I.A.I.S))

Bed management 4.0 - more safety and ressources in hospitals Mandana BANEDJ-SCHAFII (CEO, Mandmehr Institute of Environment and Health, Germany)

Energy efficiency and contract strategy for HVAC equipment maintenance

Yahia BEHLOULI (Engineer General, Amiens Picardie University Hospital)

Thibaut BROCCHIERI (Maintenance engineer for HVAC and energy efficiency, Amiens Picardie University Hospital)

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THURSDAY JUNE 15TH - WORKSHOPS

8:30-10:00

WORKSHOP NO.1: SMART HOPITALS AND DIGITALIZATION

Three analyses in Europe on the challenges and consequences of the digital revolution affecting all aspects of hospital engineering from design right through to operation and the lessons that can be learned to improve the processes.

Digital twin and knowledge management for smart and sustainable hospital in ASL, LECCE, Italy

Daniele PRETE (Director of Technical Management, ASL, Lecce) Anna ZITO (Physician Nephrologist, Hospital Vito Fazzi, Lecce)

Smart buildings, digitalization, flexible plans and increasing agility of care facilities as a suitable response to the pandemic. Lessons learned COVID-19 and looking at the future

Ann VANDYCKE (Architect, Director of Technical Facilities, Mintus, Belgium)

As Built Drawings with BIM

Frédéric FORET (Draftsman-Designer, University Hospital of Caen, Normandy)

Guillaume LEDEBT (Legacy Engineer Manager, University Hospital of Caen, Normandy)

8:30-10:00

WORKSHOP NO.2: ESTATE MANAGEMENT

Here's a contrast that could seem paradoxical to the untrained eye: engineering and hospital architecture also mean the long life of the building, which is part of history, heritage, urban planning, as well as what we think about disease, pain, and humanity. Three presentations that contextualize these issues that are at the heart of our professions.

A Legacy Hospital: Medical and Legacy Challenges

Alain BENINI (Head of the Architecture and Design Department, University Hospitals of Lyon)

The City of Health and Research: an innovative project

Susanna AZZINI (Freelance Hospital Engineer)

Mauro ROSSI (Hospital Architect, Director of Technical Department, Neurological Institute, Milan)

Revaluing hospitality in contemporary hospitals: points of attention in the context of chronic diseases

Coline PERIANO (Doctoral student, research fellow at Michel Rémon & Associés)

10:30-12:00

WORKSHOP NO.3: ENERGY MANAGEMENT

We are all aware that the energy needed to run care facilities has been a key issue for decades. The combination of climate challenges and necessary decarbonation goals, followed by the war in Ukraine and its global consequences, have made this issue an extreme one that endangers our very societies. So, it is up to us to continue to conduct research tirelessly, stubbornly and unstintingly in order to improve our methods and practices in this field.

The "hunger for energy" in times of energy savings and high energy prices, while new departments are being built. The future vision of a regional hospital on this subject David CARETTE (Head of Technical Department, Sint Andries

Ziekenhuis, Tielt, Belgium)

Example of energy efficiency in hospitals over 40 years old; Mostoles University Hospital

Laura-Andrea GOMEZ DELGADO (Manager of the Engineering and Maintenance Service of the University Hospital of Mostoles, Spain)

David PENA MARTIN (Facilities Manager, Mostoles Academic Hospital, Spain)

Energy Performance Contract (E.P.C.) for the National and Regional Systems: an alternative financing scheme for the global climate action

Stefano MAESTRELLI (Energy Efficiency Manager, Renovit, Milan)

10:30-12:00

WORKSHOP NO.4: ARCHITECTURAL AND TECHNICAL DESIGN

Feedback from three projects illustrating the range of themes related to architectural and technical design in hospitals with a new building to house a tropical and infectious diseases department, an analysis of acoustic issues in an operating theatre, and lengthy refurbishment / remediation work in an occupied hospital.

Presentation of the Tropical and Infectious Diseases department building of University Hospitals of Lyon

Michaël JACONELLI (Engineer in charge of operations, University Hospitals of Lyon)

Acoustic and modular conception of an operating theatre in Sweden

Anne POLLET (Healthcare Concept Developer, Saint Gobain Ecophon) Maria QUINN (Concept Developer Healthcare, Saint Gobain Ecophon)

Louis Pradel Hospital

Stéphane BIRON (Engineer in charge of operations, University Hospitals of Lyon) Christophe DAMIAN (Architect, Partner President A26, Manager A26-AD)

THURSDAY JUNE 15TH - WORKSHOPS

16:30-18:00

WORKSHOP NO.5: SUSTAINABILITY

The facets of sustainable development are many and varied. An example of the use of wood as building material in a hospital, feedback on the now unavoidable refurbishment of hospital buildings, and some thoughts about the best options for addressing climate deregulation and diminishing resources.

WOOD & HEALTH: how to reconcile these two imperatives for our environment?

Christophe BELLONCLE (Teacher Researcher, Ecole Supérieure du Bois, Nantes)

Anabelle BILLY (European Real Estate Technical Director, Korian Group)

Hospitals refurbishments

Géraldine MAURICE (Architect, Project Director, Groupe-6) Yves TAILFER (Architect, Project Director, Groupe-6)

Energy: climate change, scarcity of resources, coping between adaptation and mitigation

Camille DEVROEDT (Sustainable Development Real Estate Project Manager, ANAP)

Yoann LELOUTRE (Project Engineer, Regional Energy Efficiency & Transition Coordinator, Nantes)

16:30-18:00

WORKSHOP NO.6: PROJECT OWNERSHIP

A comparative analysis across several European countries of the legal rules concerning builders' liability followed by two presentations on how to determine the investment cost of building a hospital and how it changes while finetuning the design and the internal organization of contracting for public works, two preconditions for a successful project.

Comparative liability law of builders and insurance in Europe

Yvan DAUMIN (Lawyer, Cabinet Daumin Coiraton-Demercière Avocats)

Determining the cost of a hospital building

Gaëtan PEETERS (Project Director, VK Architects & Engineers) Michel REMON (Urban Architect, Founder and Manager, Atelier Michel Rémon & Associés)

Towards a clear definition of roles and responsibilities within the project manager / operation manager duo

Valery BRUNEL (Head of the Works Investments Department, University Hospitals of Lyon)

8:30-10:00

WORKSHOP NO.7: ENERGY AND ENGINEERING

More on energy with a discussion of engineering innovations to reduce or even eliminate the use of fossil fuels in care facilities and an overview of medical gases in the healthcare sector.

Gases and gas distribution systems in the healthcare

sector - Classification of borderline therapeutic products Dennis WALD (Senior Engineering Expert Qualification & Validation, Chemgineering Switzerland AG)

Towards fossil-free energy production for hospitals?

Florent DONNARD (Fluid Energy Thermal Service Engineer, AIA Ingénierie)

Jean-Marie MELO (Thermal Engineer and Environmentalist, HVAC Service, AIA Ingénierie)

Optimization of cold production in hospitals: feedback on 2 ice storage operations

Laurence GROSBOIS (Engineer in charge of operations, University Hospitals of Lyon) Fanny MORA (Engineer in charge of operations, University Hospitals of Lyon)

FRIDAY JUNE 16TH - WORKSHOPS

8:30-10:00

WORKSHOP NO.8: PROJECT MANAGEMENT

Feedback on a multi-faceted review of the reconstruction of a nursing home for dependent elderly people, an innovative method to ergonomically program outpatient departments in Finland, and feedback on the incredible Sinjar French Medicat Centre project currently being built in Iraq.

Convergence of expertise at the service of a bold nursing home reconstruction project

Julie COTTENCEAU (Director of Carhaix Hospital, University Hospital of Brest) Erwan LE LANN (Operations manager, University Hospital of Brest)

Advanced dimensioning framework that supports future service and work-place concepts in hospital outpatient departments - Examples from Finnish hospital development projects

Rashmi Karolina WERNING (Director Healthcare Consulting Delfoi Oy)

A new hope and engineering challenge in a post-conflict zone

Bashar HASSAN (Architect and Infrastructure Coordinator of La Chaine de l'Espoir in Iraq)

PRACTICAL INFORMATION

Dates & Venue

14 - 16 June, 2023

Palais des Congrès de Paris 2 Pl. de la Porte Maillot 75017 Paris

www.palaisdescongresdeparis.com

Registration

IMPORTANT: Online registration at www.eche-paris2023.com

Prices and general conditions of sale available on the congress website.

Training Accreditation Number: 11 75 33650 75 - Intracommunity N°: FR 87 334 129 814 000 37 - Code APE: 9412Z - Status association loi 1901. The IHF's training organisation is Datadock certified (IDD: 0070328) and QUALIOPI certified (n°2021/95720.1) for its training activities.

TECHNICAL VISITS

Technical tours will be held on Friday, June 16 from 14:00 to 17:00. Details and registration procedures for these visits will be communicated later by e-mail and on the congress website.

Accommodation

You will find a wide variety of proposals via the hotel central, which has been set up especially for the congress: http://booking.journees-ihf.com

Contact

Europa Group

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IHF

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Association founded in 1956 to promote the sharing of information and feedback and to develop contacts between its members who are specialists in the real estate techniques of health care institutions.

Initially made up of engineers from public health establishments, it then opened up to engineers from private establishments, and then to all those involved in hospital engineering (architects, project management assistants, design offices, consultants, manufacturers, etc.).

A founding member and affiliate of the International Federation of Hospital Engineering (IFHE), it is also a founding member of the European group IFHE Europe.

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