

## Montana Section News

### September, 2006 Chair's Message

Doug Galarus

Can you believe that summer has come and gone already? That means it's time to hit the ground running, and the Montana Section of the IEEE is running fast and furious. We have two big events coming up in October and we would like to have a strong showing of members at both. In fact, we'd like to have a strong showing of non-members (students and professionals) as well. We're going to use these two events to introduce our friends and colleagues to IEEE.

IEEE has a Member-Get-A-Member program in which you benefit from introducing new members to the IEEE. ([http://www.ieee.org/web/volunteers/membership\\_dev/mgm.html](http://www.ieee.org/web/volunteers/membership_dev/mgm.html)) Take a look at the program and if you're interested, ask your friends to follow the directions for acknowledging that you introduced them to IEEE when they apply for membership. Of course, we all benefit from introducing new members to IEEE and we welcome guests at our meetings. So, let's try to introduce some new people to the Montana Section of the IEEE through these two events.

In other news, our Section has recently been awarded PACE (Professional Activities Committees for Engineers) funding for pre-college outreach and further PACE / M-PAC (Member Professional Awareness Conference) funding for professional development.

Our "Pre-College Outreach Planning and Coordination" project seeks to determine the best means for the Section to increase awareness of engineering and science among pre-college students within our area. Our goal is to come up with a plan by the end of December that can be implemented next year for such outreach. We'd like to have your help. If you'd like to be involved with this effort, send me an email. For our professional development M-PAC, Carl Selinger, author of "Stuff You Don't Learn in Engineering School: Skills for Success in the Real World" (Wiley-IEEE Press), will be conducting a two-hour workshop in Bozeman that will be of interest to all. Admission to this workshop will be free to members and non-members, thanks to our PACE / M-PAC grant from IEEE. Thanks also go to the Western Transportation Institute for matching IEEE funding and for hosting the event. This is a must-come event. Please invite your friends and colleagues.

Finally, we need volunteers. Elections are just around the corner. If you're interested in serving as an officer, would like to volunteer in some other capacity, or would like to nominate a colleague for an officer position, please send me an email.

There will be two events in October. They will be held at different locations. Please pay careful attention to the details that follow.

### October Section Meeting #1

Thursday, October 12, 2006, 6:30 PM

@ EPS 103 on the Montana State University Campus

**Max C. Deibert**

Associate Professor of Chemical Engineering  
Montana State University

**"Fuel Cells and the Future Energy Economy"**

### October Section Meeting #2

#### Member Professional Activities Conference (Free Seminar)

Tuesday, October 17, 2006, 6:30 PM

@ Western Transportation Institute Conference Room in the old VLC Building

**Carl Selinger**

Contributing Editor, IEEE Spectrum Magazine  
Author:

**"Stuff You Don't Learn in Engineering School: Skills for Success in the Real World"**

### Life Member Meeting

If you're a Life Member, join the group at 6 p.m. just before the Section meeting on the 17<sup>th</sup>.

### Section Officers

Chair	Doug Galarus	<a href="mailto:DougGalarus@ieee.org">DougGalarus@ieee.org</a>	994-5268
Chair-elect	Richard Wolff	<a href="mailto:rwolff@montana.edu">rwolff@montana.edu</a>	994-7172
Secretary	Jason Daughenbaugh	<a href="mailto:jasond@ieee.org">jasond@ieee.org</a>	585-8892 x15
Treasurer	Arlyn Selting	<a href="mailto:arlyn@ieee.org">arlyn@ieee.org</a>	522-8118
GOLD Chair	Calvin Coopmans	<a href="mailto:Coopmans@gmail.com">Coopmans@gmail.com</a>	
Webmaster & Membership Development	Jon Koon	<a href="mailto:Jon.koon@advanced.pro">Jon.koon@advanced.pro</a>	585-8892 x13
MSU Student Branch Advisor	Rob Maher	<a href="mailto:rmaher@ee.montana.edu">rmaher@ee.montana.edu</a>	994-7759
SM Nominating Committee Chair	Don Pierre	<a href="mailto:Pierre_Don@ieee.org">Pierre_Don@ieee.org</a>	587-4065
Moose Call Editor & LM Group Chair	Bill Jameson	<a href="mailto:b.jameson@ieee.org">b.jameson@ieee.org</a>	586-0280

# IEEE

## October Montana Section Meeting #1

### Max C. Deibert

#### Associate Professor of Chemical Engineering Montana State University

#### "Fuel Cells and the Future Energy Economy"

Fuel cells will be defined and compared to conventional energy conversion devices: batteries, internal combustion engines and thermal power plant systems utilizing steam turbines. The basic operating components and types of fuel cells will be described including the advantages and technical challenges that each type currently manifests. The substantial energy economy advantages that will be realized by the development of viable fuel cell technologies will be outlined. The basis for the capital cost target of \$400/KW of fuel cell electrical generating capacity will be evaluated. An illustration will be presented of the application of solid oxide fuel cell (SOFC) modules to supply Gallatin County's (approximately) 60 MW base load using distributed 5 MW SOFC generating units. This distributed electrical generating system will be compared to the current system of electrical generation and distribution from very large thermal and hydroelectric generating facilities. The major firms currently involved in developing and marketing fuel cell systems will be identified. Models of a future energy infrastructure that includes fuel cell energy conversion systems will be presented.

**Thursday, October 12, 6:30 p.m., at EPS  
(Engineering, Physical Science) 103**

**#16 on the map to the right**

**On the Montana State University Campus**



**Free pizza & pop**

Please call Doug Galarus at 994-5268 (or e-mail: [DGalarus@coe.montana.edu](mailto:DGalarus@coe.montana.edu)) or sign up via the Section website <http://ewh.ieee.org/r6/montana> , to make reservations by noon, October 11.

# IEEE

## October Montana Section Meeting #2

### Member Professional Activities Conference

Free Seminar (Sponsored by IEEE and the Western Transportation Institute)

## Carl Selinger

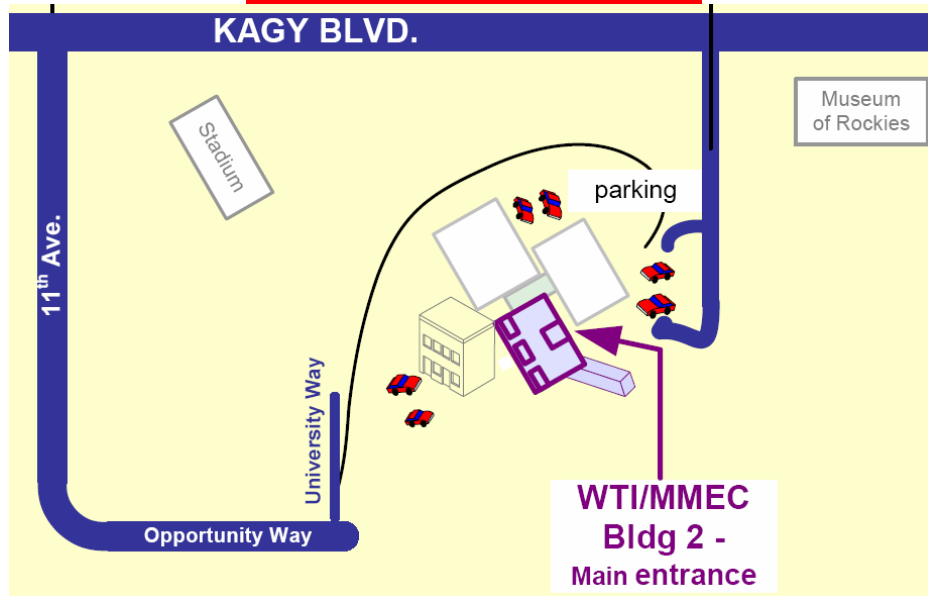
<http://www.carlselinger.com/>

Contributing Editor, IEEE Spectrum Magazine

## "Stuff You Don't Learn in Engineering School: Skills for Success in the Real World"

“Carl’s seminars, articles and book help younger engineers and emerging project managers – indeed, all professionals -- learn the non-technical soft skills that are important to be more effective and happier in the real world. These skills include making decisions, setting priorities, running meetings, speaking, writing and listening better, leading teams, dealing with stress and having fun, and understanding themselves and others.”

**Tuesday, October 17, 6:30 p.m., at WTI Conference Room**  
**In the Old VLC Building**



***Life Member Affinity Group meeting at 6:00 p.m.***

**Free pizza & pop**

Please call Doug Galarus at 994-5268 (or e-mail: [DGalarus@coe.montana.edu](mailto:DGalarus@coe.montana.edu)) or sign up via the Section website <http://ewh.ieee.org/r6/montana> , to make reservations by noon, October 16.