



Gathering cast iron experts for the 10<sup>th</sup> time.

12<sup>th</sup>  
AND  
13<sup>th</sup>  
APRIL

## MAIN TOPICS

- New Material Properties
- Metallurgical Control
- Advanced Research
- Production Process

HOSTS



N. MAHALINGAM  
CENTRE FOR INNOVATION AND TECHNOLOGY



Rua António da Silva Brinco, 265  
3750-122 Águeda - Portugal

**U. PORTO**  
FEUP FACULDADE DE ENGENHARIA  
UNIVERSIDADE DO PORTO



Rua Dr. Roberto Frias  
4200-465 Porto - Portugal



## PROGRAMME

12<sup>th</sup>  
APRIL

at CITNM

8:30 Get together @ Casa da Música Metro Station (Porto) and Bus Transfer to Águeda

10:00 Welcome Coffee @ Sakthi Portugal SP21

10:15 Opening Session  
Vitor Anjos (CITNM) and Carlos Silva Ribeiro (FEUP)

10:30 Welcome to Sakthi Portugal SP21  
Jorge Fesch (Chairman of CITNM and CEO & Chairman of Sakthi Portugal)

11:00 Visit to Sakthi Portugal SP21 plant

12:30 Bus Transfer to CITNM

12:50 Lunch

### ECI Meeting Session - New Material Properties

13:50 "A New High Strength Ductile Nodular Iron"  
Werner Menk (Georg Fischer)

14:10 "NHV Properties Improvement In Ductile Iron For Braking System Components"  
Inês Pereira (CITNM), Gorka Alonso (IK4-Azterlan)

14:30 "Metallurgical Advances and Novel Application of The Austempered Ductile Iron"  
Adel Nofal, Mostafa Othman (Central Metallurgical R&D Institute Egypt)

14:50 "Getting the Most of Solid Solution Strengthening and Reducing Wall Thickness Dependence of Partly Pearlitic Ductile Iron"  
Konrad Papis, Sebastian Wierschke (Georg Fischer)

15:10 Discussion on New Material Properties

15:30 Coffee break

### ECI Meeting Session - Metallurgical Control

15:50 "Evaluation of microstructure quality of isothermed ductile irons through tensile tests"  
Giuliano Angella (CNR - ICMATE), Franco Zanardi (Zanardi Fonderie S.p.A)

16:10 "Morphological developments of graphite nodules during solidification"  
Mathias K. Bjerre (Technical University of Denmark)

16:30 "Solidification monitoring by electrical resistivity measurements"  
Mitja Petrič, Sebastjan Kastelic, Primož Mrvar  
(Faculty of Natural Sciences and Engineering, University of Ljubljana)

16:50 "Modelling of Austempered Ductile Iron Properties"  
Andrzej Kochanski (Politechnika Warszawska)

17:10 Discussion on Metallurgical Control

17:30 Coffee break

17:50 Bus Transfer to Porto

19:30 Cocktail and Dinner @ Casa da Música



## PROGRAMME

13<sup>th</sup>  
APRIL

at FEUP

8:30 Get together @ Casa da Música Metro Station (Porto) and Bus Transfer to FEUP

### ECI Meeting Session - Advanced Research

9:00 "Solidification Path of Cast Iron Containing 9-10% Al as Affected by Inoculation and Dynamic Solidification"  
Adel Nofal, Mohamed Eisa (Central Metallurgical R&D Institute Egypt)

9:20 "High temperature oxidation of high-silicon SiMo nodular cast iron: study of the decarburization and oxidation coupling in dry and wet air"  
A.Ebel, L.Vaissière (Renault SA); B.Malard, J.Lacaze, D.Monceau, (CIRIMAT, Université de Toulouse)

9:40 "Primary Structure and Graphite Nodules in Thin-Walled and High-Nickel Cast Iron"  
Marcin Górny, Ewa Olejnik, Magdalena Kawalec, Gabriela Sikora, Tomasz Tokarski (AGH-University of Science and Technology)

10:00 Discussion on Advanced Research

10:20 Coffee break

### ECI Meeting Session - Production Process

10:40 "Slag Build-ups in the SGI Casting Process"  
Philippe Pinel, Aurélie Fay (FerroGlobe)

11:00 "An overview on moulding material related research and educational activities at Jönköping University, Sweden"  
József Tamás Svidró, Judit Svidró (Jönköping University)

11:20 "Reduction of BTEX emissions in green sand moulds"  
Thomas Engelhardt (Clariant, BU Functional Minerals)

11:40 Discussion on Production Process

12:00 Closing Remarks  
Carlos Silva Ribeiro (FEUP) and Vítor Anjos (CITNM)

12:30 Farewell Lunch @ FEUP

14:00 Bus Transfer to Casa da Música Metro Station





# ECI MEETING 2018 PORTUGAL

## VISIT TO SAKTHI PORTUGAL SP21



**SAKTHI**   
PORTUGAL SP21 IRON

DINNER 12<sup>TH</sup> APRIL

LUNCH 13<sup>TH</sup> APRIL



**Casa da Música**

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

Courtesy of  
Clariant BU Functional Minerals

**CLARIANT** 



**FEUP**

[www.fe.up.pt](http://www.fe.up.pt)

Courtesy of  
Fundipor

 **FUNDIPOR**





## INSTITUTIONS PRESENT AT THE EVENT

### COMPANIES

Brembo

Clariant

Edertek Technology Centre

Elkem

Ferroglobe

Foseco-Vesuvius

FNSS Defense Systems

Georg Fischer Automotive

Heraeus Electro-Nite

IK4-Azterlan

LIVAR Industries

Renault

Saint-Gobain

Sakthi Portugal

SinterCast

Volvo Group

Zanardi Fonderie

### UNIVERSITIES / RESEARCH INSTITUTES

AGH - Faculty of Foundry Engineering

Cinvestav

CIRIMAT

CITNM

CMRDI

CNR-ICMATE

Edertek

FEUP

Jönköping University

Politehnica University of Bucharest

Technical University of Denmark

Universitat de Barcelona

University of Zagreb

University of Lille

University of Ljubljana

Warsaw University of Technology

### CONTACTS

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