

70th Annual Technical Conference & Exhibition of the Investment Casting Institute (ICI 2023)

Bridging Investment Casting Technology
for the Future

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13 – 16 August 2023

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70th ANNUAL TECHNICAL CONFERENCE & EXHIBITION

Bridging Investment Casting Technology to the Future

Receptions

Sun. 5:30 p.m.

Tues. 6:00 p.m.

Exposition

Mon. 2:30 p.m. - 6:00 p.m.

Tues. 2:30 p.m. - 5:00 p.m.

SUNDAY, AUGUST 13, 2023

3:00 p.m. - 7:30 p.m.

REGISTRATION

5:30 p.m. - 7:30 p.m.

WELCOME RECEPTION & AWARD CEREMONY

(Intern Scholarships, Innovator of The Year, Hall of Honor, Member Emeritus)

MONDAY, AUGUST 14, 2023

7:00 a.m. – 5:30 p.m.

REGISTRATION DESK

8:00 a.m. – 8:30 a.m.

WELCOME - GENERAL SESSION*Nip Singh, S&A Consulting Group, LLP, ICI Director*

8:30 a.m. – 9:30 a.m.

Keynote Address: Overcoming Organizational Adversity
Colonel Greg Gadson, *US Army*9:30 a.m. – 10:00 a.m. **BREAK**

10:00 a.m. – 10:30 a.m.

How Automation Can Be Used As An Employee Development Platform In The New
'Difficult-To-Hire and Retain' World*Aaron Phipps, MPI, Inc.***Booth #413**

1

10:30 a.m. – 11:30 a.m.

A Research and Industry Roadmap: Barriers and Opportunities for Increased,
Lower Cost Additive Manufacturing Integration for Investment Casting Foundries
Christopher Annear, Penn State Behrend

7

11:30 a.m. – 12:15 p.m.

How Is My Pattern Coating and Draining?
*Gavin Dooley, REMET UK***Booth #101**

27

12:15 p.m. – 1:00 p.m.

LUNCH

1:00 p.m. – 1:30 p.m.

Training and Recruiting High-Quality Next Generation through Industry Partnered
Competitions*Victor Okhuysen, Ph.D., Cal Poly Pomona University*

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1:30 p.m. – 2:30 p.m.

Water Shell Removal Compared to Other Methods
*Darrell Terpenning, NLB Corp.***Booth #216**

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2:30 p.m. – 6:00 p.m.

EXPO

TUESDAY, AUGUST 15, 2023

7:00 a.m. – 5:00 p.m.	REGISTRATION DESK	
8:00 a.m. – 8:15 a.m.	WELCOME - GENERAL SESSION <i>John Marcin, Raytheon Technologies Corp., ICI Director</i>	
8:15 a.m. – 9:00 a.m.	Industry 4.0 and the Foundry of Tomorrow <i>Imed Bourega, Shell-O-Matic</i>	61 Booth #213
9:00 a.m. – 9:30 a.m.	Intercoat Drying and Shell Characteristics for Investment Casting Industry <i>N. Vigneswaran, SAN Precision Alloys Private Limited</i>	65
9:30 a.m. – 10:30 a.m.	Foundry 4.0 – Shell Room Experience with SlurryTrack Inline Viscosity Monitoring and Control System <i>Dr. Sunil Kumar, Dr. Joe Goodbread, Rheonics GmbH</i>	71 Booth #506
10:30 a.m. – 10:45 a.m.	BREAK	
10:45 a.m. – 11:30 a.m.	Improved Process and Material Properties in Air Casting Applications by Means of Vacuum CAP (VAP) Furnace Process <i>Iñaki Vicario, Consarc Engineering Ltd.</i>	85 Booth #316
11:30 a.m. – 12:15 p.m.	The Cyclops Ladle <i>Jorge Arellano, POK</i>	99
12:15 p.m. - 1:00 p.m.	LUNCH	
1:00 p.m. – 1:45 p.m.	Novel Regular Ceramic Filter for The Lost Wax Applications <i>Ladislav Tomek, LANIK s.r.o.</i>	107 Booth #301
1:45 p.m. – 2:30 p.m.	Effect of Depressurization on Dimensional Expansion of Turbine Blades Casting Process <i>Lütfi Yakut, Tubitak Marmara Research Center</i>	117
2:30 p.m. – 5:00 p.m.	EXPO	
6:00 p.m. – 8:00 p.m.	RECEPTION	

WEDNESDAY, AUGUST 16, 2023

7:00 a.m. – 12:00 p.m. REGISTRATION DESK

8:00 a.m. – 8:15 a.m. **WELCOME - GENERAL SESSION***Ty Ueland, SeaCast, Inc., ICI Director*8:15 a.m. – 9:00 a.m. Advanced Electrode Melting for Highest-Purity Cast Parts
Dr. Samuel Bogner, ALD Vacuum Technologies GmbH

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Booth #1139:00 a.m. – 9:30 a.m. An Approach Utilizing Technology to Restore the Metal Casting Industry
to a New Level of Pre-eminence

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*Donald Deptowicz, Aspen Hybrid Technology Solutions LLC
ICI AM Subcommittee Chair*9:30 a.m. – 10:15 a.m. Nadcap Casting Program
Dr. Richard Freeman, PRI

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10:15 a.m. – 10:30 a.m. **BREAK**10:30 a.m. – 11:00 a.m. ICI Process Control Standards and Nadcap Casting Program
Complementary Systems with Different Objectives
Brian Ferg, Member Emeritus

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11:00 a.m. – 11:30 a.m. **CASTING CONTEST AWARDS**11:30 a.m. – 11:45 a.m. **ADJOURNMENT***Joseph Fritz, ICI Executive Director*