



# EICF International Conference 2026

## Conference Programme & Schedule



The EICF International Conference 2026 brings together the European and global investment casting community for two days of technical excellence, strategic insight, and industry collaboration. The programme reflects both the technological depth of the sector and the growing importance of workforce development, knowledge transfer, and organisational resilience.

The conference opens with a plenary session including an industry overview from the European Foundry Federation, followed by the keynote address from Dr. Sharon Grossman on workforce engagement and retention. Technical sessions across both days showcase advances in shell systems, melting and solidification technologies, monitoring, wax behaviour, simulation,

digitalisation, automation, and artificial intelligence.

On the second day, following a panel discussion, a dedicated Theme Seminar complements the technical programme with a practical, experience-based focus on attracting, developing and retaining talent, while safeguarding and transferring critical know-how.

### Monday, 11 May 2026

#### Plenary Session 1 (09:00 – 10:30)

09:00 – 09:05 **Conference Opening**

*Dr. Julio Aguilar*

09:05 – 09:30 **Industry Address: The Aerospace & Advanced Manufacturing Ecosystem in Seville**

*Speaker TBC*

09:30 – 10:30 **Keynote: “The HABIT Advantage: Daily Practices that Retain Talent and Accelerate Workforce Development in Foundries”**

*Dr. Sharon Grossman*

#### Parallel Sessions (11:45 to 13:15)

##### Track 1 – SHELL SYSTEMS

11:45 – 12:15 **A New Approach to Evaluate Green Shell Strength Properties to Better Understand Shell Cracking**

*Carel Wegman*

12:15 – 12:45 **Investment Casting Ceramic Shell Properties Evolution Study as a Function of Temperature**

*Sophie Lefebvre*

12:45 – 13:15 **Accelerated Backup-Layer Shell Systems Using Capillary Suspension Technology**

*Moritz Weiß*

##### Track 2 – MELTING TECHNOLOGY

11:45 – 12:15 **Automatic Evaluation System for Dross on Vacuum Precision Casting Process**

*Iñaki Vicario*

12:15 – 12:45 **Advancement of Selected Methods for Directional Solidification Control in Single-Crystal Nickel Superalloy Castings**

*Łukasz Piechowicz*

12:45 – 13:15 **Development and Performance Evaluation of Zirconia Crucibles for Superalloy Processing**

*Ronny Simon*

February 2026



# EICF International Conference 2026 Conference Programme & Schedule

**Monday, 11 May 2026 continued...**

## **Parallel Sessions (14:30 to 15:30)**

### **Track 1 – SENSOR TECHNOLOGY INLINE MONITORING**

- 14:30 – 15:00 **Enhancing Investment Casting Process Stability: A Performance Evaluation of the SlurrySense SRD with CleanWave for In-Situ Slurry Weight and Consistency Monitoring**  
*Sunil Kumar*
- 15:00 – 15:30 **An End-to-End Digital Transformation Framework for Ceramic Shelling Inspection: Integrated Image Acquisition and Deep Learning Quality Control**  
*Wenchao Tang*

### **Track 2 – INNOVATION**

- 14:30 – 15:00 **High-Performance Aluminum Aerospace Castings Using Advanced Materials, Solidification Control Methods and Tailored Heat Treatments**  
*Haize Galarraga*
- 15:00 – 15:30 **A Flexible Automation Approach for Wax Assembly in Investment Casting Using Collaborative Robots**  
*Martin Hamacher*

## **Parallel Sessions (16:00 to 17:30)**

### **Track 1 – WAX**

- 16:00 – 16:30 **A Fundamental Analysis Into The Pattern Washing of Investment Casting Waxes: How Does It Work and Can its Effectiveness Be Measured?**  
*Gavin Dooley*
- 16:30 – 17:00 **Surface Energy of Wax Patterns: The Parameters and Developments**  
*John Machielse*
- 17:00 – 17:30 **Research And Development on the Modification of Wax Pattern Surface Hydrophilicity**  
*Nicolò Ferri*

### **Track 2 – PROCESS INNOVATION TRENDS**

- 16:00 – 16:30 **Tool-Less Manufacturing in Investment Casting: Quality Analysis of MAR M247 LC Turbine Blades Using Additively Manufactured Ceramic Cores and Wax Patterns**  
*Hendrik Holling*
- 16:30 – 17:00 **Use of a Sensor for Measuring Viscosity and Temperature to Replace Manual Operation and Its Impact on Shell Quality and Labor**  
*George Salomon*
- 17:00 – 17:30 **Hot Isostatic Pressing (HIP) of Parts for Gas Turbine Applications**  
*Benjamin Ruttert*

**Tuesday, 12 May 2026**

**Plenary Session 2 (09:30 – 10:30) – Panel Discussion**

Objective: Practical, experience-based discussion on how our industry can attract, develop and retain talent, while safeguarding and transferring critical know-how. Discussion angles:

- Talent attraction and retention: what works today (and what does not)
- Bridging the generational gap: mentoring, coaching and succession planning
- Capturing and transferring know-how from experienced personnel
- Training approaches: internal academies, apprenticeships, partnerships with schools/universities
- Leadership, communication and people management in a demanding industrial environment
- The link between skills, culture and Health & Safety performance
- How digital tools and AI can support workforce development (without losing core expertise)

**Parallel Sessions (11:45 to 13:15)**

**Track 1 – CAE SIMULATION PROCESS OPTIMIZATION**

- 11:45 – 12:15 **Iterative Simulation Using ProCAST for Robust Design and Process Integration of Filling and Solidification Systems in the Manufacturing of an IN718 Investment Casting Component**  
*Fernando Santos Barrena*
- 12:15 – 12:45 **Simulation-Driven Investment Casting Using ProCAST: DOE, Optimization, and Robustness Evaluation for Porosity Reduction**  
*Kareema Khatoon*
- 12:45 – 13:15 **Interesting Facts about Selected Aspects of Investment Casting Process**  
*Jacek Nawrocki*

**Track 2 – THEME SEMINAR (Strategic & Workforce Development Stream)**

- 11:45 – 12:15 **Challenges and Opportunities of Establishing a Green-Field Investment Casting Facility in Europe**  
*Julio Aguilar*
- 12:15 – 12:45 **Process Innovation in a Green Field Facility**  
*Jacqueline Wahl*
- 12:45 – 13:15 **How AI Agents Can Preserve Foundry Know-How and Strengthen the Next-Generation Workforce**  
*Rajesh Ransing*

**Parallel Sessions (14:30 to 15:30)**

**Track 1 – AI ASSISTED DIGITAL TWIN**

- 14:30 – 15:00 **Digital Twins or Artificial Intelligence—What Does Investment Casting Need to be Well Positioned for the Future?**  
*Erik Hepp*
- 15:00 – 15:30 **Physics-Informed AI Surrogate Model for Reliable Porosity Prediction in Investment Casting**  
*Jürgen Jakumeit*

**Track 2 – THEME SEMINAR (Strategic & Workforce Development Stream)**

- 14:30 – 15:00 **Enhancing Knowledge Transfer: Innovative Methods in Teaching Technical Subjects**  
*Vladimir Krutis*
- 15:00 – 15:30 **The Role of People, Skills & Knowledge in the Growth of European Microfuzioni Aerospaziali Spa**  
*Michele Di Foggia, Simona Mele*

**Parallel Sessions (16:00 to 17:00)**

**Track 1 – IC MARKET**

- 16:00 – 16:30 **MP – Market Review: Europe, North America, China, Japan & Rest of Asia; World**  
*Carlos Olabe, TBC*

**Track 2 – THEME SEMINAR (Strategic & Workforce Development Stream)**

- 16:00 – 16:30 **Future-Proofing Manufacturing: Combining Institutional Expertise with Next-Generation Systems**  
*Jacqueline Wahl*
- 16:30 – 17:00 **Modern Investigation Methods of Ceramic Shells and Raw Materials: An Introduction for Young Scientists**  
*Teresa Rey Wojcik*

*EICF reserves the right to modify the programme and schedule without prior notice.*

February 2026