



38 SEMINARIO DE INGENIERÍA HOSPITALARIA
CONGRESO NACIONAL

9TH IFHE-EU CONGRESS

Gijón 27-29 de Octubre de 2021

PROGRAM



Wednesday, October 27

17:00-20:00 **Opening of the Technical Secretariat and the Commercial Exhibition**
Documentation hand-out

Permanent Exhibition. Engineering in Action Awards:
<Response to the Pandemic / Climate Emergency>
Palacio de Congresos Feria de Muestras de Gijón

18:00-19:00 **Workshops:**

SALA GIJÓN
“GDPR (General Data Protection Regulation)”
Albert Cabré
Olympus

SALA ANFITEATRO
Photovoltaic Facilities for self-consumption applied to Hospital Buildings
Gabriel Uría González
Official Association of Industrial Engineers. Principado de Asturias

20:30 **Welcome Reception**
Palacio de Congresos Feria de Muestras de Gijón



Thursday, October 28:

9:00-10:00

SALÓN DE ACTOS

Round Table: PRINT

Presentations and debate table which include the latest developments with regard to 3D printing using diverse materials, where a range of experts will highlight the inclusion of this tool in the healthcare environment, in services such as Traumatology, Radiotherapy, Urology, etc., also taking into account the recent changes in the regulations governing healthcare products.

Moderator:

Gustavo Amor Rodriguez
Technical Engineer, Subdirección de Infraestructuras
Servicio de Salud del Principado de Asturias (SESPA)

Speakers:

Biomedical engineering and additive manufacturing technologies: applications and success stories

Juan Carlos Piquero Cambor
Market Unit Coordinator. Idonial Technology Centre. Gijón

3D impression in a Radiation Oncology Service

José Pérez-Regadera
Radiotherapy Head of Service. Hospital Universitario 12 de Octubre

Regulation change: New MDR and RD regulations for medical devices and their application to 3D printing: custom and in-house ps manufacturing

Xavier Canals-Riera
Vice Chairman. Sociedad Española de Electromedicina e Ingeniería Clínica. Madrid

9:00-10:00

SALA ANFITEATRO

Round Table: HUMANISE

Mesa de ponencias y debate donde profesionales ponen de manifiesto la importancia que un entorno mas humanizado en las instalaciones sanitarias v a en pos de una recuperación temprana y con menos secuelas de los pacientes tratando temas con el entorno como 3er cuidador, el diseño de las instalaciones, el estado del conocimiento actual en este campo.

Moderator:

Manuel Bayona García. Manager Hospital Universitario de Cabueñes. Gijón

Speakers:

Humanization in oncology: Flexible and resilient architecture

Marta Parra Casado
Architect. Parra-Müller Maternity Architecture

Carmelo A. de la Higuera Arranz
Maintenance Manager. Hospital Santos Reyes. Burgos

HUCA's ICU Humanization Plan

Dolores Escudero Augusto
Head of Service of the Intensive Care Unit, (UCI)
Hospital Universitario Central de Asturias (HUCA) Oviedo

Life of children with cancer in the Hospital

Paula Rodríguez de Diego. Head of Management. Galbán Association



Thursday, October 28:

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- 9:00-10:00 **SALA ASTURIAS**
**Engineering in Action Awards Table
Response to the Pandemic**
-
- 10:00-10:30 **Coffee break**
-
- 10:30-11:45 **SALÓN DE ACTOS**
Opening of the 38TH AEIH SEMINAR, NATIONAL CONGRESS / 9TH IFHE-EU CONGRESS.

Opening conference
Technology in the service of humanity
Amador Menéndez Velázquez
Researcher at IDONIAL Technological Center. Asturias
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- 11:45-14:30 **SALA ASTURIAS**
**Engineering in Action Awards Table
Response to the Pandemic**
-
- 11:45-12:45 **SALÓN DE ACTOS**
Round Table: CABUEÑES
Lectures and debate table about Hospital Universitario de Cabueñes. The process of approaching the care-related needs had a special methodology when planning the implementation of a Master Plan (Functional Plan and Basic Project). The presentation will include the process carried out for the preparation of the Functional Plan, the Master Plan and the Execution Project of Phase I, as well as the adjustments that are expected to be implemented in the remaining phases.

Moderator:
Jesús Menéndez Fernández
Engineering & Maintenance Service, Electromedicine Department
Hospital Universitario Central de Asturias

Speakers:

Do we need a new hospital? The development of the HUCAB's functional plan
Laura M. Muñoz Fernández
Managing Director. Hospital Universitario Cabueñes. Gijón

Hospital de Cabueñes project
Joaquín López Fando
Architect. López-Fando y Asociados slp.
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Thursday, October 28:

11:45-13:00 **SALA ANFITEATRO**

Round Table: INNOVATE

Presentations and debate table in order to showcase innovative projects, already implemented or already working in healthcare centres, that use infrastructures with particular requirements, designs of very specific premises or projects managed by teams of engineers with a view to disseminating among the attendees the knowledge and expertise for their enhanced planning, management, design and usage. For instance, the design of the operating rooms of the Clínic de Barcelona and the rooms where CAR-T Therapies are provided, as well as their conditions, and all the innovative projects and participations of HSJD's engineering.

Moderator:

María Simón García
Engineering & Maintenance Service. Área Sanitaria VII
Hospital Vital Alvarez Buylla. Mieres

Speakers:

New ophthalmology surgical wing

Manuel Sanz Rodríguez
Head of Biomedical Engineering, Hospital Clinic. Barcelona

Immunotherapy Unit for CAR-T cells at the Health Research Institute Principado de Asturias

Miguel Crespo Vázquez
Architect at GISPASA. Oviedo

Innovation in Health with Ferrovial Servicios

Alfonso Quiroga Ramos
Senior Managing Director of market healthcare at Ferrovial. Barcelona

The need for bioengineering in healthcare areas

Xavier Escayola Elias
Bioengineering Manager, Hospital San Joan de Deu. Barcelona

SALA GIJÓN

Moderator:

Francisco Javier Guijarro Hueso
Secretary General AEIH. Member of the Medical and Sanitary Engineering Commission of COIIM

11:45-12:15 **Presentation of Management and maintenance guide for hospital facilities**

Laura A. Gómez Delgado
Head of the Engineering and Maintenance Service of Hospital Universitario de Móstoles
Vocal de la COIIM

12:15-12:30 **INVEAT Plan: vision of the healthcare technology sector**

Pablo Crespo de la Cruz
Chief Operating Officer. COO de Fenin



Thursday, October 28:

12:45-14:30 **SALÓN DE ACTOS**

Round Table: BUILD

Lectures and debate table to present how the COVID-19 pandemic has affected and modified the design, construction and development of the healthcare infrastructures by trying to find more flexibility and to adapt them in order to provide a better response to COVID-19. Several experiences coming from diverse healthcare centres in Spain and the rest of Europe will exemplify their conclusions, innovations and lessons learned. The project of Malmo Hospital (Sweden) and the changes that have been forced or triggered by the pandemic regarding the development of the project. The project of Hospital 12 de Octubre will showcase how innovation applied to prefabricated elements has had a significant impact on the project. Furthermore, Hospital Vall D'Hebron will demonstrate the versatility and resilience of the architectural projects put in place due to COVID-19. Link Arkitektur will display the new north wing of Rijs Hospital in Copenhagen.

Moderator:

Luis González Sterling

Árgola Arquitectos. Architect, Nuevo Hospital 12 de Octubre

Speakers:

On-site total replacement process of the University Hospital 12 de Octubre in Madrid

Luis González Sterling

Árgola Arquitectos. Architect, Nuevo Hospital 12 de Octubre

New Malmö Hospital. Building the hospital of the future. Of the new future

Isabel Sánchez Gámez

Hospital Planning Facilities Infrastructures Manager. Skåne Region, Malmö Hospital Project

And now what?

Esther Tomás Martínez

Infrastructure & Systems Manager. Vall d'Hebron Hospital

Healing Architecture in a Scandinavian context

Mikael Pontoppidan

Commercial Director MA. Copenhagen

Mette Dan-Weibel

Architecture / MBA LINK / Arkitektur A/S. Copenhagen



Thursday, October 28:

13:00-14:30 **SALA ANFITEATRO**

Round Table: BIG DATA

Presentations and debate table with diverse leading-edge experts in their sector who will highlight the importance of data and how data reveal, in massive amounts and under the adequate mathematic processing, patterns and trends that allow us to be precognitive even in healthcare matters when it comes to the treatment and prevention of illnesses at early stages.

Moderator:

Francisco Vizoso Piñeiro
Research Unit Manager Fundacion Hospital de Jove

Speakers:

IA: towards a wiser medicine

Carlos María Galmarini
Topazium. Founder and CEO. Madrid

Artificial intelligence in the biomedical field

Juan Luis Fernández Martínez
Applied Maths Area Maths Department. Universidad de Oviedo

Technology as enabler of a new model of socio-sanitary care

Arkaitz Carbajo Robles
I + D Technical Manager at Grupo AMATECH. Bilbao

What can be said about artificial intelligence?

Antonio Bahamonde Rionda
Computer Science and Artificial Intelligence Professor at Universidad de Oviedo

13:30-14:30 **SALA GIJÓN**
AEIH Meeting

14:30-16:00 **Working lunch**



Thursday, October 28:

16:00-17:30 **SALÓN DE ACTOS**

Round Table: STANDARISE

Presentations and debate table that will bring attention to the importance of engineering standards, driving us to work on procedures of higher quality, thus leading us to a more collaborative and cross-sectional performance among the different teams of professionals that make up the healthcare structure. As well, we will describe the update of the standard UNE-171340 on Validation and Qualification of Controlled Environments in Hospitals (seclusion rooms, operating rooms, etc.) and how the premises can comply with this standard).

Moderator:

Fernando Gallego Rodríguez

Inspection of Services and Healthcare Centers, Head of Service
Consejería de Salud del Principado de Asturias

Speakers:

The importance of the invisible

Valentín Javier Rodríguez Martínez

Quality Certification Unit Manager of the Principado de Asturias. Oviedo

How to apply the evidence in hospital design?

Laura Cambra Rufino

PhD in Architecture EDAC

Habilitación de entornos de aislamiento cumpliendo con la UNE 171340:2020"

Fernando Feldman

I+D and Technical Director. Aire Limpio

16:00-18:30 **SALA ANFITEATRO**
Abstract sessions

16:00-18:30 **SALA GIJÓN**
Abstract sessions



Thursday, October 28:

17:30-18:30 **SALÓN DE ACTOS**

Round Table: VENTILATE

Presentations and debate table that will address current affairs topics in relation to Environmental Quality, Regulation on Thermal Installations in Buildings and post-COVID technical solutions regarding heating and air-conditioning installations in hospitals.

Moderator:

José Manuel Bravo

Maintenance & General Services Chief. Fundación Hospital de Jove. Gijón

Speakers:

New DTIE on Hospitals. The complete guide about hospital air conditioning systems

Manuel Gallardo Salazar

President of Agrupación ATECYR Andalucía. Malaga

Ventilation of hospitals: regulations and good practices

Paulino Pastor Pérez

General Manager at Ambisalud and President at FEDECAI. Madrid

Adjustment of air conditioning equipment to the "new normal" situational"

Ramón Bacardit Vallibera.

Technical Manager at DECALIMA. Torelló

21:00

Working Dinner



Friday, October 29:

09:00-10:00 **SALA ASTURIAS**
Engineering in Action Awards Table
Climate Emergency

09:00-10:00 **SALÓN DE ACTOS**
Round Table: MANAGES
Presentations and debate table that will try to find short and medium term trends with reference to the control and management of healthcare infrastructures, as well as which technologies are to be implemented or that are already put into effect, such as the IoT, regarding these systems. The advantages of management in such a heterogeneous sector consisting of outdated facilities, newly constructed, where controls come from different origins regarding their technical base or where they do not even exist.

Moderator:

Josu Jiménez Idoeta

Engineering & Maintenance Chief. Hospital Universitario Central de Asturias

Speakers:

"IoT Solutions for Smart Hospitals"

Peter Rawlins

Business Development Manager. Barbara IoT. Bilbao

Centralized energy management in healthcare

Alejandro Baragaño Rodríguez

Commercial Manager of Asturias. Veolia Services North

09:00-10:00 **SALA ANFITEATRO**
Abstract sessions

09:00-10:00 **SALA GIJÓN**
Abstract sessions

10:00-10:30 **Coffee break**



Friday, October 29:

10:30-11:45 **SALÓN DE ACTOS**

Round Table: DEVISE

Presentations and debate table that will try to find short and medium term trends with reference to the control and management of healthcare infrastructures, as well as which technologies are to be implemented or that are already put into effect, such as the IoT, regarding these systems. The advantages of management in such a heterogeneous sector consisting of outdated facilities, newly constructed, where controls come from different origins regarding their technical base or where they do not even exist.

Moderator:

Ana Cabrero López

Deputy Director General Management. Hospital 12 de Octubre. Madrid

Speakers:

The role of engineering in hospital quality audits. GECCAs experience in the Principado de Asturias

Milagros Bada Sánchez

Quality Technician at the Servicio de Calidad y Gestión Clínica

Subdirectorato for Health Services Organization. Oviedo

Servicio de Salud del Principado de Asturias

The hybrid, conventional-radiological operating room at Cabueñes Hospital

Manuel Javier Vallina Victorero

Aortic Complex Surgery Chief, Hospital Universitario de Cabueñes. Gijón

Advanced planning and 3D manufacturing unit, a multidisciplinary working reality

Sonia García San José

Deputy Manager at Hospital Gregorio Marañón

10:30-11:45 **SALA GIJÓN**

Abstract sessions



Friday, October 29:

10:30-11:45 **SALA ANFITEATRO**

Round Table: ROBOTISE

Presentations and debate table where experts in robotics applied to different environments such as surgery, laboratory, logistics or physiotherapy will address the role played by robotics from diverse perspectives. In the same vein, we will raise the challenges and opportunities offered by the sector to approach the future, which will have an increasing presence within the healthcare industry,

Moderator:

Ignacio Secades Riestra
Collaborative Robotics Group at @HispaRob

Speakers:

Intelligent robotization at the lab's service

Tomás Ortiz Chiorra
Technical Solution Design Manager. Abbott

Present and future of robotic surgery

Juan López Cazorla
National Sales Manager ABEX. Madrid

Mako SmartRobotics: Know More, Cut Less in Orthopaedics

Gauthier Croizart
Associate Manager MPS Stryek. Montpellier

11:45-13:00 **SALÓN DE ACTOS**

Round Table: OXYGENATE

Presentations and debate table where the strongest companies in the industry will showcase the latest developments, as well as the challenges to be overcome in relation to medical gas supply within healthcare environments. On this occasion, the pandemic will take centre stage.

Moderator:

Félix Ruiz de la Prada Sentmenat
Chairman of the medicinal gases commission of AFGIM

Oxygen, essential medicine in the COVID-19 pandemic

Speakers:

Luis Mosquera Madera
Southern Europe & Maghreb Hospitals Business Manager. Air Products Carbueros Metálicos. Madrid

Jon Berasategi Ordeñana
Facilities Maintenance Chief at Servicio de Salud Osakidetza. Bilbao

Fernando Prados Roa
Chief Coordinator at Hospital de Emergencias Enfermera Isabel Zendal. Madrid

Juan Bautista Godoy Prieto
Chief Engineering of the Engineering & Maintenance Service. Hospital 12 de Octubre. Madrid



Friday, October 29:

11:45-13:00 **SALA ANFITEATRO**

Round Table: (P)REPAIR

Presentations and debate table where we will address the constant evolution provided by electromedical companies in order to offer a better service when giving assistance to electromedical teams. As well, we will highlight their technology, as it translates into an enhanced and higher-quality availability of equipment and installations, as well as into a better control and availability of such installations.

Moderator:

Lorena Andrés Fernández

Engineering & Maintenance Service, Electromedicine Department
Hospital Universitario Central de Asturias

Speakers:

The holistic value of Electromedicine

Gemma Casar Sánchez

Technical Coordinator Agenor Mantenimientos. Gijón

Post-pandemic strategic resilience

Luis Noval Illana

Operations Manager GEE

The digital transformation in Services, a process accelerated by the pandemic

Carlos Jiménez Alonso

Academics Executive Leader GE. Madrid

Espacio Post Covid - The new challenge of clinical engineering

Rodrigo Gastesi Aguiar

Country Manager Spain & Portugal

13:00-14:30 **SALÓN DE ACTOS**

Closing of the 38TH AEIH SEMINAR, NATIONAL CONGRESS / 9TH IFHE-EU CONGRESS.
Engineering in Action Awards Ceremony

16:00-18:30 **NIPPON GASES site inspection visit**

NORMAGRUP site inspection visit

21:00

Closing of the 38TH AEIH SEMINAR, NATIONAL CONGRESS / 9TH IFHE-EU CONGRESS.