

# **International Zinc Die Casting Conference 2016**

# 22-23 September, Brescia, Italy

# **Final Program**

# 21 September – Park Hotel Ca'Nöa

- 17:00 Registration desk opens
- 19:00 Welcome reception

# **22 September – DIMI, Department of Mechanical and Industrial Engineering, University of Brescia**



- 09:00 Registration opens
- 10:00 Welcome word

Prof. Rodolfo Faglia, Director of the DIMI - Department of Mechanical and Industrial Engineering - University of Brescia

Prof. Maurizio Memo, Chancellor's Deputy for Research and International Affairs -University of Brescia

Dr. Frank Goodwin, IZA, Director Technology & Marked Development, USA

### Session 1: Markets and market development

10:15 New IZA zinc die casting website and brochures

Mik Gilles, IZA, Belgium

10:30 Die casting markets Europe

Didier Rollez, Grillo, Germany

Die casting markets Americas

Ryan Winters, Eastern Alloys, USA

Die casting markets Asia

Ling Tao, Nyrstar China

Die casting markets India

Sandeep Tandon and Pravin Thapar, DST Industries, India

#### 11:15 Coffee break

#### Session 2: Zinc Die casting technology

11:35 The enlighting in zinc die-casting

Didier Rollez, Grillo, Germany

11:55 Innovations in Vacuum Die Casting for Zinc Applications

Franck Gigez, Fondarex, Switzerland

- 12:15 Vacuum technology in the zinc die-casting: how to use it successfully in very demanding situations Alessandro Mambretti, Mambretti Metalli, Italy
- 12:35 Sprue reduced zinc-high pressure die-casting with hotcast®: a field report Robert Seiler, HZD, Germany
- 12:55 Additional developments and field experience with the Frech Gating System FGS Gerd Bühner, Frech, Germany

#### 13:15 Lunch

### Session 3: Alloy development

14:15 New alloy opportunities in consumer electronic applications

Frank Goodwin, IZA, USA

14:35 Optimized die casting process, the key factor for ultra-thin walled zinc parts

Mr. Martin Schlotterbeck and Dr. Norbert Erhard, Frech, Germany

14:55 Ageing and creep behavior of Zinc die casting alloys

Dr. Walter Leis, FH Aalen, Germany

15:15 Wear resistance of zinc alloys: laboratory tests and first industrial attempts

Prof. Annalisa Pola and Dr.Lorenzo Montesano, DIMI-University of Brescia, Italy

#### 15:35 Coffee break

## Session 4: Numerical casting simulation and prototyping

- 16:05 Die Casting Machine Virtualization: full injection cycle simulation for total reliability results Lorenzo Valente, Ecotre, Italy
- 16:25 Zinc die casting optimization through advanced process simulation

Andrea Panvini, PiQ2, Italy

16:55 3D printing with zinc alloy

Prof. Paolo Piccardo, UNI Genua, Italy

- 18:00 Buses depart from Park Hotel Ca'Nöa
- 18:30 Dinner event at Villa Baiana and European Zinc Die-Casting Competition Award Ceremony

# **23 September** – DIMI, Department of Mechanical and Industrial Engineering, University of Brescia

#### Session 5: Sustainable zinc die casting and circular economy

9:00 Energy efficiency in zinc die casting

Dr. Norbert Erhard and Mr. Martin Schlotterbeck, Frech, Germany

9:20 Weight reductions and thin wall casting using HF Zinc for Smart devices

Joe Annetts, Zinc die-casting consultant

9:40 Zinc die casting from a Circular Economy and LCA perspective

Sabina Grund, Initiative Zinc, Germany

10:00 Recycling in practice: performance and hurdles

Kolja Uhlig, Metallwerk Dinslaken, Germany

#### 10:20 Coffee break

#### **Session 6: Zinc die-casting competition**

10:50 Presentations by die casting competition winners

#### Session 7: Design and surface finishing

11:30 Nano coatings textures in zinc die casting

Ulrich Schwab, Föhl, Germany

11:50 PVD decorative coatings with antibacterial properties on die- casted zinc items

Dott. Michele Tosti, Protectim, Italy

12:10 Design Haptic rules

Prof.Marco Ajovalasit, Brunel University (London), UK

#### 12:30 Conclusions

12:45 Lunch

14:00 End of Conference

## Addresses:

DIMI – Dipartimento di Ingegneria Meccanica e Industriale (Department of Mechanical and Industrial Engineering)
University of Brescia
Via Branze 38
I-25123 Brescia (Italy)
www.dimi.unibs.it

Park Hotel Ca`Nöa via Triumplina 66 I-25123 Brescia (Italy) Tel. +39 030 39 87 62 http://hotelcanoa.it/

# Kindly sponsored by:











