



American Welding Society

Alberta Section



AWS Dinner Meeting Announcement – April 14, 2011

What Happens in the HAZ Doesn't Always Stay in the HAZ

by Dr. Kioumars Poorhaydari, Ph.D., P.Eng.

2010-2011 Executive

Joel Pepin, Chairman
joel.pepin@albertainnovates.ca

Chris Vrolyk, Vice-Chairman
chris.vrolyk@tdwilliamson.com

Dale Lesik, Treasurer
dale.lesik@atcopipelines.com

Rick Witzke, Secretary
rick.witzke@amec.com

Ken Nelson, Program Chair
ken.nelson@gov.ab.ca

Matthew Yarmuch, Special Events Chair
matthew.yarmuch@albertainnovates.ca

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p.belanger@shell.com

Wanda Griesheimer, Scholarships Chair
wanda@qualimetinc.com

Kioumars Poorhaydari, Awards Chair
kpoorhaydari@acuren.com

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bell.kurtis@gmail.com

Shawn Wylie, Publicity Co-Chair
swylie@masterflo.com

Kimberley Meszaros, Facility Coordinator
kmeszaros@masterflo.com

Adrian Gerlich, Education Co-Chair and Technical Chair
gerlich@ualberta.ca

Patricio Mendez, Education Co-Chair
pmendez@ualberta.ca

Brett Berger, Student Rep (U of A)
bberger@ualberta.ca

Christopher Lantos, Student Rep (NAIT)
chrislantos@gmail.com

Sheri Acheson, Fort McMurray Rep
acheson.sheri@syncrude.com

Jim Mitchell, Calgary Rep
jmitchell@suncor.com

Jacek Mielczarek, CATS Rep
jacek.mielczarek@huskynenergy.com

Darcy Yantz, Member-at-Large
darcy.yantz@cwbgroupp.org

James Lambert, Member-at-Large
jamesl@ludwigassociatesltd.com

Rachel Duncan, Member-at-Large
duncan.rachel@syncrude.com

Visit Our Website at:
<http://awssection.org/alberta>

Abstract

In modern high-strength steels, the main microstructural changes in the heat-affected zone (HAZ) include phase transformation, grain growth, and precipitate alterations. The degree to which these three elements affect the properties of interest is a subject of in-depth research. Also, it is of interest to know how these changes in the HAZ contribute to failures in practice. Is HAZ being justly or unjustly blamed for failures?

In the first part of this presentation, the basic properties of HAZ (with an emphasis on transformable steels) are reviewed and the main microstructural changes in the HAZ of high-strength microalloyed steels are discussed. In the second part of the presentation, an introduction to failure mechanisms related to the HAZ, as well as a few failure case studies, will be presented in brief.

About our Speaker

Kioumars Poorhaydari has been part of the failure analysis and materials testing team at Acuren Group Inc., in Edmonton, since 2006. Kioumars earned his B.Sc. (1995) and M.Sc. (1998) in Metallurgical Engineering from Sharif University of Technology in Tehran, Iran. He came to Canada for further studies, where he obtained a Ph.D. degree (2005) and took a post-doctoral fellowship (2006) in materials engineering at the University of Alberta. Kioumars has 14 publications on HAZ and base metal microstructural characterization of high-strength microalloyed steels and correlation with yield strength and hardness.

WHEN: Thursday, April 14, 2011

WHERE: University of Alberta Faculty Club, 11435 Saskatchewan Drive
(Use Parking Lot V, or Windsor Car Park, off 116 Street)

TIMES: 6:00 pm Reception, Cash Bar
6:30 pm Dinner (buffet style)
7:30 pm Presentation

COST: Members \$30.00; Non-Members \$35.00; Student Members \$10.00; Student Non-Members \$15.00. All members of AWS, CWA, ASM, NACE, SME, ASQ, STLE and CSChE will be charged as members. Cash or cheque only please.

NOTE: An AWS Welding Handbook will be given away as a door prize to one lucky student!
Also, student non-members can sign up for a one-year free AWS membership.
(Students who have received free AWS membership in the past are ineligible)

REGISTRATION:

Please confirm your attendance before April 12, 2011 by contacting:
(780) 422-4757 or by E-mailing Ken Nelson at ken.nelson@gov.ab.ca

Please state name(s), company, phone number and member affiliation when registering.

This will also be election night for the AWS Alberta Executive see attachment for current nominees and voting information.

Register Early! Limited Space!

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Executive Election for Term 2011-2013

The AWS Alberta Section will be holding their executive election at the April 14, 2011 dinner meeting. The elected positions of Chairman, Vice-Chairman, Treasurer and Secretary are for a two-year term. As AWS Members, you may nominate someone for one of these positions (with exception to Chairman). If you would like to do so before election night, please E-mail your nominations to rick.witzke@amec.com before April 12, 2011. We will also be opening the floor to nominations at the dinner meeting. In addition, there are other appointed positions available and we certainly welcome anyone to join our executive – if you are interested in joining our executive, please contact an executive member.

Current nominees are listed below:

Chris Vrolyk – Chairman (as Vice-Chairman, Chris automatically assumes the role of Chairman).

No nominee for Vice-Chairman

Dale Lesik – Treasurer

Richard Witzke – Secretary

Joel Pepin – Program Co-Chair (Past Chairman)

Ken Nelson – Program Co-Chair

Matthew Yarmuch – Special Events Chair

Patrick Belanger – Sponsorship Chair

Wanda Griesheimer – Scholarships Chair

Kioumars Poorhaydari – Awards Chair

Kurtis Bell – Publicity Chair

Shawn Wylie – Technical Chair

Adrian Gerlich – Education Co-Chair

Patricio Mendez – Education Co-Chair

Brett Berger – Student Rep (U of A)

Christopher Lantos – Student Rep (NAIT)

Kimberley Meszaros – Facility Coordinator

Jim Mitchell – Calgary Representative

Sheri Acheson – Ft. McMurray Representative

Jacek Mielczarek – CATS Representative

Darcy Yantz – Member at Large

James Lambert – Member at Large

Rachel Duncan – Member at Large

If no other nominees are brought forward at the election, the above-mentioned nominees will be voted in by acclamation.

We also wish to thank Joel Pepin for two outstanding years of leadership as Chairman of our executive. He will move into the role of Program Co-Chair, with Chris Vrolyk assuming the role as Chairman.



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2010-2011 Technical Events Schedule

DATE	SPEAKER	TOPIC	HOST	LOCATION
Sep. 24, 2010 (Friday)	Dr. H. Bhadeshia (U. of Cambridge) Dr. Eric Sjerve (IRISNDT Corp.) Dr. Michael Moles (Olympus NDT) Peter den Boer (Applus RTD) Brian Reed (Acuren Group)	AWS Fall Seminar - Advanced Ultrasonic Examination Methods for Weld Inspection	AWS	AITF Edmonton (250 Karl Clark Rd)
Oct. 22, 2010 (Friday)	Dr. Gary Fisher (AITF) Dr. Tonya Wolfe (AITF)	Workshop: Wear Overlays with a Focus on Plasma Transfer Arc Welding Applications	AWS & ASM-Cgy	AITF Calgary (3608 - 33 St NW)
Oct. 28, 2010 (Thursday)	Dick Marini (Praxair) Kevin Sloman (Praxair)	Praxair Air Separation Presentations: The How's of Industrial Gases	CWA	U of A Faculty Club
Nov. 2, 2010 (Tuesday)	Social Mixer	Alberta Night Reception at FABTECH / AWS Welding Show	AWS & U. of A. CCWJ	Hyatt Regency (Atlanta, Georgia)
Nov. 17, 2010 (Wednesday)	Jim Suggett (Imperial Oil Resources)	The Kearn Oil Sands	EATS	AITF Edmonton (250 Karl Clark Rd)
Jan. 05, 2011 (Wednesday)	Uwe Aschemeier (H. C. Nutting, a Terracon Company)	Calgary Presentation: Underwater Weld Repair	AWS & CWA Cgy	TBD
Jan. 06, 2011 (Thursday)	Uwe Aschemeier (H. C. Nutting, a Terracon Company)	Edmonton Presentation: Underwater Weld Repair	AWS & CWA Edm	U of A Faculty Club
Feb. 10, 2011 (Thursday)	Dean Phillips (ITW - Hobart Brothers Company)	Low Alloy Steel Submerged Arc Welding Consumables	AWS	U of A Faculty Club
Mar. 3, 2011 (Thursday)	Dr. Horst Cerjak (Graz University of Technology)	Joinability for Advanced Designs	AWS & ASM Edm	U of A Faculty Club
Mar. 10, 2011 (Thursday)	Matthew Yarmuch (AITF)	Welding Productivity	CWA	U of A Faculty Club
Apr. 14, 2011 (Thursday)	Dr. Kioumars Poorhaydari (Acuren)	What Happens in the HAZ Doesn't Always Stay in the HAZ	AWS	U of A Faculty Club
May 26, 2011 (Thursday)	John Bringas (Codes and Standards Training Institute)	Welder's Night & BBQ	AWS	Souch Campus

* U of A Faculty Club meetings are in the Saskatchewan Room