



---

## Final program

---

# 10<sup>th</sup> EUROPEAN CONFERENCE ON HEALTHCARE ENGINEERING

## PALAIS DES CONGRÈS DE PARIS

June 14<sup>th</sup> - 16<sup>th</sup>, 2023

63<sup>rd</sup> IHF STUDY & TRAINING DAYS

Crédit photo : Wikimedia Commons





# What water treatment in healthcare facilities?

**New!**  
White Paper

Water is an essential element in healthcare facilities. In constant contact with a fragile population, it is a source of hygiene, safety and comfort. It is also the key to the smooth running of the various hospital departments, in particular the sterilisation units. Water quality control is therefore more than a necessity, it is a vital imperative based on a global risk management approach.

The purpose of this white paper is to provide an overview of the main uses of water in healthcare facilities and the best practices to adopt for optimum quality.

**White paper to be picked up from our stand n°44**

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.

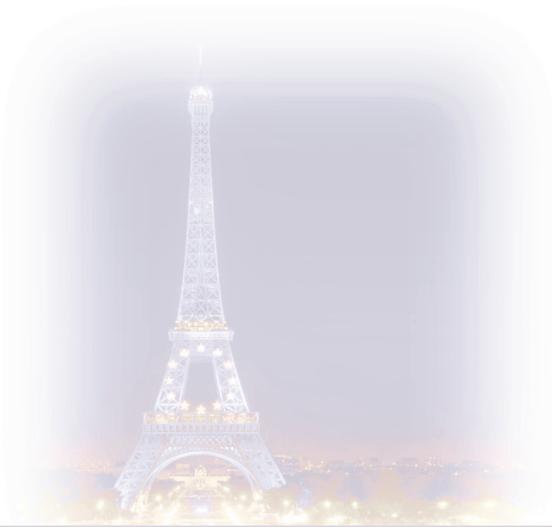
Finally, there will be multiple spaces and opportunities for friendly interaction during this event, as a key objective of this European conference is for figures from the European healthcare engineering sector to share and discuss topics, as well as network with their European colleagues.

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**





## Committees

### IHF President

**Bruno CAZABAT**, President - Hospices Civils de Lyon

### SCIENTIFIC COMMITTEE

**Jacques ROOS**, Coordinator, vice-president IHF, vice-president IFHE EU.

**Alain BENINI**, Board member IHF, Hospices Civils de Lyon.

**France BOUGON**, Vice-president IHF, Assistance Publique - Hôpitaux de Marseille.

**Tomas BUCHER**, President Swiss hospital engineers (IHS), Clinique Romande de réadaptation, Sion

**Bruno CAZABAT**, President IHF, Hospices Civils de Lyon.

**Pierre NASSIF**, Board member IHF, CHU de Nantes.

**Daniela PEDRINI**, President IFHE, president S.I.A.I.S, UOC Gestione del Patrimonio interaziendale Azienda Ospedaliero - Universitaria di Bologna, Policlinico di Sant'Orsola, e Azienda USL di Bologna, Emilia-Romagna.

**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 Wednesday 14 June afternoon, 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 10.00 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 / 10:00 AM - 8:00 PM**

**THURSDAY 15 JUNE / 8.00 AM - 7.30 PM**

**FRIDAY 16 JUNE / 8:00 AM - 2:00 PM**

## Sommaire

Synoptic program .....	P. 6
Forum planning .....	P. 6
Our partners .....	P. 7
Detailed program .....	P. 10
- Plenary sessions .....	P. 10
- Workshops .....	P. 14
- Innovation & technology forums .....	P. 22
General information .....	P. 26
Exhibition map .....	P. 28
Exhibitors list .....	P. 29

## Synoptic program

Wednesday June 14 <sup>th</sup>	Thursday June 15 <sup>th</sup>	Friday June 16 <sup>th</sup>
	<b>8:30-10:00</b> <b>Workshop no.1</b> Smart hospitals and digitalization <b>Workshop no.2</b> Estate management	<b>8:30-10:00</b> <b>Workshop no.7</b> Energy and engineering <b>Workshop no.8</b> Project management
<b>9:00-11:30</b> IFHE EU Council meeting	<b>10:00-10:30</b> Break on the exhibition	<b>10:00-10:30</b> Break on the exhibition
<b>11:30-12:00</b> Visit of the exhibition	<b>10:30-12:00</b> <b>Workshop no.3</b> Energy management <b>Workshop no.4</b> Architectural and technical design	<b>10:30-11:10</b> Forum
<b>12:30</b> Lunch break	<b>12:00-13:00</b> Visit of the exhibition	<b>11:30-12:30</b> Cocktail ECHE 2025 <b>12:30-13:15</b> Visit of the exhibition
<b>14:00-14h15</b> Opening	<b>13:00</b> Lunch break	<b>13:15</b> Lunch break
<b>14:15-15:45</b> Plenary session no.1 Hospital architecture	<b>14:00-15:30</b> Forums	<b>14:15-17:00</b> Technical visits
<b>15:45-16:30</b> Break on the exhibition	<b>15:30-16:30</b> Break on the exhibition	
<b>16:30-18:00</b> Plenary session no.2 Management	<b>16:30-18:00</b> <b>Workshop no.5</b> Sustainability <b>Workshop no.6</b> Project ownership	
<b>18:00-18:40</b> Forum IHF Forum OSCIMES	<b>18:00-19:00</b> IHF's General Assembly	
<b>18:45-20:00</b> Inauguration	<b>20:00</b> Official reception	

## Forum planning

<b>WEDNESDAY JUNE 14<sup>TH</sup></b>	<b>18:00-18:40</b> Havane Amphi	<b>FORUM IHF</b> IHF and the energy transition in health
	<b>18:00-18:40</b> 351 Room	<b>FORUM IHF: OSCIMES</b> How to quickly estimate our projects from the program, functional sectors and work units in Hospital
<b>THURSDAY JUNE 15<sup>TH</sup></b>	<b>14:00-14:40</b> 351 Room	<b>FORUM TARKETT</b> End of life recycling: a circular story. Example of University College London Hospital
	<b>14:00-14:40</b> 352B Room	<b>FORUM CARL SOFTWARE</b> Energy Sobriety: How can you reduce the energy consumption of your buildings with CMMS, AI and IoT?
	<b>14:50-15:30</b> 351 Room	<b>FORUM ENERBRAIN</b> From the Cloud to the Field: our experience on the management of energy efficiency projects in hospitals
	<b>14:50-15:30</b> 352B Room	<b>FORUM AIRINSPEACE</b> BIOCAIR®: Modular controlled environment or how to create a modular controlled environment in a standard room without structural work
<b>FRIDAY JUNE 16<sup>TH</sup></b>	<b>10:30-11:10</b> 351 Room	<b>FORUM GRANITIFIANDRE</b> Eco-active surfaces in healthcare design: a matter of safety and well-being

## Our partners

The IHF would like to thank the following societies for their active support.

### GOLD Partners



### SILVER Partners



### BRONZE Partners



## Other partners

A26 • ABB FRANCE • AIR LIQUIDE SANTÉ FRANCE • AIRINSACE • ANAP • ASPIDA • AUTOMATISME & HYGIENE • BETEM • BOUYGUES • BWT • CABINET CLEMENT & ASSOCCIÉS • CARL • CEGELEC • CET INGENIERIE • CHABANNE ARCHITECTE • CIAT • CRR ARCHITECTURE • DALKIA • DOM METALUX • DRAEGER • EATON • EGIS BÂTIMENTS • EIFFAGE CONSTRUCTION PROVENCE • ENERBRAIN • ESTP • GERFLOR SAS • GETINGE • GIRPI NICOLL/ ALIAXIS • GRANITIFIANDRE • GROUPE 6 • GROUPE OTE • HILTI • ID CAPTURE • IDEX SERVICES • INPRO FRANCE • KOHLER FRANCE • METASSISTANCE • MOUVEMENT CONSEIL • NATURAECO • PILLER FRANCE • PRESTO • RESAH • SAINT GOBAIN GROUPE • SALTO SYSTEMS • SIEMENS HEALTHCARE SAS • SOCOFIT S.A.S • TLV HEALTHCARE • VINCI CONSTRUCTION FRANCE • VINCI FACILITIES • WSP •

  
  
**DOM**<sup>®</sup>

## Ecosystème DOM ENiQ<sup>®</sup>

Dans un contexte en perpétuelle évolution où rigueur, efficacité des flux, souplesse et flexibilité sont les enjeux, découvrez une diversité de produits évolutifs pour s'inscrire dans la durée.

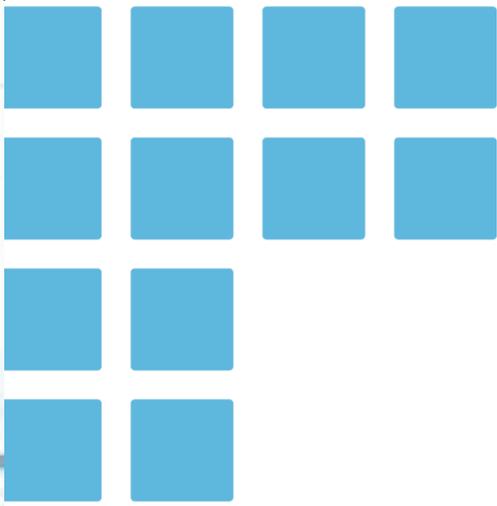
## DOM ENiQ<sup>®</sup> Ecosystem

In an ever-changing context where rigour, flow efficiency, flexibility and adaptability are at stake, discover a variety of evolving products to ensure a long-lasting presence.

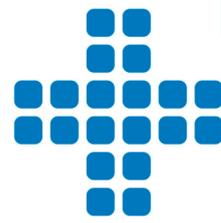


Rencontrez nos experts  
Meet our experts  
**STAND 32**





# Integrated Hospital Design Alliance



Healthy and high performing hospitals.  
We bring Nordic design to your project.

IHDA business consortium consists of forerunners from different areas of healthcare. Together they form a comprehensive offering of the design and construction management of smart, customer-oriented and functional hospitals.

**Meet us at booth 31**

[www.ihda.fi](http://www.ihda.fi)



14:00 - 14:15

**OPENING***Bruno CAZABAT (President IHF)*

14:15 - 15:45

**PLENARY SESSION NO.1: HOSPITAL ARCHITECTURE***Moderator : Jacques ROOS (Vice president IHF / IFHE EU)*

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.

| 14:15 - 14:45

**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)*

Liège University Hospital is architect Charles Vandenhove's post-modern masterpiece. From the design stage, he worked with contemporary artists to **humanise the hospital**. It is within this context, during the COVID-19 pandemic, that studies into the new (and final) tower 7 (42,000 m<sup>2</sup>) took place.

In addition to High Environmental Quality standards, innovative conceptual technologies were used to create this high-quality environment, drawing on **Systems Engineering**, and an inter-disciplinary scientific approach to standardise and optimise the design from the planning phase.

| 14:45 - 15:15

**Man, machine and beauty***Jérôme BRUNET (Chairman, Brunet Saunier Architecture)**Antoine CHAAYA (Partner / Director, Renzo Piano Building Workshop)*

The result of a rich and close collaboration between the Renzo Piano Building Workshop and Brunet Saunier & Associés architecture firms, the winning project of the 2020 architectural competition to build the new Saint-Ouen Grand Paris-Nord University Hospital for the Paris public hospitals authority (AP-HP) focuses on well-being and adaptability. A true healthcare infrastructure, this almost 135,000 m<sup>2</sup> building will be located on the former PSA industrial site in Saint-Ouen. The omnipresence of vegetation, from the street to the roof and into the very heart of the hospital, makes it an open environment focused on the well-being of its occupants, patients, care staff, visitors, researchers, etc.

Its resolutely neutral and generic structure makes HUSOGPN a state-of-the-art urban facility with increased flexibility and scalability, capable of responding to the constant evolution of care technologies as well as to crises.

| 15:15 - 15:45

**University Hospital of Saint Ouen, Greater Paris North: technical integration in a resilient project***Sophie BOISSELMON (Project Director, INGEROP)**Julien CAILLET (Chief Engineer, APHP Paris Hospitals)*

A technical project facing many challenges. Allowing a garden to grow across the roof, whilst incorporating the technical equipment on an intermediate level under the garden. Devising a resolutely dynamic and structured project, between technique and functionality. Preparing for climate change. The technical choices are naturally guided by a strong emphasis on energy resilience. This challenge is reflected in the building's efficient envelope and thoughtful technical choices, including against climate change. Finally, anticipating COVID-19 type public health emergencies based on feedback, notably from AP-HP, drawing inspiration from actions taken during the pandemic.

**| LEARNING OBJECTIVES:**

- Inventory new architectural responses to the growing constraints of hospital design
- Identify areas of climate resilience



16:30 - 18:00

**PLENARY SESSION NO.2: MANAGEMENT**

Moderator: Pierre NASSIF (General Engineer, University Hospital of Nantes)

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.

16:30 - 17:00

**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))

For project managers the impact of COVID-19, has been hugely challenging. The project management remains the key to success for many healthcare projects and building work. The Covid-19 pandemic has presented an array of novel and acute challenges and serves as reminder that we live in a complex and unpredictable world. The global experience has been strongly «results-oriented» overcoming the barriers of professional belonging and organizational ones that limited the ability to work together. The creation of customized flexible spaces in healthcare, the adaptive reuse and the use of Value Management approach and BIM provide the opportunity to transform the pandemic experience into more agile and resilient learning systems.

17:00 - 17:30

**Bed management 4.0 - more safety and resources in hospitals**

Mandana BANEDJ-SCHAFII (CEO, Mandamehr Institute of Environment and Health, Germany)

One of the most needed and most used products in hospitals are hospital beds. The patients are using them most of the time but hardly anyone is thinking about the complex process that is needed to ensure a technical and hygienic provision of that medical product at all times. That's how the research project "bed management 4.0" started. medmehr as a technical service provider was asked to maintenance the beds of a big hospital. The problem was to find the beds and when they were found they mostly were in a bad hygienic situation. So a holistic lifecycle oriented process using smart solution was needed to solve the problem.

17:30 - 18:00

**Energy efficiency and contract strategy for HVAC equipment maintenance**

Yahia BEHLOULI (Engineer General, Amiens Picardie University Hospital)

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

Builder's guarantees in Europe differ depending on the country. They are usually statutory guarantees, although in some countries they are outlined in contracts. A 10-year guarantee is common, but schemes have not yet been standardised as a whole.

**LEARNING OBJECTIVES:**

- Inventory the impacts of Covid-19 on project management
- Measure potential new applications for hospital technical engineering



**HTA<sup>®</sup>**  
**THE QUALITY  
OF WATER  
THE EYES  
CLOSED**

**Nicoll**  
by aliaxis



**WITH HTA<sup>®</sup> YOU CAN BE CONFIDENT IN THE QUALITY  
AND SAFETY OF YOUR WATER SUPPLY**

For more than 40 years, HTA<sup>®</sup> is the solution for domestic hot and cold water services with high requirements.

**C-PVC HTA<sup>®</sup>, water safety:**

- Water quality maintained,
- Very low potential for biofilm development, no corrosion,
- Suitable for chemical and heat treatment for both hot and cold water.

**The most complete solution for your projects:**

- HTA<sup>®</sup> pipe for hot water,
- HTA<sup>®</sup>- F pipe for cold water,
- More than 450 fittings,
- Innovation: balancing valve fast maintenance without network shutoff.



[www.nicoll.fr](http://www.nicoll.fr)

[www.girpi.fr](http://www.girpi.fr)

**Discover our innovations Level 3 - Stand 3**



CAPABLE OF PROVIDING END-TO-END SERVICES THROUGHOUT THE LIFE CYCLE OF YOURS INSTALLATIONS,  
WE HAVE BUILT OUR GROUP AROUND A WIDE RANGE OF TECHNICAL SKILLS.

## Why Snef ? Our strengths

Created in 1905, Snef was founded on the Port of Marseille as a ship electrician. It then developed its activities in France's ports and naval dockyards. In keeping with its commitment to continuous improvement, Groupe Snef increasingly turned to the industry sector and became a recognized player in the fields of electrical engineering, instrumentation and control systems.

In the 80s, Snef diversified into other sectors of the Industry before conquering the Services and Telecommunications markets. Since then, its network of branch offices has expanded throughout France and internationally.

Groupe Snef is established in Eastern Europe, Latin America and Africa through local subsidiaries.

With the acquisition of the Ekium Group, Groupe Snef has expanded its field of action in conception design and engineering.

With the integration of Fouré Lagadec, Groupe Snef has further enhanced its expertise in the field of industrial mechanical maintenance.

The creation of Snef Lab marks Groupe Snef's commitment to new technologies, support for the development of its historical activities.

Snef is an independent ISE (Intermediate-Sized Enterprise) located in Marseille. Its assets are agility, a spirit of economy, the absence of large speeches for an emphasis on fieldwork, and the belief that the success of the company takes precedence over the success of those who manage it.

Groupe Snef's strategy is simple; move up the value chain while preserving what has always been its strength: perfect knowhow of the trade in the field and at the service of its customers and partners.

Snef's business portfolio comprises a multitude of projects; treating each project as a stand-alone is what makes the overall success of the company.

Snef has always favored hiring, valued the work and considered that the company is the venue for economic development, job creation and the personal fulfillment of its employees.

Founded over 110 years ago, Snef remains a young company, turned towards the future, at the heart of the energy transformation and of the digital revolution.

### THE GROUP COMPANIES

## SNEF Our commitments



Groupe Snef owes its longevity to its model, which combines entrepreneurship, responsibility of economic players, agility and respect for a job well done.



We affirm our Intermediate Size Company status, independent, committed. We advocate simplicity in decision-making, the ability to adapt, a direct management approach – many assets to embark new talents on the Snef adventure.



Although independent, our rule has always been to hold ourselves to the highest standards.



### Governance

- Independent Directors
- Audit Committee
- Compensation Committee
- IFRS Financial Statement
- CSR Report
- Risk Factor Report

### Compliance

- Code of conduct
- Compliance officer
- Global Compact
- Sapin II law

### Social

- Social Dialogue
- University

### Environment

- ISO 14001
- Low-Consumption Buildings (BBC)
- Eco-driving



8:30 - 10:00

**WORKSHOP NO.1: SMART HOPITALS AND DIGITALIZATION***Moderator: Daniela PEDRINI (President of Italian Society for Healthcare Engineering and Architecture (S.I.A.I.S))*

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.

| 8:30 - 9:00

**🇬🇧 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)*

ASL Lecce represents the Regional Health System of the south of Regione Puglia, Italy. The increasing complexity of the health needs in this area, especially regarding the care of patients with chronic kidney disease, often collides with the obstacles represented by buildings, technological and plant engineering obsolescence. We propose a project structured in two main points: **1.** An innovative model for the efficient and sustainable management of healthcare real estate assets through a digital management system based on BIM (Building Information Modeling) and combined with the IoT (Internet of Things) technology. **2.** The creation of a tele dialysis platform integrated into the existing CKD care network, and whose hub will be located in a smart hospital.

| 9:00 - 9:30

**🇬🇧 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)*

The COVID-19 pandemic has been a worldwide economic and social disruptor, and hospitals as well as other caretaking facilities have not been spared from this turmoil. As the world continues to learn more about COVID-19 and other infectious diseases, updating processes and procedures to accommodate the changing environment, there is awareness of the need to design and construct new spaces and facilities that are as well-equipped as possible for future pandemics. The world will never be the same after the COVID-19 crisis and we need to proceed to the next level, reinventing or reimagining the next normal.

Challenges spark creativity, so lack of accessibility, staff and sources during the pandemic has caused architects, engineers, technical directors and facility managers to accelerate towards digitization, development of new standardized building systems to speed up and automate elements of design and construction, remote controlled processes and flexible off-site construction.

| 9:30 - 10:00

**🇫🇷 As Built Drawings with BIM***Frédéric FORET (Draftsman-Designer, University Hospital of Caen, Normandy)**Guillaume LEDEBT (Legacy Engineer Manager, University Hospital of Caen, Normandy)*

Feedback about the handover of the As-Built BIM and the choices made by Caen Normandy University Hospital in the context of the anticipated reconstruction of the new hospital and its existing assets.

**| LEARNING OBJECTIVES:**

- Identify the digital revolution serving the hospital sector
- Manage as-built records at the end of construction work



8:30 - 10:00

**WORKSHOP NO. 2: ESTATE MANAGEMENT**

Moderator: Pierre NASSIF (General Engineer, University Hospital of Nantes)

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.

8:30 - 9:00

**A Legacy Hospital: Medical and Legacy Challenges**

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

Edouard Herriot Hospital is one of the iconic pavilion hospitals built in response to the recommendations of hospital hygiene treaties at the turn of the 20th century. Designed by the architect Tony Garnier, it is listed as a Historic Monument. While preserving the site's function as a hospital in the centre of Lyon, the Hospices Civils de Lyon have launched a major operation to restructure this heritage, guided by a forward-looking approach to the healthcare needs of the coming years. This modernisation is the right response to the sometimes conflicting demands of the medical profession and heritage conservation.

9:00 - 9:30

**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)

The City of Health and Research is a strategic public health project of great importance that will be carried out in the Milan area. It is a structure of more human dimensions (articulated structure of only three floors above ground, no more than 18 meters high). Besta Neurological Institute and National Cancer Institute, will converge in the new hospital structure of clinical and scientific excellence of national and international significance.

The health complex called "City of Health and Research" will 135,000 square meters with 650 beds an underground car park of 24,000 square meters, an outdoor green area of 55,000 square meters

The diagnosis and treatment plate (among the largest in our country) will be equipped with nine bunker rooms for radiotherapy, and one for proton therapy, 7 rooms for MRI, one of which 7 Tesla for human use, over 15 thousand square meters of translational research laboratories. Two distinct operating blocks with twelve operating theaters and two other large high-tech operating theaters.

The overall costs for the construction of the City of are estimated in 450 million euros and will be carried out through a «concession»: the winner of the tender will build the complex and manage it for 27 years, providing all the necessary services with the exception of health services.

9:30 - 10:00

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

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

Many terms associated with hospitals remind us of their historic roots. Some of the expressions that naturally lead us to associate the idea of a hospital with hospitality include "Hôtel-Dieu" in French, "hospices", "assistance" or, generally speaking, the adjective "hospitable". Hospitality is an ambivalent notion, whose complexity comes into play in the hospital to allow but also enhance care. It is about giving a place and role to the patient in the institution, and also allowing them to transcend this role and adapt their place to collaborate with medical staff, right through to actively playing a role in their own care.

**LEARNING OBJECTIVES:**

- Determine the right balance between medical requirements and legacy constraints
- Identify ways to take people into account in hospital environments

10:30 - 12:00

**WORKSHOP NO.3: ENERGY MANAGEMENT***Moderator: Bruno CAZABAT (President IHF)*

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.

10:30 - 11:00

 **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, Tiel, Belgium)*

The 'hunger for energy' is something familiar to every business, so too for the healthcare sector. In this presentation, we, Sint-Andriesziekenhuis Tiel (Belgium), as a hospital, are going to share our experience of how we tackle energy challenges. As a story, we start by replacing our rotary UPS to a new model and see what savings can be found. We also dare to question the current infrastructure and look for better solutions in combination with new legislation and technological innovations. However, managing energy cannot be a purely technical matter, good monitoring can only be done with well-trained people. This is where we as a hospital can make our (limited) contribution. We hope to pleasantly surprise you in our story.

11:00 - 11:30

 **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)*

Many terms associated with hospitals remind us of their historic roots. Some of the expressions that naturally lead us to associate the idea of a hospital with hospitality include "Hôtel-Dieu" in French, "hospices", "assistance" or, generally speaking, the adjective "hospitable". Hospitality is an ambivalent notion, whose complexity comes into play in the hospital to allow but also enhance care. It is about giving a place and role to the patient in the institution, and also allowing them to transcend this role and adapt their place to collaborate with medical staff, right through to actively playing a role in their own care.

11:30 - 12:00

 **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)*

In the first part, the article indicates the European strategies for developing energy efficiency in our continent and illustrates which are the main regulatory measures that guide European policy for the improvement of the climate and the people's lives in our continent.

In the second part, the article illustrates the possibilities of carrying out experiences of efficiency improvement of civil or sanitary public buildings through the use of the Energy Performance Contract (EPC) according to the European guidelines.

In the final part, two case studies of concrete implementation of the E.P.C., which have already carried out, are illustrated.

**LEARNING OBJECTIVES:**

- Estimate possible energy saving actions in an existing building
- Develop effective ways to address energy efficiency challenges



10:30 - 12:00

**WORKSHOP NO.4: ARCHITECTURAL AND TECHNICAL DESIGN**

Moderator: Alain BENINI (Head Architecture Department, University Hospital of Lyon)

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.

| 10:30 - 11:00

**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)

In March 2021, Hospices Civils de Lyon moved its Infectious and Tropical Diseases Unit into a new high-tech building. This 45-room building has specific features in terms of airflow, technical redundancy, airtightness, effluent treatment, flow management and access control, which we will present in this article.

| 10:30 - 11:00

**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)

Working conditions are being increasingly addressed in a general sense, and in the Healthcare sector staff is faced with many challenging acoustical issues. For modular constructions, either being used for laboratories or operating theatres, acoustic comfort is not always addressed or considered in the project. In the traditional construction way, acoustic comfort and its impact on staff and patients have been well studied. Nevertheless, the comfort and the work quality are equally affected, especially in sensitive specialist areas in new modular buildings, whether they are temporary or permanent modular constructions.

The objective is to present feedback on the modular construction of an operating theater in Trollhättan in Sweden, which was constructed in 6 months following a technical issue with existing operating rooms. These modular rooms are temporary. The customer required the same level of acoustic comfort as in the existing operating rooms so that the medical staff could have the same supportive work conditions with a well-functioning sound environment.

| 10:30 - 11:00

**Louis Pradel Hospital**

Stéphane BIRON (Engineer in charge of operations, University Hospitals of Lyon)

Christophe DAMIAN (Architect, Partner President A26, Manager A26-AD)

We removed asbestos, carried out safety works and a complete renovation after stripping back each floor at a U-type occupied high-rise building with 14 storeys.

Support for a long project to illustrate project progress, whose first phase started in AUTOCAD and continued in REVIT then FULL BIM.

We were able to see our approaches and methods change at the same site. The programme is essentially identical, emphasising comparison of one phase with another.

The works took place at an occupied site coordinated over 4 successive projects. The different phases were arranged as a decanting project and allowed the building's overall level of safety to be improved gradually.

**| LEARNING OBJECTIVES:**

- Acquire design and construction methods for specific buildings depending on their purpose (infectious and tropical diseases) or their fire safety requirements (high-rise building)
- Control acoustics in an operating theatre

16:30 - 18:00

**WORKSHOP NO.5: SUSTAINABILITY***Moderator: Bruno CAZABAT (President IHF)*

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.

16:30 - 17:00

**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)*

The construction of healthcare facilities has a significant impact on the environment, particularly in terms of the use of materials and energy consumption. The sustainable construction of these buildings consequently requires the use of environmentally-friendly materials. To identify opportunities to promote the use of wood in healthcare buildings, an impact study is carried out on the combined effects of healthcare and carbon footprint factors. An analysis methodology is put forward that includes modelling, life cycle assessment and reference buildings, but also studies linking wood & hygiene/well-being. Any lessons learned will be used in situ in view of the impact on occupants.

17:00 - 17:30

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

In France, the RE2020 environmental regulation and the "tertiary" decree require the transformation of buildings to limit energy consumption. This obligation, which affects many areas of healthcare facilities, is in fact an opportunity to transform and revitalise the hospital by improving functional comfort, quality of life for healthcare professionals and patient care. Rehabilitation means designing differently, on the scale of a restructured building or a modernised site with new extensions. The projects for the neurology centre at the Pitié-Salpêtrière hospital in Paris, Valence hospital, and the new Becquerel centre in Rouen, designed by Groupe-6, as well as two tertiary projects, illustrate this dual design approach.

17:30 - 18:00

**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)*

The geopolitical situation has once again reminded us of our dependency on fossil fuels and the volatility of their prices. Yet the challenge of securing our energy supplies does not depend solely on matters of market organisation. We also need to rethink our way of consumption based on three levers of action - sobriety, performance and developing the use of renewable energies. We will present here the initial results of a model for engaging the sector, based on sharing skills and resources to involve as many facilities as possible in their energy and environmental transition.

**LEARNING OBJECTIVES:**

- Identify sustainable development applications in hospital construction
- Measure suitable solutions for a controlled energy transition



16:30 - 18:00

**WORKSHOP NO.6: PROJECT OWNERSHIP**

Moderator: Philippe STALLIVIERI (Vice president IHF)

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 fine tuning the design and the internal organization of contracting for public works, two preconditions for a successful project.

16:30 - 17:00

**Comparative liability law of builders and insurance in Europe**

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

Builder's guarantees in Europe differ depending on the country. They are usually statutory guarantees, although in some countries they are outlined in contracts. A 10-year guarantee is common, but schemes have not yet been standardised as a whole.

17:00 - 17:30

**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)

Comparing the methods used to determine the cost of a building in France and Belgium can be an opportunity to clarify French working methods. To summarise, the cost of a building in France is defined based on the calculation in the operation programme by the project owner. In Belgium, the process to determine the price is quite different: A "light" programme with a "target" price is given to bidders at the start of the operation. This means the designer simultaneously defines the programme and indicates the cost of the building. This iterative approach is supported by the project owner and their consultants.

We will explain this working method and how it has the advantage of "telling the truth" to the Project Owner as studies move forward...

17:30 - 18:00

**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)

A project manager and operation manager are clearly identified for every building construction at Hospices Civils de Lyon. They work as a duo, and this collaboration often continues over several years. In order to ensure an effective, productive and seamless partnership between the project manager and operation manager, it seemed necessary to review the roles and responsibilities of each party. The result of this work is presented in this article. Their respective roles are explained for each phase of the operation. Important topics are addressed, including the decision-making methodology, control methods and contingency management.

**LEARNING OBJECTIVES:**

- Determine the cost of building a hospital building
- Organise project ownership to carry out construction work
- Distinguish between builders' liability and insurance in Europe

8:30 - 10:00

**WORKSHOP NO.7: ENERGY AND ENGINEERING***Moderator: Philippe STALLIVIERI (Vice president IHF)*

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.

8:30 - 9:00

**🇬🇧 Gases and gas distribution systems in the healthcare sector - Classification of borderline therapeutic products***Dennis WALD (Senior Engineering Expert Qualification & Validation, Chemengineering Switzerland AG)*

Pressurized gases are some of the most widely used substances in medical procedures, treatments or for diagnostic applications. Therefore, hospitals and healthcare institutions require a reliable and safe supply of medical grade gases.

Depending on the usage of the gas, the hospital must comply with the EU Medical Device Regulation 2017/745 as well as the EU Medicinal Product Directive 2001/83/EC and 2004/27/EC. An unclear or imprecise classification of the gas could lead to non-compliance with the applicable regulations or local law. The goal of this article is to inform the reader about fundamental steps each hospital needs to take in order to be compliant with EU regulations.

9:00 - 9:30

**🇫🇷 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)*

Reducing greenhouse gas emissions is a major challenge facing our society. In healthcare facilities, technical and regulatory developments paired with the management of consumption profiles has already allowed a significant reduction in building energy needs. We are now seeing a transition towards zero-carbon and renewable energy production.

9:30 - 10:00

**🇫🇷 Optimization of cold production in hospitals: feedback on 2 ice storage operations***Fabrice AGNIEL (Air and thermal systems engineer, University Hospitals of Lyon)**Fanny MORA (Engineer in charge of the works, Eastern hospitals group, University Hospitals of Lyon)*

Between 2016 and 2022, a new 4.2MW cooling capacity chilled water production system was designed and created for Louis Pradel Hospital in Lyon, accompanying the project to renovate, improve safety and enhance user comfort in its accommodation units.

This system primarily comprises 2 x 1.2MWcc Air/Water cooling units, one 1.2MWcc Water/Water cooling unit and a 7.2MWh cooling capacity ice storage unit. This cutting-edge storage unit helps limit demand during hot periods, and makes the existing electrical installations compatible with the hospital's requirements in terms of thermal comfort.

**| LEARNING OBJECTIVES:**

- Adapt hospital energy production to virtuous consumption expectations
- Design optimized cold production
- Categorise uses of medical gases in hospitals



8:30 - 10:00

**WORKSHOP NO.8: PROJECT MANAGEMENT**

Moderator: Pierre NASSIF (General Engineer, University Hospital of Nantes)

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 Medical Centre project currently being built in Iraq.

| 8:30 - 9:00

**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)

A technical project facing many challenges. Allowing a garden to grow across the roof, whilst incorporating the technical equipment on an intermediate level under the garden. Devising a resolutely dynamic and structured project, between technique and functionality. Preparing for climate change. The technical choices are naturally guided by a strong emphasis on energy resilience. This challenge is reflected in the building's efficient envelope and thoughtful technical choices, including against climate change. Finally, anticipating COVID-19 type public health emergencies based on feedback, notably from AP-HP, drawing inspiration from actions taken during the pandemic.

| 9:00 - 9:30

**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)

During the hospital planning process, the capacity dimensioning is a difficult task and requires a structured approach. Within this presentation a framework for outpatient departments is given gathering the pivotal questions to arrive at a future-proof number of spaces. Two actual examples of applying the framework within specialized care outpatient departments are presented.

| 9:30 - 10:00

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

Hélène CAMUSET (Head of Infrastructure & Biomedical Department, La Chaîne de l'Espoir)

Sinjar in Iraq lost most of its population and infrastructures under ISIS war including its health care centers. The Sinjar French Medical Center is a new hope to restore this territory and encourage return of refugees. In these complex and volatile contexts, strengthening health systems remains a major area of development to provide access to care for disadvantaged populations.

Despite lot of security and logistics challenges, the project is implemented with international high-quality standards in accordance with the hospital requirement. With the support of the international community and local partners (Funders, NGO, Compagnies...) is the design and construction of the future public SFMC become a reality and hope symbol for all.

**| LEARNING OBJECTIVES:**

- Develop expertise and new concepts for hospital projects
- Measure the challenges of hospital engineering



HAVANE AMPHI

18:00 - 18:40

FORUM IHF

**IHF AND THE ENERGY TRANSITION IN HEALTH**

Anabelle BILLY, Board member IHF, CHU de Limoges

Frédéric ALEXANDRE, Board member IHF, CHD La Candelie

François XAINTRAY, Board member IHF, Hôpitaux Universitaires de Strasbourg

It's time now for healthcare and nursing homes buildings to embrace sustainable development and ecological transition. IHF association intends to make its contribution to reinforcing carbon reduction in the healthcare sector, and has built its road map around 4 key convictions: training staff in sustainable development (engineers and governance establishments), reinforcing energy renovation of the existing building stock, low-carbon design of new constructions, and preservation of the environment and its natural resources.

A call for applications to take part in working groups was launched in November 2022, and has met with great success among healthcare real estate professionals.

The roadmaps for each of these groups have been drawn up and will enable to deploy feedback, recommendations and publications on the themes of the ecological and energy transition and will build a work program that will be rolled out over the next two years.

The members of the groups are recognized and wellknown professionals in the healthcare real estate sector, including owners, contractors, builders, engineers and architects, from both the public and private sectors, as well as academics and institutions.

**FOR TECHNICAL RAISONS, UNFORTUNATELY THIS FORUM  
WILL NOT BE TRADUCED IN ENGLISH**

351 ROOM

18:00 - 18:40

**FORUM IHF: OSCIMES (L'OBSERVATOIRE DES SURFACES ET DES COÛTS DE L'IMMOBILIER DE LA SANTÉ)****HOW TO QUICKLY ESTIMATE OUR PROJECTS FROM THE PROGRAM, FUNCTIONAL SECTORS AND WORK UNITS IN HOSPITAL***Bruno CAZABAT, President IHF**Gery DIVRY, ANAP Architect**Thierry LACHAUD, Ingénieur, responsable des études préalables au sein du DAMOE, direction des affaires techniques, Hospices Civils de Lyon*

The Conférence des Directeurs Généraux de CHU, commission Engineers and architectsg and the Agence Nationale d'Appui à la Performance (ANAP) have set up Oscimes®, an observatory of surface areas and real-estate costs in healthcare establishments. The Hospices civils de Lyon, as part of the Conférence des DG de CHU (Conference of CHU General Managers), and ANAP, the French National Agency for Performance Support, are leading the project.

Created in 2011, Oscimes® is a database of real estate transactions made available in 2013 to all public health and medico-social establishments, to provide them with a benchmark for the development of their real estate and capacity projects.

This benchmarking tool provides a detailed view of projects and construction costs for real estate investments. It enables future projects to be compared with similar projects that have already been carried out. It is thus a decision-making aid, from the feasibility study to the call for tenders, in terms of both sizing and work estimates.

To date, Oscimes® includes 131 public and private construction projects representing over 2.9 million m<sup>2</sup>. These operations are presented architecturally and broken down into functional sectors characterizing the buildings concerned - accommodation, operating theatres, radiology, emergency, pharmacy, etc. - and into work units. Construction costs are broken down by functional sector, by trade and by m<sup>2</sup>. They incorporate changes in construction cost indices, making the updated data comparable.

The database is accessible to all: engineers, architects, contractors, students, etc., and allows users to view architectural presentation brochures for projects registered in the database, and to run simulations for new projects.

This free access allows you to use the sizing and construction cost estimation tool according to sector of activity and functional areas. Construction costs are calculated on the basis of ratios resulting from operations integrated into the database, whose data is anonymous. A cost map was put online in April 2023, providing a highly ergonomic visualization of the economics of the various projects included in the database.

To consult Oscimes, visit [www.oscimes.fr](http://www.oscimes.fr)

**FOR TECHNICAL RAISONS, UNFORTUNATELY THIS FORUM  
WILL NOT BE TRADUCED IN ENGLISH**

351 ROOM

THURSDAY JUNE 15<sup>TH</sup> - FORUMS

14:00 - 14:40

## FORUM TARKETT

**END OF LIFE RECYCLING: A CIRCULAR STORY. EXAMPLE OF UNIVERSITY COLLEGE LONDON HOSPITAL***Marcelo MARTINS MEIRA, Responsable Développement Durable Tarkett*

To reduce their environmental footprint, hospitals must identify all their carbon emissions. Floorings, which weight less than 10% of their building carbon weight, can optimize their environmental performance through 6 key criteria : eco-design, manufacturing, lifespan, maintenance, end of life, manufacturer's policy. The University College London Hospital (UCLH) recycled 2.5 tons of end-of-use homogeneous vinyl and thus generated a total saving of -9 tons of CO<sub>2</sub>: their feedback will promote recycling programs and new end-of-use waste recycling techniques, to make building more circular.

352B ROOM

14:00 - 14:40

## FORUM CARL SOFTWARE

**ENERGY SOBRIETY: HOW CAN YOU REDUCE THE ENERGY CONSUMPTION OF YOUR BUILDINGS WITH CMMS, AI AND IOT?***Youssef MILOUDI, Head of research and innovation development at Berger-Levrault*

It's time for sobriety! The plan presented by the French government sets a clear objective: to reduce energy consumption by 10% within two years. In the long term, the tertiary sector and BACS decrees set out a regulatory framework for a collective and sustainable commitment to reducing energy consumption, with the aim of achieving carbon neutrality by 2050.

Now more than ever, energy savings and the quality and performance of equipment and infrastructure are key objectives of the ecological transition. To achieve this, we need to measure and optimize the energy efficiency of buildings and equipment.

In this sense, sustainable and efficient asset management through CMMS, and real-time analysis of equipment operation are the means and tools needed to achieve these objectives.

Through concrete case studies, Mr Miloudi will show you how CARL-Berger-Levrault's CMMS solutions, CARL Source, coupled with the AI and IoT platform, BL.Predict, can help you meet the challenge of energy sobriety and the objectives of the tertiary sector decree.

351 ROOM

14:50 - 15:30

## FORUM ENERBRAIN

**FROM THE CLOUD TO THE FIELD: OUR EXPERIENCE ON THE MANAGEMENT OF ENERGY EFFICIENCY PROJECTS IN HOSPITALS***Alberto RIBONI, International Sales Manager, Enerbrain*

The article presents the results obtained and the lessons learned from the implementation of Enerbrain's projects to optimize the control systems of HVAC systems serving hospitals, based on the experience in hospital facilities in France and Italy, where the technical solutions use control logics based on IoT and the cloud. The resulting critical considerations support the thesis that the success of an energy efficiency project depends on a complex combination of factors, in which the objectivity of a robust technological solution must be combined with the total acceptance of the project by all the players involved.

352B ROOM

14:50 - 15:30

## FORUM AIRINSPACE

**BIOCAIR®: MODULAR CONTROLLED ENVIRONMENT OR HOW TO CREATE A MODULAR CONTROLLED ENVIRONMENT IN A STANDARD ROOM WITHOUT STRUCTURAL WORK***Nicolas LAUDINET, Customer Support Director, Airinspace*

Creating an additional controlled environment in an occupied hospital building is often problematic due to construction management constraints and the lack of space to install the air handling systems. With twenty years of experience in air handling for high-risk areas in hospitals, Airinspace has integrated its mobile air decontamination units into the Biocair® modular concept, which allows existing rooms to be customised with controlled positive/negative pressure and, where necessary, the creation of cleanroom-quality partitions. The Biocair® concept is now used to create protected rooms and isolation rooms, to bring laboratories (especially for assisted reproduction) and pharmaceutical production areas into compliance, as well as for office-based surgery.

 351 ROOMFRIDAY JUNE 16<sup>TH</sup> - FORUMS

10:30 - 11:10

**FORUM GRANITIFIANDRE** **ECO-ACTIVE SURFACES IN HEALTHCARE DESIGN: A MATTER OF SAFETY AND WELL-BEING***Paolo CHIECO, Key Account Manager*

The Covid-19 pandemic has uncovered the weaknesses of healthcare facilities, including poor hygiene and the threat posed by antibiotic resistance to patients. Since even seemingly safe environments can hide serious risks, Iris Ceramica Group has created Active Surfaces®, the cutting-edge ceramic surfaces for floors and walls to: destroy bacteria and viruses, including antibiotic-resistant bacteria and SARS-CoV-2; degrade nitrogen oxides and volatile organic compounds; make dirt adhere less to floors and walls, while making external facades self-cleaning; eliminate the molecules responsible for bad odors.



## Dates and venue

**From 14 to 16 June 2023**

Palais des Congrès de Paris

Level 3 - Neuilly side

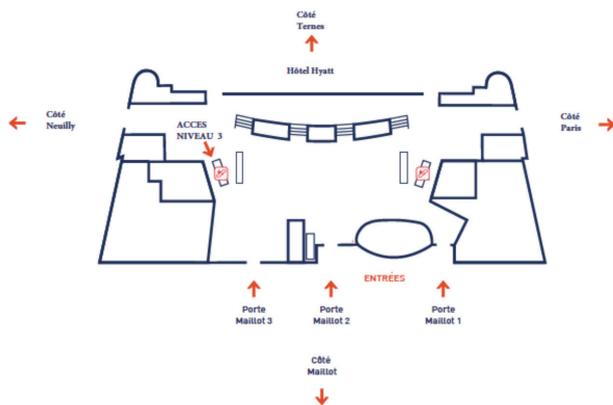
2 place de la Porte Maillot - 75017 PARIS

[www.palaisdescongresdeparis.com](http://www.palaisdescongresdeparis.com)

The congress venue is located on level 3.

Access to level 3 is via the escalator on the Neuilly side.

The congress is bilingual English / French with simultaneous translation.



## The congress is accessible to people with disabilities

Contact the organisers if necessary:

[ECHE-PARIS2023@europa-organisation.com](mailto:ECHE-PARIS2023@europa-organisation.com)

## Cloakroom - Luggage storage

A cloakroom-baggage room is available on level 3, next to the reception.

Opening hours are the same as at the congress reception.

**IMPORTANT: THE CLOAKROOM WILL CLOSE AT 2PM ON FRIDAY 16 JUNE**

## Wifi



Identifier: **ECHE-JEFIHF23**

Code: **ECHE-JEFIHF23**

## Badges

For security reasons, badges must be worn throughout the congress.

## Working lunches

The lunches on 14, 15 and 16 June, ordered in advance when you register, will take place in the **catering area - level 3, at 1 pm.**

No reservations will be possible on site

## Opening cocktail

The exhibition's opening cocktail will take place on Wednesday 14 June from 6 pm to 8 pm on the exhibition area.

Everyone registered for the congress is invited to this cocktail that is offered by the IHF.

## Official evening

The official evening will take place on Thursday 15 June on the boat LE PAQUEBOT (by reservation only).

Port de Javel haut - 75015 PARIS

**Meeting time: 8pm.**

Boat departure and start of the cruise at 8.15 pm.

Return at 11pm.

Ligne 10 (Javel - André Citroën Station)

Ligne C (station Javel station)

**Paying public car park nearby:**

Parking Magnetic - Centre Beaugrenelle

P1 MAGNETIC accessible from Quai André-Citroën

Shuttles from the Palais des Congrès and back to the Palais des Congrès are planned.

Schedules and meeting points available at the congress reception.

## Closing cocktail

ZORG.tech, organizer of the 11th EUROPEAN CONFERENCE ON HOSPITAL ENGINEERING, which will take place in 2025 in Antwerp, Belgium, invites you to a cocktail party on Friday 16 June from 12:00 to 13:00 on the exhibition area.

## Contacts

**Europa Organisation**

19, allées Jean-Jaurès / B.P. 61508

31015 TOULOUSE Cedex 6 - FRANCE

Phone : + 33 5 34 45 26 45

E-mail : [ECHE-PARIS2023@europa-organisation.com](mailto:ECHE-PARIS2023@europa-organisation.com)

**IHF**

Jacques Roos - Philippe Stallivieri

E-mail : [journeesnationales@ihf.fr](mailto:journeesnationales@ihf.fr)

**Tarkett,  
the partner for  
your healthcare  
projects!**

Find the sustainable flooring that meets the requirements of the hospital environments and choose the right design for the users.

**Discover our healthcare design guide!**



More information: [https://professionals.tarkett.com/en\\_EU/](https://professionals.tarkett.com/en_EU/)

 **Tarkett**

# Exhibition map



## Exhibitors list

A26 ARCHITECTURES .....	15	GETINGE .....	65
ABB France .....	13	GIRPI .....	03
AIRINSPACE .....	44Bis	GROUPE 6 ARCHITECTES .....	43
AIR LIQUIDE .....	57	GROUPE OTE .....	14
ANAP .....	61	HILTI .....	12
ASPIDA .....	22	ID CAPTURE .....	55
AUTOMATISME & HYGIENE .....	11	IDEX .....	41
BETEM .....	20	IHDA.....	31
BOUYGUES CONSTRUCTION .....	45	I.H.F - E.C.H.E .....	56
BWT .....	44	INPRO France .....	64
CABINET CLÉMENT & ASSOCIÉS .....	18	KOHLER .....	48
VINCI CONSTRUCTION FRANCE .....	17	METASSISTANCE .....	68
CARL SOFTWARE .....	02	MOUVEMENT CONSEIL .....	10
CET INGENIERIE .....	52	NATURAECO .....	05
CHABANNE ARCHITECTE .....	21	PILLER .....	53
CIAT .....	26	PRESTO .....	67
CRR ARCHITECTURE .....	04	RESAH .....	66
DALKIA .....	50	SAINT GOBAIN ECOPHON .....	69
DOM-METALUX .....	32	SAINT GOBAIN SOLUTIONS FRANCE .....	24
DRAEGER .....	01	SALTO SYSTEMS .....	30
EATON .....	49	SCHNEIDER ELECTRIC FRANCE .....	46
EGIS .....	19	SIEMENS .....	54
EIFFAGE CONSTRUCTION .....	51	SNEF .....	42
ENERBRAIN .....	58	SOCOFIT .....	59
ENGIE .....	28	TARKETT FRANCE .....	23
ESTP PARIS .....	16	TLV HEALTHCARE .....	67Bis
GERFLOR .....	70	VINCI ENERGIES .....	47



*Association founded in 1956 to promote the sharing of information and feed back 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.*

E-mail: [ECHE-PARIS2023@europa-organisation.com](mailto:ECHE-PARIS2023@europa-organisation.com)

Site Internet: [www.ihf.fr](http://www.ihf.fr)

Training agreement N° 11753365075

[www.eche-paris2023.com](http://www.eche-paris2023.com)



