

November 17-18, 2016 | Las Vegas, USA | www.nitriding.info

#### **PROGRAM**

Welcome to the 4th edition of Nitriding Symposium (NS4).

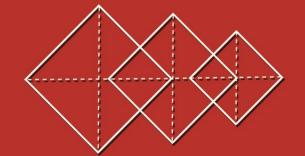
This unique event focuses on the various ways in which educational and industrial developments contribute towards enhancing the surface properties of metals through nitriding and nitrocarburizing, with benefits in practical uses and commercial realities. Symposium delegates will learn from researchers, users, and suppliers about recent developments in process technologies, advanced controls, software tools, and applications.





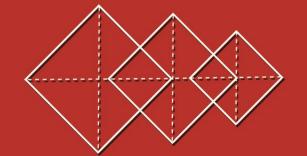






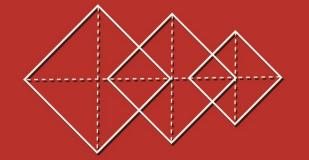
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THURSDAY	NOVEMBER 17, 2016							
8:00-9:00	Registration							
9:00-9:10	Welcome							
	CHAIR: DR. WITOLD LILIENTAL							
9:10-9:40	Mr. Shaun Radford, Continental Heat Treating Inc.  Practical Gas Nitriding of Aerospace Gears							
9:40-10:10	Mr. Jack Kalucki, Nitrex Metal Inc.	Elements of Uniformity and Reproducibility of Controlled Gas Nitriding						
10:10-10:40	Prof. Sebastien Jégou, MSMP Laboratory, Arts et Métiers ParisTech	Activation of Surfaces Prior to Gaseous Nitriding of a 3wt.% Cr Carbon Iron-based Alloy						
10:40-11:00	Coffee Break							
11:00-11:30	Mr. Jack Kalucki, Nitrex Metal Inc.	Environmentally-Friendly Depassivation and Nitriding of Stainless Steels						
11:30-12:00	Mr. Andrés Bernal, Ion Heat	Electrochemical Behavior in SBF of 316l Stainless Steel Thermochemically Treated by Ion Nitriding						
12:00-1:30	Lunch							
	CHAIR: MR. MICHEL J. KORWIN							
1:30-2:00	Mr. YoonHo Son, YuJin SMC Co., Ltd	Prediction of the Hardness Profile of Tempered & Gas Nitrided Low Alloyed Steel						
2:00-2:30	Mr. Karl-Michael Winter, Process-Electronic GmbH, a member of UPC	How to Determine Pre-nitriding Properties Based on Hardenability and Tempering Conditions – a Comparison of the Most Popular Approaches						
2:30-3:00	Mr. Cédric Dannoux, ALD Vacuum Systems Inc.	North American Introduction to Active Screen Plasma Nitriding (ASPN)						
3:00-3:15	Coffee Break							
3:15-3:45	Mr. Andrés Bernal, Ion Heat	Differences in Plasma Nitriding Technology, New Developments from Ion Heat						
3:45-4:15	Mr. Patrick Torok, United Process Controls Inc.	Solution-Oriented Approach to Nitriding / Nitrocarburizing Controls						
4:15-5:00		Discussions						
7:00-9:00		Symposium Dinner						



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FRIDAY NOVEMBER 18, 2016							
8:30-8:45	Hephaestus Award Ceremo	phaestus Award Ceremony					
	CHAIR: DR. WITOLD LILIENTAL						
8:45-9:45	Mr. Gunter Connert, EMO/CIS	Parts Cleaning Before & After Nitriding as a Value-Added Process Step					
9:45-10:15	Mr. Jack Kalucki, Nitrex Metal Inc.	Versatility and Technological Possibilities of Controlled Ferritic- Nitrocarburizing					
10:15-10:30	Coffee Break						
10:30-11:00	Mr. Karl-Michael Winter, Process-Electronic GmbH, a member of UPC	Simulation of Nitriding / Nitrocarburizing Process					
11:00-11:30	Dr. Joaquin Oseguera, ITESM	Mathematical Modeling & Simulation of the Compound Layer Growth Kinetics in Cylindrical Surfaces during Plasma Nitriding of Pure Iron					
11:30-12:30		Discussions					
12:30-12:45		End of Symposium					



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In Memoriam of our Departed Friend Dr. Kiyoshi Funatani



This year's Nitriding Symposium is in memoriam of Dr. Kiyoshi Funatani, our dear friend and colleague, who passed away earlier this year. Dr. Funatani was a distinguished expert in the nitriding community, known for his influential position in the development and industrialization of nitriding in the automotive industry. He also served as co-chairman for all past Nitriding Symposia and was among the first to receive the Hephaestus Award in recognition of his prolific work.

An enthusiastic advocate of heat treatment technology his entire life, Dr. Funatani was a high-profile figure who served as editorial member of various ASM technical committees, and provided critical and important programming support for numerous international conferences. He was also an active member of the HTS board and IFHTSE executive committee, and authored and edited/co-edited numerous journals and handbooks.

#### HEPHAESTUS AWARD

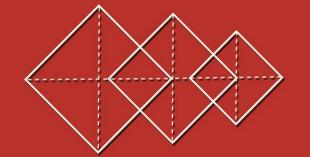


The Hephaestus Award recognizes contributions made by academic and industrial researchers and industry leaders to the field of heat treating that have had an impact on surface engineering, materials science, and industrial processes or production techniques.

2016 Hephaestus Award Recipient
Mr. John Hubbard, P.E.



The 2016 Hephaestus Award will be presented to Mr. John Hubbard, P.E., for his lifelong service and contribution to the development of heat treating worldwide. Mr. Hubbard devoted his entire career to the thermal processing industry and was a driving force behind the remarkable growth of today's largest provider of thermal processing services. He made over 200 acquisitions before retiring in 2009; but he didn't stay away for too long. Earlier this year, he came out of retirement to return to the heat-treating business, working with a private US investment firm, both as an investor and a board member.



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3799 S. Las Vegas Blvd South, Las Vegas, NV 89109 T 877.880.0880 • 702.891.1111 • www.mgmgrand.com

A map of the MGM Grand property is available on page 6.

#### **NOTES**

- Breakfast is <u>not</u> included with the symposium room block, however attendees can enjoy complementary coffee and snacks in the meeting room.
- Lunch and Dinner are included for all delegates.
- We want you to be comfortable at the symposium and evening reception, so attire is business casual.



MGM Grand is 3 kilometers from McCarran Airport. While the hotel does not offer shuttle service, independent shuttles run between the airport and hotels on the strip.

**Shuttles** are available at Terminal 1 on the west side of baggage claim, outside door exits 7-13.

At Terminal 3, shuttles are located outside on Level Zero on the west end of the building to serve domestic travelers and on the east side to accommodate international travelers. The cost for a round-trip is approximately \$14-\$17 per person.

**Taxis** are available at Terminal 1 on the east side of baggage claim, outside door exits 1-4.

At Terminal 3, taxis are conveniently located outside on Level Zero.

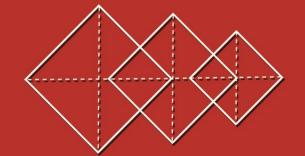
The approximate minimum fare is \$17.



Registration will take place at the MGM Grand Conference Center Level 3 on Thursday November 17 from 8-9 am. Delegates will be able to collect their name badge and conference documentation at this time.

Meeting room: 314 & 315

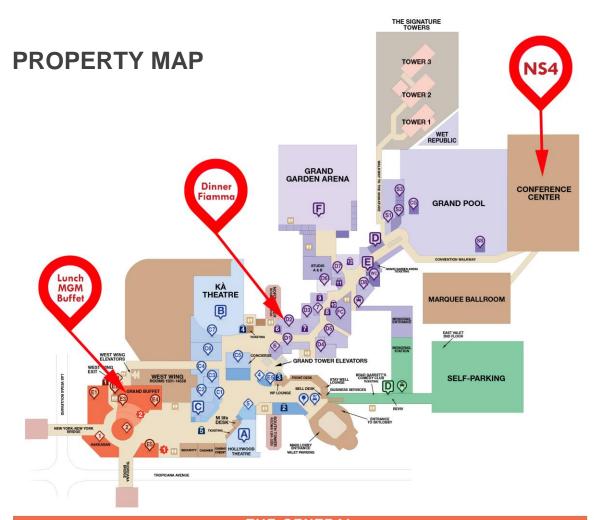
Floorplan is available on pages 7.



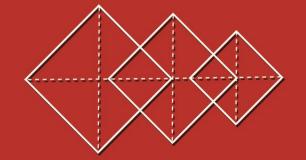
## NITRIDING

 $\overline{\mathsf{SYMPOSIUM}}$  4

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GAMING	NIGHTL	FE	RESTAURANTS			SHOPPING			EXITS	
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A Hollywood Theatre B KÀ Theatre C Beacher's Madhouse	<ul><li>Lobby Bar</li><li>Whiskey Down</li><li>Lounge &amp; Gaming</li></ul>	Breakfast-	Avenue Café G L'Atelier Breakfast Lunch Joël Rot		Atelier de Joël Robuchon  © Ne oël Robuchon		☐ MGM Grand & Company ☐ Newsstand ☐ KĀ Boutique ☐ Davidoff		© Avis Car Rental  GOLF  • Walters Golf Desk	
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RESTAURANTS				SHOPPING				- 29	TRANSPORTATION	
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@ FiAMMA Trattoria & Bar @ Pearl @ Tom Colicchio's Craftste	Blizz Frozen Yog	) Michael Mina PUB 1842 ) Blizz Frozen Yogurt ) HFCHO en Vegas			Misura OPTICA Paradiso		面 Sugar Factory 函 Jeff Mitchum Gallery		WEDDING CHAPEL  ® Forever Grand Wedding Chape	
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D Brad Garrett's Comedy C	ub Grand Candy Pearl Factory Houdini's Magic Star Magnets				Fat Tuesday Häagen-Dazs egas		New York Pretzel Project Pie Pizza	(4) Monorail		
		Las Vegas Harley-Davidson Welcome to Las V							AMENITIES	
									REVIV Med Spa	



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#### **CONFERENCE CENTER LEVEL 3 FLOORPLAN**

