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17. Proposed Theory on the Mechanism for Spheroidal Graphite Formation in Iron (with reviews)
   Campbell

18. A New Model for the Solidification of Ductile Iron
   Viswanathan, Samuel

19. Novel Approaches to Analyze the Structure of Ductile Iron
   Lekakh, Harris

20. Review of Microstructural Features of Chunky Graphite in Ductile Cast Irons
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Note: The table of contents does not necessarily follow the order of presentations as listed on the agenda. Only paper presentations have been published.
KEITH MILLIS SYMPOSIUM ON DUCTILE CAST IRON
October 15-17, 2013 • Loews Vanderbilt Hotel • Nashville, TN

Agenda

Tuesday, October 15, 2013

7:00 a.m.
Registration Opens (Symphony I & II Foyer)

General Session (Symphony I & II)
Session Chair: Scott Gledhill
8:00 a.m.
Keynote Address: What Would Keith Say?
Kathy Hayrynen, Applied Process Inc.

9:00 a.m.
Inter-Laboratory Study of the Determination of Nodularity and Nodule Count of Ductile Iron by Image Analysis
Serge Grenier, Rio Tinto Iron and Titanium

9:45 a.m.
Break

10:00 a.m.
The Continuing Evolution of MgFeSi Treatments for Ductile Irons
Cathrine Hartung & Ken Copi, Elkem AS

10:45 a.m.
New Inoculation Solutions Beneficial Against Chunky Graphite in Ductile Iron Castings
Michael Koch, FerroPem SAS

11:30 a.m.
Filtering a Heavy Section Ductile Iron Casting—New Opportunities
Thorsten Reuther, Hofmann Ceramic GmbH

12:00 p.m.
Lunch (Symphony III)
Session Chair: John McGoldrick

1:00 p.m.
Thermal Analysis and Process Control for Compacted Graphite Iron and Ductile Iron
Steve Dawson, SinterCast Ltd.

1:45 p.m.
Optimized Lifetime Prediction of Ductile Iron and CGI Castings
Christof Heisser, MAGMA

2:30 p.m.
Novel Approaches to Analyze the Structure of Ductile Iron
Simon Lekakh, Missouri University of Science & Technology

3:15 p.m.
Break

3:30 p.m.
Iron Turbulence Analysis via Foundry Water Model I: Introduction
Brian Pinto, FOSECO

4:15 p.m.
Experiences in Identifying and Reducing Ductile Iron Casting Defects
Al Alagarsamy, THORS

6:00 p.m.
Reception (Skylight Foyer)
Drinks and hors d’oeuvres
Wednesday, October 16, 2013

7:00 a.m.
Registration Opens (Symphony I & II Foyer)

General Session (Symphony I & II)
Session Chair: Jim Csonka

8:00 a.m.
Analysis of Pearlitic Ductile Iron with Enhanced Mechanical Properties
Rick Gundlach & John Tartaglia, Element Materials Technology

9:00 a.m.
The Effect of Copper on the Ferrite—Pearlite Ratio in Ductile Iron
Srinath Viswanathan, M3 Consultants

9:45 a.m.
Break

10:00 a.m.
Franco Zanardi, Zanardi Fonderie S.p.A.

10:45 a.m.
Advanced Fracture Mechanics Testing of Ductile Iron—A Key to Valuable Toughness Data
Wolfram Baer, BAM Federal Institute for Materials Research and Testing

11:30 a.m.
AS-Cast Ausferritic Ductile Iron
Pello Larrañaga & Urko de le Torre Ugarte, IK4-Azterlan

12:15 p.m.
Lunch (Symphony III)
Session Chair: Tom Prucha

1:15 p.m.
The STUFF Matters—Is Austempered Ductile Iron (ADI) a Green Alternative?
John “Chip” Keough, Applied Process Inc.

2:00 p.m.
The Importance of Rare Earth Contribution from Nodulizing Alloys and Their Subsequent Effect on the Inoculation of Ductile Iron
Iulian Riposan, POLITEHNICA University of Bucharest

2:45 p.m.
Optimization of Chemical Compositions of Ductile Iron
Simon Lekakh, Missouri University of Science & Technology

3:30 p.m.
Break

3:45 p.m.
Solution Strengthened Ferritic Ductile Cast Iron According DIN EN 1563: 2012—Properties, Production and Application
Wolfram Stets, Institut für Gießereitechnik gGmbH

4:30 p.m.
Intercritically Austempered Ductile Iron
Robin Foley, UAB, AL

5:15 p.m.
General Session Adjourns

6:30 p.m.
Light Reception (Symphony Ballroom Foyer)

7:30 p.m.
Dinner Banquet (Symphony II)

Badge Key Legend

- Director
- Attendee
- Staff
- Spouse
- Speaker
- Student
- Guest
Thursday, October 17, 2013

General Session (Symphony I & II)
Session Chair: Kathy Hayrynen

8:00 a.m.
Proposed Theory on the Mechanism of Spheroidal Graphite Formation in Iron
John Campbell, University of Birmingham, UK

9:30 a.m.
Break

9:45 a.m.
A New Model for the Solidification of Ductile Iron
Srinath Viswanathan, M3 Consultants

10:30 a.m.
Examining Light-Weight Runner Systems That Cut Application Problems
Matthew Shaner, Elyria Foundry Company

11:15 a.m.
Review of Microstructural Features of Chunky Graphite in Ductile Cast Irons
Jacques LaCaze, CIRIMAT, Universite de Toulouse

12:00 p.m.
Symposium Adjourns

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