



American Institute of Professional Geologists Michigan Section

June 2014

From the President's Desk

The Power of Volunteerism

Many of you may have attended our 4th Annual Workshop on Environmental Issues on June 17 and 18 at the RAM Center in Roscommon, Michigan. If so, you may have noticed that the event went pretty well despite a little bad weather early on Tuesday and most of the day Wednesday, and perhaps a mix-up over where to find the ice cream.

A successful event doesn't happen by itself, it happens because a small group of individuals step forward and volunteer to make it happen. I can't say enough to express my appreciation to the people who donated their time and skills to make events like the workshop, golf outing, field trips and member meetings a joy and positive experience for our members.

In 2011, 2012, and 2013, most of the planning, organization, and implementation for the workshops were accomplished by Kevin Lund and Sara Pearson, with some input from the executive committee. This year, we did things a little differently and set up a larger committee, co-chaired by Rick Dunkin and Sara Pearson, with assistance from John Barkach, and direct assistance from members of the executive committee.

The Annual AIPG Golf Outing in Wixom this past May also was a wonderful experience for those who attended. Traditionally, this outing was the result of the hard work of two people: Kevin Lund and Bob Reichenbach. This year, Bob stepped up to take on a larger role in organizing that event, but he will be looking for helpers next year.

I want everyone to know and thoroughly understand and appreciate how much hard work goes into making these events the best experience possible for you, the attendees. There is so much that goes on behind the scenes, and we all owe a huge thank you to those people who make the effort to donate their time to run or to help organize these events year after year.

But everyone needs a break now and then, so I encourage you, our members and CPGs, to raise your hands and step up to volunteer. We welcome the influx of fresh ideas that will help us to produce quality experiences for our membership. And to be honest, our veterans can use the help from some fresh recruits so they can take a little bit of a break from "doing it all."

So, if you love golf, and want to help organize the outing next May, please tell someone on the executive committee or tell Bob Reichenbach directly – he will welcome the assistance.

If you have ideas for a field trip or have some contacts with worthy speakers, let us know and we can have you spearhead organizing an educational talk at a regular member meeting or put you with others to organize a field trip that will benefit all of us.

If you think the annual workshops are a useful tool to network or improve your skill set, give something back and volunteer to help us organize it next year.

If you like mentoring young people, get on a committee to interact with and be a liaison to one of our student chapters and help them prepare to enter the professional world.

If you think you would be up for a longer term commitment, and really want to know what goes on within AIPG, we will be soliciting nominations and volunteers for our 2015 Secretary position in the fall. Remember that this is a five year commitment, and not to be taken lightly. You are elected to the Secretary position, then advance yearly to the other positions: Treasurer, Vice President, President, and Past President. I think that everyone who has rotated through the Ex-Com considers it a rewarding experience, but one that will certainly occupy some of your time.

So, please think about all the things that are going on within your organization, and appreciate that six to eight people can't do everything we set out to do year after year. We are soliciting and will appreciate any and all of the help that our members are willing to offer. If you want to be more active in a group of

your professional peers, or if you think it will help you develop as a leader in your chosen profession, please approach one of the committee members and tell us how you would like to help. We will put you in touch with the right people. If you have an idea for something that AIPG should engage in, bring it to our attention and if it's something we can do, we will place you in a committee to make it happen.

So, don't be afraid, don't be shy. Raise your hand and help make the Michigan AIPG Chapter remain one of the most successful and relevant in the country. This is YOUR organization, and you can make it what you want it to be...you just have to raise your hand and help make it happen.

Craig Savage, CPG – 2014 Michigan Section President

Section Officers Reports

President: Information presented in the "From the President's Desk" article above.

Vice President: The Michigan Section contributed a \$1,000 grant in June 2014 to the Michigan Alliance of Environmental and Outdoor Educators (MAEOE). This enabled 80 4th and 6th graders from Pontiac Schools to spend the day and overnight at Hawk Wood learning and exploring nature.

Treasurer: No Report.

Secretary: No Report.

Past President: One of the most rewarding aspects of being a member of the Michigan Section AIPG Executive Committee is to identify opportunities to give back to our field and to encourage new membership. A large percentage of the funds that are raised each year by the Michigan Section, during the Annual AIPG Golf Outing (thanks Bob Reichenbach and Kevin Lund) and the Annual AIPG Michigan Section Workshop (thank you to all who helped with the organization), are distributed as scholarships, grants, and awards.

For the third year in a row, the Michigan Section has pledged funds totaling \$3,000 for Michigan teachers to participate in the MDNR's Academy of Natural Resources. This year, the Michigan Section sponsorship includes providing \$150/attendee for curriculum materials. Educators attending the Academy receive hands-on training from a team of professionals from Ferris State University and the Department of Environmental Quality. Michigan educators will spend a week inside and out learning about Michigan's water and energy resources and how to implement lessons in the classroom.

The Academy will be held this year on July 13-18th at the MDNR's Ralph A MacMullan Conference Center on Higgins Lake. The Academy, now in its 6th year,

is open to all educators who wish to learn more about natural resources in this week long mixture of classroom and field experiences taught by a variety of professionals.

For more information check www.michigan.gov/anr or contact ANR Coordinator Kevin Frailey at (517) 373-7306 or fraileyk@michigan.gov.

Coming Events

August 1, 2, and 3, 2014: Michigan Section AIPG field trip. Details forthcoming.

August 23, 2014: Opening of a Time Capsule in Eagle River, Michigan. The time capsule was sealed 100 years ago, and may contain some personal items that belonged to Douglas Houghton, Michigan's first State Geologist.

August or September 2014: MBGS Field Trip "Silurian and Ordovician, Eastern Upper Peninsula, Michigan." Trip to be led by Dr. Peter Voice, Michigan Geological Survey, Western Michigan University.

September 13-16, 2014: 51st Annual AIPG Meeting, Prescott, Arizona.

September 27-30, 2014: American Association of Petroleum Geologists 42nd Annual Eastern Section Meeting. The meeting will be September 27-30, 2014 in London, Ontario, Canada. Further information may be found at the meeting website: www.esaapg2014.org or contact the organizing committee at (519) 680-1620 or via email at info@esaapg2014.org.

October 2, 2014: Michigan Section AIPG Meeting, Cleary University, Howell. The USEPA will be speaking about "Recent Developments and Research in Groundwater Surface Water Interface Discharges."

Location: Johnson Center, Cleary University, Howell.

Dinner: Southern Stick to Your Ribs Comfort Buffet: Mama's Meatloaf or Baked Herbed Chicken, Mashed Potatoes, Green Bean Casserole and Macaroni Salad with Cornbread and Strawberry Shortcake for Dessert.

Schedule: Cash Bar 5:30-6:30 PM, Dinner 6:30 PM, and Speaker 7:30-9:00 PM.

Cost: Students free, Members \$30.00, Non-members \$50.00.

RSVP by September 29, 2014: RSVP for the meeting on the Eventbrite website no later than September 29th at: <https://www.eventbrite.com/e/aipg-michigan-section-meeting-tickets-12028801469>.

December 4, 2014: Michigan Section AIPG Annual Meeting and awards presentation, Weber's Inn, Ann Arbor. Meeting presentation topic TBA.

2014 Golf Outing

May 13, 2014 was great day for our Tenth Annual AIPG Michigan Chapter Golf Outing. 75 players enjoyed a day of golf and camaraderie for this year's event. Proceeds from this event continue to support our K-12 educational grants.



Team Bio Chem Lab, winner of the 2014 golf outing. Photograph courtesy of Bob Reichenbach.

The rain held off, at least for most participants, until the rounds were completed. A Low Total of 63 was posted by the Bio-Chem Laboratory foursome of Wayne DeWitt, Garnet Johnson, Katelyn DeWitt, and Rick Verstrate.

A lucky winner won a Grand Prize (32GB Microsoft Surface Tablet). The 50/50 Raffle was won by Tom Kanthe. Skill prize winners were Lynn Tucker/Rick Dunkin (Long Drives), Craig Marlow (Closest to Pin).

Our sponsors were:

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Thank you to all our sponsors. Additional thanks to Cheri DeLyon and Lori Near (Fibertec) for assisting

with registration, student volunteer Austin Jackson (U-M) for handling our "Putting for Dough" contest, Cindy Louiselle and Samantha Sage (ERG) for helping with the hole-in-one grand prize hole, team photographs. Samantha and Laura Lambert (ERG) also assisted with the raffles and awards presentation.

Thanks to all attendees.

Bob Reichenbach and Kevin Lund, Golf Outing Co-Chairs

Member Input Sought

The Section Executive Committee is seeking input from members on a variety of topics. Do you have any suggestions regarding speakers/presentation topics that you would like to hear? What about field trips or other events? Some place you'd like to see us go, or something you think the membership would enjoy doing? Then make your voice heard; please send your suggestions to one of the members of the Executive Committee; any of the six of us would be glad to hear from you. AIPG is your organization. Please help keep it relevant and interesting for all by participating.

Welcome New Members

The Michigan Section is continuing to grow. Please welcome the following new CPGs, Professional Members, Young Professional Members, Associate Members, and Students:

Cody MacDonald, Anthony Vickers, Jesse Anderson, Thomas Schumacher, Brittany Ward, Patti McCall, Mac Gaikema, Wayne Amber, Kelly Dvorak, and Daniel Landreville.

To each of our new members, the Michigan Section Executive Committee would like to welcome you to our Section, and encourage you to attend Section meetings and other events. You are also welcome to provide information for the Member's Corner articles.

Michigan Department of Environmental Quality News

MDEQ Requests Comments on New GSI Resource Materials Document

The Michigan Department of Environmental Quality (MDEQ), Remediation and Redevelopment Division (RRD) announces the publication of the DRAFT [Groundwater/Surface Water Interface Pathway Compliance Options Resource Material](#) document. This is a resource document for MDEQ's staff and contractors to provide information on options for achieving compliance with the Cleanup Criteria

Requirements for Response Activity to address the groundwater/surface water (GSI) pathway.

The RRD is requesting comments on this draft document. Please provide your comments by September 19, 2014 to:

Ms. Sara Pearson
MDEQ-RRD
P.O. Box 30426
Lansing, MI 48909-7926
PearsonS@michigan.gov

The GSI Pathway Compliance Options Resource Material document is intended to promote a consistent and informed approach for MDEQ staff, and to assist any party conducting investigations and assessing the GSI pathway to demonstrate compliance and support risk management decisions.

Sara Pearson, MDEQ RRD TAPS Team Coordinator, CPG #10650

Support our Sponsors!

The Section Executive Committee would like to remind its members to support the companies advertising in the newsletter. Consider working with these companies, and when you speak with their representatives, let them know that you saw their ad in the Michigan Section newsletter.

Newsletter Notice via E-mail

Please be sure that you continue to receive the Section newsletters and other announcements. Submit an updated e-mail address to Adam Heft at heft@pbworld.com. If you move or change places of employment, don't forget to send your new contact information to both the Section and to National. If you are not receiving announcements directly from the Editor, it is because your email address is not up to date.

Section Website Reminders

As you may have noticed, the Michigan Section is working on building a database of geologic photographs on our website. We would like to continue building this collection. Please submit photographs that you are willing to share to Adam Heft at heft@pbworld.com. Don't forget to include your name and a short explanation of what the photograph depicts. The photographs will be periodically uploaded to the website once several have been received.

If you have suggestions on other items that should be included on the History page, please let a member of the Section Executive Committee know.

The 4th Annual Michigan Section AIPG Workshop Was A Success!

The Michigan Section AIPG conducted its 4th Annual Workshop (technical conference) on June 17th and 18th along the beautiful north shore of Higgins Lake at the Ralph A. MacMullan (RAM) Conference Center. The featured topic for this conference was the Groundwater/Surface Water Interface (GSI) pathway. Historically, the GSI pathway has been a complicated pathway to understand, characterize, and demonstrate compliance, so our focus was on the science and risks associated with contaminated venting groundwater as well as ways to demonstrate compliance with regulations to help bring sites to closure.



Jon Allan presenting his keynote address. Photograph courtesy of Craig Savage.

Our Keynote speaker was Jon Allan, Director of the DEQ's Office of the Great Lakes, who provided a dynamic and engaging talk on the importance of water resources in the birth, growth and development of our Great Lakes Region and how we took water for granted and misused our greatest treasure, but now have renewed interest to better understand our water systems, their interconnections (such as the GSI), so we can protect, restore and sustain our water resources and become better users and stewards. Jon spoke to the Governor's call to develop a water strategy that is based on an ecosystem approach based on three things: healthy functional water systems, water use and enjoyment, and the quality of life it provides. He stressed that the Great Lakes region, especially Michigan, derives its sense of culture and value and has strong physical and psychological connections to our Great Lakes and other water resources that sustain our way of life, and that our work on the connection of GSI issues is key to the protection of our Great Lakes waterways, ecosystems, and our people.



Jon Allan presenting his keynote address. Photograph courtesy of Adam Heft.

Bob Wagner, Chief of the MDEQ-RRD, and Sara Pearson, RRD's TAPS Team Coordinator, then focused the workshop on the 2012 legislative changes to the State's environmental remediation program highlighting the 10 ways to evaluate and manage risks (demonstrate compliance) associated with hazardous substances and the GSI pathway. We had some excellent talks on the science of the groundwater / surface water transition zone, its complexity and interactions at streams, lakes and wetlands, its impacts on ecosystems, human health, and the fate and transport of chemicals moving from groundwater to surface water or vice versa. We were excited by the complexity of the GSI and the spatial and temporal variability of chemicals passing through it and the evidence and techniques to identify and monitor for preferential discharges. The Workshop provided the latest information from regulatory agencies, universities, industry, private consulting and law firms, including sampling techniques and project case studies.



Martin Briggs demonstrating an infrared camera that shows the temperature difference between the warm lake water, and colder inflow from a stream and groundwater seeps. Photograph courtesy of Adam Heft.

Additionally, experts from the US Geological Survey (Dr. Martin Briggs), the University of Waterloo (Dr. Brewster Conant), and a former DEQ regulator (Mark Henry, now an environmental equipment manufacturer and consultant) performed field demonstrations along scenic Higgins Lake using established methods and tools to measure water quality/quantity characteristics (e.g., pore water sampling, hydraulic head and flow measurements) and also some remote sensing technologies (thermal imaging using FLIR cameras) to observe the dynamics of the GSI.



Brewster Conant demonstrating the installation of a seepage meter near the shoreline of Higgins Lake. Photograph courtesy of Rick Dunkin.

The field demonstrations involved lakebed temperature mapping, how to install piezometers to sample pore water, and the collection of hydraulic head measurements using mini-piezometers and flow measurements using seepage meters.



Mark Henry demonstrating pore water sampling devices near the shore of Higgins Lake. Photograph courtesy of Adam Heft.

Our experts, inquisitive attendees, and the cooperation of the weather made the field demonstrations a highlight of the conference.

The food provided for the meals was, as usual, excellent. Attendees enjoyed grilled chicken for lunch on Tuesday, followed by steak or whitefish for dinner. Lunch Wednesday was hot dogs and hamburgers, and BBQ ribs or salmon for dinner. A build your own ice cream float event occurred during the afternoon break on Wednesday.



RAM Center staff grilling steaks and whitefish for the attendees dinner Tuesday evening by the shore of Higgins Lake. Photograph courtesy of Rick Dunkin.



Attendees enjoying dinner by the shore of Higgins Lake immediately prior to the field demonstrations. Photograph courtesy of Adam Heft.

The social networking event on Tuesday night was a huge success after the field demonstrations and went well into the night. Participants enjoyed spirited discussions, a variety of tasty cold beverages, and snacks. Those individuals staying at one of the nearby off-site hotels could take advantage of a shuttle service between the hotel and the RAM center.

The Workshop had a total of 204 registrants, 195 of whom attended. Most individuals were present for the entire duration of the event. A good time was had by all, and many are already looking forward to next year's workshop.



Attendees enjoying a euchre tournament during the Tuesday evening social event. Photograph courtesy of Adam Heft.



Attendees making s'mores and enjoying a bonfire during the Tuesday evening social event. Photograph courtesy of Adam Heft.

On the last day, a panel of experts from consulting, industry, and the MDEQ (Gary Klepper [Conestoga Rovers & Assoc.], Grant Trigger [Racer Trust], Mike Gerdenich [BASF Corp.], and Bob Wagner [MDEQ]) discussed their thoughts on the lessons from the presentations, including:

- The complexity of the GSI and identification of risks,
- The need for better communication and cooperative engagement between the regulators and regulated community, to include the use of less formal dialogue before developing an action plan or writing reports,
- The focus on identifying a common endpoint and real risk reduction upfront,
- The need for more investment and cost-effective techniques (e.g., up-front field screening) for site characterization,

- The use of multiple lines of evidence approach to solving problems,
- The importance of conceptual site models (CSMs).

The Michigan Section appreciates the support of 18 sponsors this year, many of whom exhibited their companies' services in the hallway or the Manistee River exhibit room, where we provided our refreshments during meeting breaks. Continuing education credits were made available to our attendees, upon request.



Sara Pearson presenting a \$100 gift card to Kimberly Tyson, one of three winners. Photograph courtesy of Adam Heft.

The workshop concluded with a drawing for three \$100 prepaid Mastercards, and eight AIPG briefcases. The drawings were made from those completing a survey about the workshop. The winners of the drawings were:

Winners of \$100 gift certificates:

- Kimberly Tyson
- Joe Walczak
- Kelly Cratsenburg

Winners of AIPG Briefcases:

- Abby Hendershott
- Joyce Dunkin
- Bob Reichenbach
- Heather Hopkins
- Beth Mead-O'Brien
- Dave Monet
- Curt Lichy
- Paul French



Sara Pearson presenting an AIPG briefcase to Bob Reichenbach, one of eight winners. Photograph courtesy of Adam Heft.

The Workshop Planning Committee consisted of co-chairs Sara Pearson and Rick Dunkin, along with AIPG MI Section Executive Committee members Craig Savage, Dawn Prell, Brian Burke, and Linda Hensel, the 2013 past-President John Barkach, and our Newsletter Editor Adam Heft.

Rick Dunkin, Workshop Co-Chair, CPG #10615, with contributions by the Editor

Member's Corner

The Member's Corner includes information about the Section's membership. This is your chance to provide information on where you are and what you are doing. Simply send the information to the Editor for inclusion in this section.

No information for the Member's Corner was provided to the Editor for this edition of the newsletter.

Employment Opportunities/Seeking Employment/Member Opportunities

To serve our members, and provide added value, the Michigan Section Executive Committee has decided to allow ads for employment or other opportunities to be posted in the Section newsletters. Employment ads will run for one edition unless renewed. There is no cost to our members or sponsors for this service. Send your employment opportunities to the Editor.

No employment opportunities were provided to the Editor for this edition of the newsletter.

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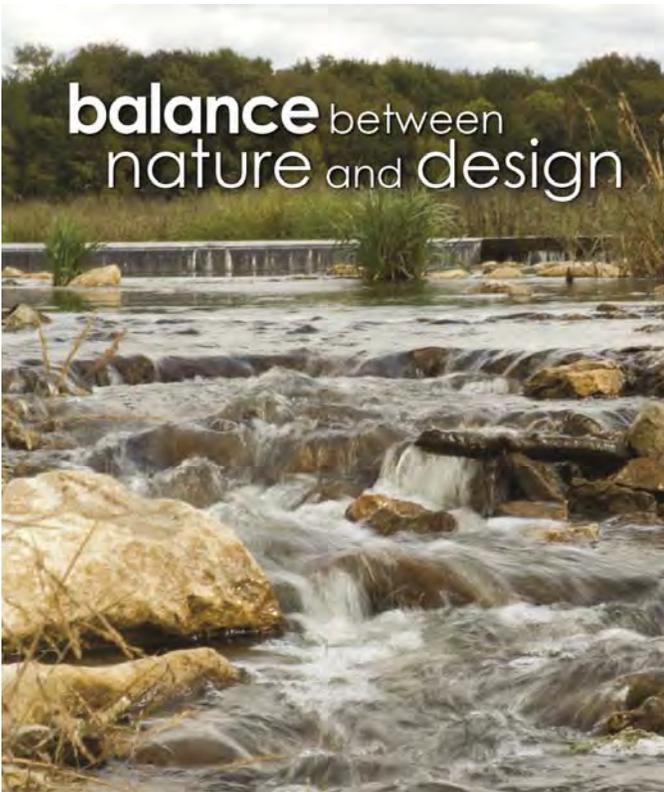
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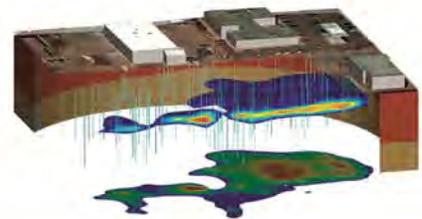
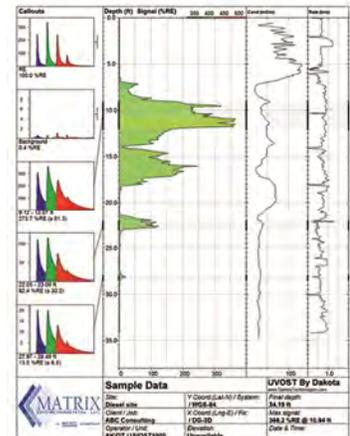
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AIPG MI Section 4th Annual Workshop GSI Characterization, Evaluation, and Compliance

Tuesday, June 17

1:00 p.m.–1:30 p.m.

A New Paradigm for GSI Pathway Compliance & Putting 10 “Options” into Perspective

Presented by: Gary Klepper and Jennifer Quigley

3:30 p.m.–4:00 p.m.

**Pore Water Characteristics as Indicators of Venting Groundwater and
Depth-Integrated Water Column Sampling (Kalamazoo River)**

Presented by: Gary Klepper and Michael Coram

Wednesday, June 18

4:00 p.m.

GSI Q&A and Viewpoints (Panel Discussion)

Presented by: Gary Klepper (CRA), Jason Lagowski (Arcadis),
Grant Trigger (Racer Trust), Bob Wagner (DEQ-RRD)

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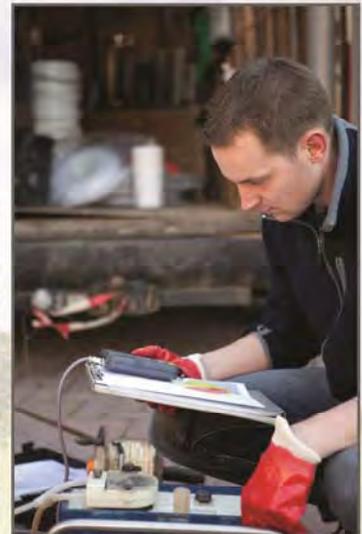


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**Michigan Chapter
American Institute of Professional Geologists
MEETING ANNOUNCEMENT**

October 2, 2014

**RECENT DEVELOPMENTS AND RESEARCH IN GROUNDWATER
SURFACE WATER INTERFACE DISCHARGES**

Featured Speaker

USEPA – TO BE DETERMINED

Location: Johnson Center, Cleary University, Howell, MI (Map attached)

Cost: Students Free, Members \$30.00, Non-members \$50.00. **Registration is payable electronically via Eventbrite (see link below) or at the door by cash or check; however, prepayment is preferred and speeds up the check-in process at the door. Please note: Cancellations made within 48 hours of the meeting and/or “No Shows” will be charged and expected to pay the registration fee.**

Dinner: Cranberry Port Chicken, Gathered Field Greens Salad with Crumbled Goad Cheese, Candied Pecans and Red Wine Vinaigrette, Chefs choice of Vegetable, rolls, butter and dessert. Vegetarian meal available upon request.

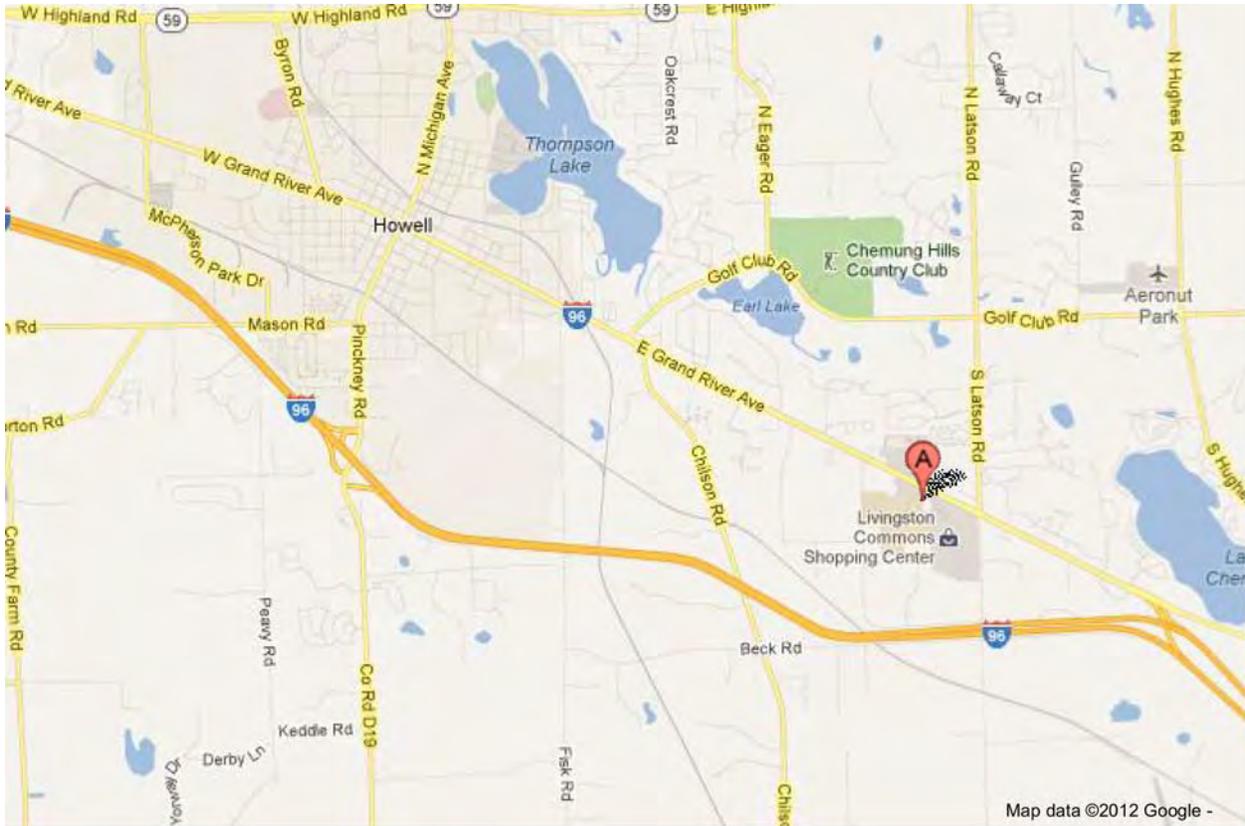
Time: Cash Bar 5:30-6:30 PM, Dinner 6:30 PM, and Speaker 7:30-9:00 PM

RSVP: On the Eventbrite website no later than April 21st at: <https://www.eventbrite.com/e/aipg-michigan-section-meeting-tickets-12028801469>. You can select your meal choice and pay online if you choose, or pay at the door by cash or check if you prefer.

Speaker Bio Forthcoming...

AIPG Section Meeting October 2, 2014

Johnson Center, Howell



From I-96 West: I-96 West to Exit #141 (Grand River), west onto Grand River. Go through the light at Latson Road, then through the next light at the Meijer entrance. Turn left onto Cleary Drive (immediately past the Meijer entrance) and follow the drive back to campus.

From I-96 East: I-96 East to Exit #137 (Michigan Avenue/D-19), north onto Michigan Avenue. Turn right on Grand River. Follow Grand River through town to Grand Oaks Drive. Turn right onto Grand Oaks, then left onto Cleary Drive; OR, go through the lights at Grand Oaks and in front of the Speedway station, and turn right onto Cleary Drive.

From M-59: (east- or westbound) South onto Latson Road; follow Latson to Grand River Avenue (2nd traffic light). Turn right onto Grand River, go through the next light (at the Meijer entrance) and make an immediate left onto Cleary Drive. Follow the drive back to the campus.