

38 SEMINARIO DE INGENIERÍA HOSPITALARIA  
CONGRESO NACIONAL

9TH IFHE-EU CONGRESS

Gijón 27-29 de Octubre de 2021

# ABSTRACTS AND POSTERS



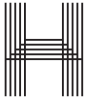
Thursday, 28 of October:

**SALA ANFITEATRO**

**Moderator:**

Asunción García Palacio  
Maintenance Manager. Gispasa

- 16:00-16:10 **The metamorphosis of a psychiatric hospital**  
Didier Bouvard
- 16:10-16:20 **Proposal for the next IHFE – EU CONGRESS**  
Anabelle Billy
- 16:20-16:30 **Behavior of sanitary equipment during the coronavirus pandemic: future experiences**  
Juan Gallostra  
JG Ingenieros. Barcelona
- 16:30-16:40 **Multipurpose surgery room for COVID and NON COVID patients**  
Carmen Carmona Gallardo  
Althaia Xarxa Assistencial Universitària de Manresa, Fundació Privada. Manresa
- 16:40-16:50 **ICU enlargement due to pandemic**  
Josu Jiménez Idoeta, Dolores Escudero, Sergio Pérez-Holanda.
- 16:50-17:00 **The industrial revolution in healthcare. Robotic systems in clinical practice**  
Jose Ramón Ledesma Aguilar, José Domingo Sanmartín Sierra, Alberto Pérez Rozos  
Servicio Andaluz de Salud (SSCC). Sevilla
- 17:00-17:10 **More with less: Hospital 4.0**  
Carlos Vives, Marc Roselló
- 17:10-17:20 **Sustainable digital plan on health emergencies**  
Sergio Atero Vázquez, Jonathan Ortiz Tirado, Bernat Farrés Cortés  
Consorci Corporació Sanitària Parc Taulí. Sabadell (Barcelona)
- 17:20-17:30 **BREATHE, Artificial intelligence system for the HVAC facilities' management control**  
Sergio Escribano Merino, Guillem Peris Sayol, Silvia Figuerola Asencio  
SENER Ingeniería. Tres Cantos, Madrid



Thursday, 28 of October:

**SALA ANFITEATRO**

**Moderator:**

Tamara García Fernández  
Architecture & Services. Gispasa

- 17:30-17:40 **Noise and age: acoustic actions in dementia clinics**  
Juan Negreira Montero, Mai-Britt Beldam, Cheol-Ho Joeng  
Saint-Gobain Ecophon. Madrid
- 17:40-17:50 **IEC vs NFPA: an electrical safety comparison in medical use premises**  
Carlos Vives, Sergio Julián
- 17:50-18:00 **Health and disinfection pairing. Dynamic lighting adapted to people with germicidal effect**  
Francesc Jordana Casamitjana, Abel Mingo  
Simon Lighting. Barcelona
- 18:00-18:10 **Control of differential pressures and air flows in infectious and immunocompromised rooms**  
Javier Aramburu Calvo  
TROX España. Zaragoza
- 18:10-18:20 **Innovation in the transfer of water treated with chlorine. Slowdown of facilities' oxidative degradation**  
Josep María Ferrer Bruach  
Italsan. Barcelona
- 18:20-18:30 **Implementation of an emergency intensive care unit within an existing exhibition space**  
Roberto Zecchin, A.Boeche, A. Cavallini



Thursday, 28 of October:

## SALA GIJÓN

### Moderator:

Javier Alonso Guerra

Shop Foreman. Hospital Universitario de Cabueñes

- 16:00-16:10 **Can the world record be broken for the setting of 7 surgery rooms in a surgical suite?**  
José Domingo Sanmartín Sierra, José Luis Arjona Sánchez, Francisco José Toro Mesa, Eduardo Barrena González, José Manuel Giraldo Estefani  
Hospital Universitario Virgen del Rocío. Sevilla
- 16:10-16:20 **Infrastructures for safety in out-of-hospital emergencies at the Serranía de Málaga health management**  
Juan Ocaña Molina, Olga María Mesa Lozano, Juan Miguel Rodríguez Cámara  
AGS Serranía de Málaga. Ronda
- 16:20-16:30 **The risk of air conditioning**  
Jaume Cortinas, Enrique Tarraga Sánchez  
4EClima. Barcelona
- 16:30-16:40 **COVID effects on the adjustment of air conditioning in intensive care units (ICU)**  
Juan Ocaña Molina, Olga María Mesa Lozano, Juan Miguel Rodríguez Cámara  
AGS Serranía de Málaga. Ronda
- 16:40-16:50 **Classical or quantum physics in healthcare institutions, that is the question**  
José Domingo Sanmartín Sierra, José Ramón Ledesma Aguilar, Alberto Pérez Roza  
Hospital Universitario Virgen del Rocío. Sevilla
- 16:50-17:00 **Disinfection of surfaces with blue LED light**  
Alba Manrique Alcanda, Juan Carlos Herrero  
DKPRO BLUELIGHT. Madrid
- 17:00-17:10 **Beyond the conventional accelerator: a review of the available technology**  
Alberto Pérez-Rozos, José Domingo Sanmartín Sierra, José Ramón Ledesma Aguilar  
Servicio Andaluz de Salud. Málaga
- 17:10-17:20 **The role of materials in the hospital environment**  
Blanca Parga Landa, Paula Aillón  
Universidad Politécnica de Madrid
- 17:20-17:30 **Use and commissioning of machines and medical equipment in hospitals environment**  
Salvador Puigdengolas Rosas  
Hospital La Fe. Valencia



Thursday, 28 of October:

**SALA GIJÓN**

**Moderator:**

Daniel Riera Pascual

Technical Engineer. Hospital Universitario de Cabueñes

- 17:30-17:40 **Humanization and well-being in hospital premises of the 21st century**  
Fabiana Ceide Gasparini, Francisco Ortega Montoliu  
Enero Arquitectura SIP. Madrid
- 17:40-17:50 **Humanization of areas for care. Architecture for the end of life**  
Albert Vitaller i Santiró, Laia Isern Meix, Paula Diaz Gutiérrez  
Vitaller Arquitectura. Barcelona
- 17:50-18:00 **Remodeling of a children s hospital to adapt to COVID and humanization protocols affecting emergency, surgical area and ambulatory major surgery (CMA)**  
Arsenio Hueros, Sofía Toledo Cabrilla  
Hueros Toledo Arquitectos. Sevilla
- 18:00-18:10 **Between functionality and urbanity. Fitting of a large hospital in the Metropolitan Area of Barcelona**  
Ricard Gratacòs Batlle  
Hospitecnia. Barcelona
- 18:10-18:20 **Wet reservoirs in healthcare: the black hole of hospital engineering**  
María Fernández Prada, María José Zapico Baragaño, María Simón  
Hospital Vital Álvarez Buylla. Mieres
- 18:20-18:30 **Presence of Hospitals Engineering: past, present and future**  
Antonio Jiménez Serrano, José Antonio Arenilla Rodríguez, José Manuel Giraldo Estefani  
Área de Gestión Sanitaria Sur de Sevilla



Friday, 29 of October:

**SALA ANFITEATRO**

**Moderator:**

José Luis Macho Álvarez

Recruitment. Hospital Universitario de Cabueñes

- 09:00-09:10 **Extract - iot in the management of hospital infrastructures and medical gases**  
Laura Gómez
- 09:10-09:20 **Digital technology in the maintenance management of the Hospital General Universitario**  
**Gregorio Marañón**  
Eva García Ventosa
- 09:20-09:30 **Asset management in hospital buildings with BIM methodology. Case of study: Hospital Universitario de Jaén**  
Francisco Javier Montiel Santiago, Manuel Jesús Hermoso Orzáez, Julio Terrados Cepeda  
Hospital Universitario de Jaén. Servicio Andaluz de Salud. Jaén
- 09:30-09:40 **Setting up a health centre (decisions and actions)**  
Marco Antonio González Cagigal, José Antonio Lora Oviedo, M<sup>a</sup> Rocío Hernández Soto  
Distrito Sanitario Aljarafe - Sevilla Norte
- 09:40-09:50 **Ambulatory minor surgery (AMC) without hospitalization and surgery rooms in primary and specialized non-hospital care centers**  
Miguel Ángel Vargas Roldán, Antonio Jiménez Serrano  
Área de Gestión Sanitaria Sur de Sevilla
- 09:50-10:00 **Neuroarchitecture applied to hospital projects**  
Clara Rius, Ramon Torrents  
Estudi PSP Arquitectura. Barcelona



Friday, 29 of October:

**SALA GIJÓN**

**Moderator:**

Germán Román Plano

Head of Group. Engineering and Maintenance Service, Hospital Universitario de Cabueñes

- 09:00-09:10 **Technical measures implemented in the emergency box to avoid contagion SARS COV2 at the Hospital Politécnico y Universitario de la Fe**  
Salvador Puigdengolas Rosas, Alfredo Cuñat Miro, Sergio Herrero Alapont  
Hospital La Fe. Valencia
- 09:10-09:20 **Book launch: Introduction to the Surgical Facilities**  
Julio Mora Larregola  
JG Ingenieros. Barcelona
- 09:20-09:30 **Hospital General Universitario Gregorio Marañón Control Center in surgical area**  
Joaquín Rodríguez-Barbero Rodrigo, Manuel Pérez Vallina, Raúl López Martínez  
Hospital General Universitario Gregorio Marañón. Madrid
- 09:30-09:40 **Characterization and standardization of disinfection using UV-C radiation**  
Luis Estrada Vena  
Luminalia, Ingeniería y Fabricación SL. Siero
- 09:40-09:50 **Setting an emergency unit within 24 hours, after a fire**  
José Alejandro Estévez Varela, Irma Ruth López Lampe  
Hospital Universitario Nuestra Señora de la Candelaria. Santa Cruz de Tenerife



Friday, 29 of October:

**SALA GIJÓN**

**Moderator:**

Manuel Asenjo Corral

Group Manager. Hospital Álvarez Buylla de Mieres

- 10:30-10:40 **Cancer cannot wait**  
Paula Gómez Vela, Fernando Reig Blanco, Aránzazu Díaz Testillano  
Vela Design ID / Vela Salvador Arquitectos SLP. Madrid. Hospital de la Princesa en Madrid
- 10:40-10:50 **Implementation of a secure procedure to access roofs and terraces of the Valencia Clínico Malvarrosa Department of Health centers**  
Laura Betoret Grancha, Cesar Rodrigo
- 10:50-11:00 **Refurbishment of areas for critical patient care. Hospital Vall d'Hebron, Barcelona**  
Eduardo Martínez Herrera  
Hospital Universitario Vall d'Hebron. Barcelona
- 11:00-11:10 **Identification of SARS-COV-2 in the air of the ICU and hospital floors with COVID-19 patients**  
Josu Jiménez Idoeta, Dolores Escudero, José Antonio Barrera
- 11:10-11:20 **Study of air conditioning systems at the Hospital Universitario de la Fe to prevent the spread of contagion via the air SARS COV2**  
Salvador Puigdemogolas Rosas, Alfredo Cuñat Miro, Sergio Herrero Alapont  
Hospital La Fe. Valencia
- 11:20-11:30 **Resistance of medical gases facilities during a pandemic situation**  
Javier Díaz de Cerio, Eider Abasolo Osinaga  
Araba Erakunde Sanitario Integratua. Vitoria
- 11:30-11:40 **Replacement of the existing generator sets at the Hospital Universitario de Jerez de la Frontera (Cádiz)**  
Francisco Jesús Reguera Gil  
Hospital Universitario de Jerez de la Frontera
- 11:40-11:50 **Effective communication? In Hospital Engineering at the Hospital Universitario de Jerez de la Frontera (Cádiz)**  
José Luis Barragán Rubia  
Hospital Universitario de Jerez de la Frontera





Friday, 29 of October:

**SALA GIJÓN**

**Moderator:**

Alejandro López Rodríguez  
Engineer Area IV Engineering & Maintenance Service

- 11:50-12:00 **Digitization of cleaning processes in hospitals**  
Roberto Valero Magdaleno  
Nueva Gestión Informática S.L. Oviedo
- 12:00-12:10 **Use and ventilation of surgery rooms with existence of sevoflurane in the healthcare field**  
Salvador Puigdengolas Rosas  
Hospital La Fe. Valencia
- 12:10-12:20 **Efficient and Safe Electric Power in Hospital Environment**  
María Nicolau  
Socomec Ibérica, S.A.U. Barcelona
- 12:20-12:30 **Evolution towards the scan process of the Asepeyo's hospitals and healthcare centers**  
Joaquín Teruel Ortega  
Asepeyo. Barcelona
- 12:30-12:40 **Interconnection for sending samples between hospitals with pneumatic transportation. Case of study: HUVN-HRT (Caleta-Cartuja)**  
Tomás Serrano  
Tiaras Granada Transporte



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**Implementation of a rest mode in surgery rooms**

Andrés Samuel López Betancort, Renato Guadalupe Rocío  
Hospital Dr. José Molina Orosa Arrecife

**Energy management service through cogeneration, a commitment to energy efficiency in the hospital field**

Ángel Luis Casas García, María Ángeles Pérez Sola, Carmen Del Sol Tamargo  
Hospital Universitario Virgen de las Nieves. Granada

**Hospital Enfermera Isabel Zenda. Origin, construction and operation of the pandemic hospital: Experiences in the design and construction.**

Emilio Gaya  
JG Ingenieros S.A. Madrid

**Collaboration of Ferrovial services at the Enfermera Isabel Zenda Emergency Hospital and the IFEMA Field Hospital**

Miguel Chaves Álvarez  
Ferrovial Servicios SA - Sanidad - Madrid

**Capacity management in COVID19**

Fernando Bergua Sevil  
Hospital Clínico Lozano Blesa. Zaragoza

**Design engineering in the treatment of enteroatmospheric fistulas**

Francisco José Calero Castro, Virginia Durán Muñoz-Cruzado, Javier Padillo Ruiz  
Hospital Universitario Virgen del Rocío. Montoro

**Vision and diagnosis of the complete management of electromedical equipment**

Antonio Jiménez Serrano  
Área de Gestión Sanitaria Sur de Sevilla

**Digitization of maintenance records using free software**

Andrés Samuel López Betancort, Renato Guadalupe Rocío  
Hospital Dr. José Molina Orosa. Arrecife