



MICHIGAN SECTION AIPG NEWSLETTER



IN THIS ISSUE

From the President's Desk

by Tim Woodburne, CPG

Geologists get to travel to really cool places...

If you are looking for travel options this year, AIPG 55th National Meeting in Colorado Springs, CO is worth considering. The 2018 National Meeting is this September 8-11 (Saturday – Tuesday) so you have time to start planning your trip and arrange time off work. The National Meeting is great because you get to see geology outside of Michigan and meet people from all over the country. In addition, you will enjoy attending the presentations and social events. Perhaps the best part of the National Meeting is the field trips that allow you to see and get a flavor of the local area. Be sure to take advantage of as many of the meeting events as you can.

How you get there will be part of the fun. If you drive, plan your route and look for some cool spots to stop and see things along the way. Or you may be able to find an inexpensive flight. Another fun option would be to take a train from Chicago to Denver, and then rent a car to Colorado Springs. Consider travelling with friends or colleagues and share the experience.

What can you expect when you are there? There are usually a wide variety of trips where you get to see and learn about the local

geology. The field trips are led by geologists who are local experts. There are several members who attend the annual meeting only for the field trips. It is interesting to learn about the local geology and see new places around the country.

The technical presentations usually cover all aspects of geology and are a good way to fulfill continuing education requirements if you need them. Or pick some to listen to that have nothing to do with your work just to enjoy something new. This is a good way to pick up something to talk about with some new friends over a tasty beverage in the evening.

The most recent National Meeting was in Nashville, TN, from September 23-26, 2017. I was fortunate to be the Michigan Section's delegate, so I had a chance to experience the meeting. For me the personal highlight was Sunday's field trip to Mammoth Cave. I learned quite a bit while attending that trip and brought back a lot of memories.

Article continues on Page 6...



Student Chapter News

See what the CMU and EMU student chapters have been up to recently.

Pages 6 and 12



Workshop Registration Open!

The Michigan Section's Workshop registration is open.

Page 16

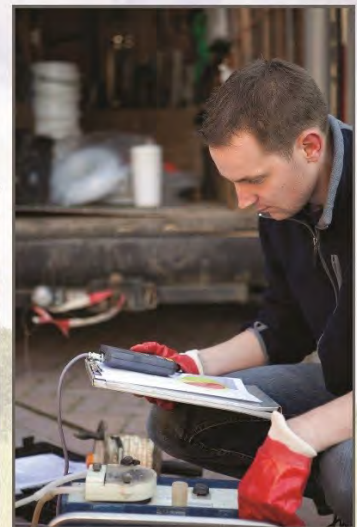


TECHNICAL SKILL .
CREATIVE SPIRIT .

Celebrating Over 55 Years of Award Winning Service

Engineering Solutions that work for your business

SURVEYING
GEOTECHNICAL ENGINEERING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL CONSULTING
CONSTRUCTION ENGINEERING



Canton, MI
(734) 397-3100

Detroit, MI
(313) 961-9500

Lansing, MI
(517) 316-9232

Monroe, MI
(734) 289-2200

Traverse City, MI
(231) 929-7330

Maumee, OH
(419) 891-2222

Columbus, OH
(614) 441-4222

Cleveland, OH
(216) 378-1490

WWW.MANNIKSMITHGROUP.COM



Geotechnical and Environmental Drilling

Since 1974 MATECO Drilling has offered ground breaking solutions on a large variety of geotechnical and environmental drilling projects throughout the United States. Staying up to date with the latest drilling technology including our rotary sonic drill and ground penetrating radar is our top priority for the success of your projects.

Let's work together. Contact us today.

www.mateco.com | info@mateco.com | 616-863-6890



- Geotechnical Drilling
- Environmental Drilling
- Sonic Drilling
- Direct Push Drilling
- Amphibious Soil Sampling
- Direct Image Testing
- Utility Location and Safe Exposure

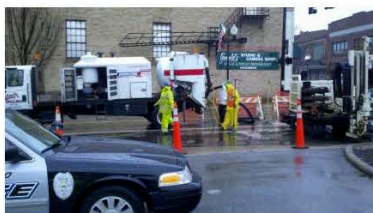
Contractor Compliant With:



STOCK DRILLING



Our Job is Boring!



DRILLING SERVICES:

- 1/2" THRU 10" WELL INSTALLATION
- 2.25" THRU 12.25" HAS DRILLING
- SONIC DRILLING 4" TO 12"
- SOLID STEM AUGER DRILLING
- MUD & AIR ROTARY
- CABLE TOOL DRILLING 4" THRU 8"
- CORE DRILLING
- GEOPROBE DRILLING GEOPROBE
- WATER SAMPLING
- HYDROPUNCH SAMPLING
- INFLATABLE PACKERS
- SCREENED AUGERS
- VERTICAL AQUIFER PROFILING
- CHEMICAL AND MECHANICAL
- WELL DEVELOPMENT & REHABILITATION
- ORC & INJECTION SERVICES WELL
- REPAIR & CLEANING WELL
- REMOVAL AND ABANDONMENT
- REMEDIATION SYSTEM
- INSTALLATION AND
- REPAIR/ABANDONMENT
- METHANE EXTRACTION POINTS
- PUMPING SYSTEM INSTALLATION,
- REPAIR & SERVICE REMOTE
- WATER PUMPING SYSTEMS
- TRENCHING AND LIGHT
- EXCAVATION SERVICES
- AIRKNIFE SERVICES

DIRECT IMAGING SERVICES:

- MIP/MIHPT/LLMIP ·HPT ·EC
- OIP/OIHPT ·LIF ·CPT
- GAMMA LOGGING
- DOWNHOLE HD VIDEO

CONTACT US AT:

RICH@STOCKDRILLING.COM

734-279-2059

734-279-2076 FAX

WWW.STOCKDRILLING.COM

-- Continued from Page 1 --

I encourage you to consider going to this year's National Meeting or to a future one if you are unable to make it this year in Colorado Springs. If you have never been to our national meeting I bet you will love the experience. You will have a great opportunity to meet people, continue to learn about geology, and listen to interesting talks and presentations.

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.

February Meeting Summary

The Section kicked off 2018 holding the first meeting at the Fetzer Center at Western Michigan University on February 15, 2018. The featured speaker was Dr. Peter Voice of the WMU Department of Geosciences, who discussed "Geologic Resources of Michigan: A Summary of Historic Production Data."



Dr. Peter Voice presenting his talk following dinner. Photo courtesy of Adam Heft.



Western and Central student contingent at the meeting. Photo courtesy of Adam Heft.

The student turnout at this meeting was impressive with nearly one-third of attendees being students. The students enjoyed networking with professionals and the subject of the talk, and many plan to attend the next meeting to be held at CMU in April.

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 members would be glad to hear from you. AIPG is your organization. Please help keep it relevant and interesting for all by participating.

Regulatory Roundup

What's the latest news from the capitol? We encourage you to stay informed and get involved. There were 76 bills introduced in 2017 to just amend Michigan's Natural Resources and Environmental Protection Act, PA 451 of 1994, as amended and several more amending the Safe Drinking Water Act and the Gas Safety Standards. Many new rules are also proposed. We have the ability to inform policy makers and shape policies affecting our profession.

It is important as professionals in the environmental industry to stay up to date on legislative changes and progress and to speak up and be heard when you have expertise to lend or a concern about the issue.

We have provided quick links to the rules and bill search capability so that you may customize the information that you are seeking. For example, if you are interested in searching for bills that have been proposed in 2017 to amend Michigan's Natural Resources and Environmental Protection Act, just click on the bill search button below with the act's name and type in 451 of 1994 in the search fields provided. All bills that have been introduced will appear.

We are also featuring a Spotlight section where we will be posting bills and administrative rules update that are moving through the legislature and likely to be passed into law. This edition's spotlight features the Michigan Department of Environmental Quality's (MDEQ's) new drinking water criteria for perfluorooctanoic acid (PFOA) [CAS # 335-67-1] and perfluorooctanesulfonic acid (PFOS) [CAS # 1763-23-1]. The [residential and nonresidential drinking water criteria](#) are 0.07 µg/L (70 parts per trillion) for the combined concentrations of PFOA and PFOS. The criteria took effect January 10, 2018

Proposed Rules

Environmental Advisory Boards

Natural Resources and Environmental Protection Act, PA 451 of 1994, as amended, bill search

Safe Drinking Water Act, PA 399 of 1976, as amended, bill search

Gas Safety Standards, PA 165 of 1969, as amended, bill search

Administrative Rules Spotlight

Residential & Nonresidential Drinking Water Criteria

CMU Student Chapter News



Fire Up Fridays

CMU hosted its first Fire Up Friday event for high school seniors who were accepted into the university! This event showcases different student organizations grouped by colleges to help high school students learn more about what CMU has to offer. There are four total Fire Up Fridays, February 16th and 23rd, as well as March 16th and 23rd. At the second Fire Up Friday we brought out a ground water model. The model was a great demonstration about what careers geology can provide. This was a great way to make our future freshmen feel more at home and give out some free rocks!



CMU students Chelsea Thibodeau, Megan Miller, Josh Cichy, and Alison Veresh at the first Fire Up Friday event. Photo courtesy of Josh Cichy.

Rock'n Bake Sale

Our most recent rock sale has been the best sale that our chapter has had in multiple years. We faced more restrictions than

Solutions in Perfect Balance

At ARCADIS, we share a single purpose to improve the environments and lives we touch. A lofty goal, but one we deliver on every day.

Between the creative and the functional, the innovative and the tried and true, the natural and the built environments, present needs and future legacy, imagination and results. We envision a better world. Then we engineer it.

Together we can do a world of good.

www.arcadis-us.com
Imagine the result



OUR SERVICES



Environmental Construction & Site Remediation

For more information, please visit jssmi.com

Contact: Derek at dmarranca@jssmi.com

- ◊ Excavation & Transportation
- ◊ Remediation System Construction
- ◊ Site Remediation
- ◊ Riverbank Restoration
- ◊ Slope Stabilization & Erosion Controls
- ◊ Sediment Removal & Stabilization
- ◊ Wetlands Construction
- ◊ UST/AST
- ◊ Landfill
- ◊ Operation & Maintenance
- ◊ HDPE Fusion Welding & Fabrication
- ◊ Air Knife, Soft Dig & Vacuum Extraction



4395 Wilder Road
Bay City, Michigan 48706
Phone: (989) 671-3318

EXPERIENCE

SAFETY

RESULTS

Since 1999



Clear Solutions for a Complex World

Tetra Tech's innovative, sustainable solutions help our clients reach

their goals for water, environment, infrastructure, resource management, energy, and international development projects.

We are proud to be home

Technical experts
 and to use
 throughout
 the cycle. Our
 to safety is
 our culture and at
 of every project.

to leading tech
 in every sector
 that expertise
 the project life
 commitment
 ingrained in o
 the forefront

Geosyntec[®]
consultants



We are
engineers, scientists
and innovators.

Providing
exceptional project
solutions related to
the environment,
natural resources,
and civil
infrastructure

Contact
Rob Ferree
3520 Green Court
Ste. 275
Ann Arbor, MI 48105
(734) 332-8004

geosyntec.com

Many Thanks to
Geosyntec Consultants
for sponsoring the
2017 AIPG Michigan
Environmental Risk
Management Workshop
as a
Superior Level Sponsor!

GEOSCAPE

EST



2010

Rock Shop




ROCKS - MINERALS - FOSSILS
JEWELRY - LANDSCAPE ROCKS

Open Weekends: Fri&Sat: 11am-7pm
Sun: 11am-5pm



37111 RED ARROW HWY,
PAW PAW, MI

 Like us on
Facebook!

before and were only able to host our sales for two days instead of five days. Despite this, we made almost \$600 dollars within two days of sales. This is compared to \$520 that we made in our previous spring sale, which lasted four days. Our success is largely due to the ability for us to accept credit cards now! We obtained a credit card reader and most people preferred to use their cards when they shopped with us. We could sell larger samples that people in the past refused to buy because we were cash-only. This has pushed us to have to make a major restock of specimens and has motivated us to have a rock sale every month instead of every semester. We are finding new methods of promotion and hope to continue having these successful sales, so we can raise funds to attend conferences and host field trips.

Future Plans

Our calendar is full with plans to continue building skills and broaden our networks. The CMU student chapter is currently planning a summer camping trip to the Upper Peninsula of Michigan. There, we plan to study basic field techniques and the rocks of the Keweenaw Supergroup. We are currently planning to visit sites within the Porcupine

Mountains, as well as visits to Pictured Rocks and Tahquamenon Falls.

Plans are also in the making to send two or more students to the 8th Annual AIPG Michigan Section Technical Workshop. Several of our members are making plans to attend and are excited for the opportunity to do so. Students enjoy attending these events as it allows these students opportunity to expand their knowledge in ways the traditional class room setting cannot.

This past fall five of our student members attended the AIPG National Conference in Nashville, TN. It was without a doubt one of the best things we have done in our college career! For most of us it was our first time being to a conference of this caliber. The atmosphere was fun and inviting and we plan to send students to Colorado Springs this upcoming Fall.

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:

Sienna Fasel, MEM-2982; Renee Soulliere, SA-9143; Regan Brandt, SA-9056; Tye

Krukowski, SA-9097; Nathan Strzelewicz, SA-9097; Raven Wright, SA-5115; Daryl Strandbergh, AS-0164; Charles Hackel, MEM-2998; Honathan Haynes, MEM-3008; Zachary Line, SA-9170; Aaron Foster, SA-9167; Michele Reaume, SA-9171; Daniel Figac, SA-9166; Andrew Grimm, SA-9168; Kara Donahue, SA-9165; Evelyn Jobe, SA-9169; and Samuel Cameron, SA-8845.

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.

Where in Michigan? Contest

The January 2018 edition of the newsletter featured a photograph of the dam and spillway in Crystal Falls; the rock is the Riverton Iron Formation. No one correctly identified the photograph.



ESC is a single location nationally certified full service environmental laboratory. We provide analyses on soil, groundwater, wastewater, drinking water, air, mold and TCLP matrices. With over 90,000 operational square feet on a single campus, nearly 24/7 staffing and redundant instrumentation for most analyses, our 250+ staff owners are prepared to meet today's challenges of large sample sets, low reporting limits and fast turnaround.

ESC is well positioned to serve as your primary laboratory resource in quality, service and capacity. Our demonstrated commitment to being the industry leader in certifications held, easy-to-use field ready sample kits and sample transport logistics has provided us many growth opportunities in major metropolitan areas as well as in the far off corners of the United States

Internet Access - Password Protected Web Site
Custom Sampling Kits
Saturday Receiving

ESC is accepting the Reduced Volume methods for Groundwater samples for PAHs, DROs, SVOCs, PCBs, & Pesticides in Michigan. Using 40 mL amber vials and/or 100 mL amber jars, these Reduced Volume methods replace the 1 liter amber bottles that have previously been used.

ESC is pleased to announce the acquisition of Outreach Laboratory. The result of this acquisition is the expansion of technologies, expertise, and capabilities of the nation's most certified and accredited laboratory to include radiochemistry testing

**NELAC, A2LA, AIHA, Corps of Engineers
DOD, EPA, USDA Certified.**

Please contact Duane Hatten (616) 307-1587 or dhatten@esclabsciences.com

ESC Lab Sciences
www.esclabsciences.com

EFFECTIVE

Vapor Barrier Systems

For Lower Total Cost-To-Closure



www.landsciencetech.com



This edition features a new photograph at the top of the first page. The first person to correctly identify what the photograph depicts (feature name, location, and formation) will win AIPG swag! Submit your entry to the Editor; only one per person per issue please.

EMU Student Chapter News

E Our student chapter, is having a very active year. With increased interest and participation, we have been able to take field trips, sell merchandise, and hold events. In November, we took a field trip to the Field Museum in Chicago, which was a great opportunity for members to see geology outside of the classroom. The Field Museum has the most complete T-Rex skeleton ever uncovered, an incredible gem room, and an expertly curated geology hall.

Chapter students regularly attend the University of Michigan's Smith Lecture series, a weekly lecture series in which Earth scientists from around the nation come to Ann Arbor and present their research. The meetings are free to attend, and we

encourage everyone with an interest in geology or Earth science to attend.

With the help of the 2017 AIPG Michigan Section grant to our chapter, we ordered reusable water bottles with the EMU Chapter logo, and a geologic time scale on the side. The sale of these bottles was a great success amongst our members and alumni alike, while generating a small amount of funding for chapter activities.



EMU student chapter officer Max Fraleigh poses with Sue the T-Rex at the Chicago Field Museum. Photo courtesy of Emily Nowacki.

In January, our chapter teamed up with our university's environmental science club, EMU GREEN Club, and brought in guest speaker and EMU alumna Megan Humphrey to talk about her experience as a geoscientist in the field of environmental consulting. The event had double the expected turnout and was a

great way for geology and environmental students to mingle. Our goal is to bring in additional speakers representing different sectors that employ geologists in order to educate our members about potential career opportunities and to increase interest in the geology major.


Our chapter will be offering two \$500 AIPG sponsored scholarships for geoscience students. The winners will be chosen by a faculty committee based on the student essays describing how the funds will be used to further their undergraduate studies (e.g. field camp attendance). Our student chapter is planning on taking a field trip to see the glacial gouging on Kelley's Island in NW Ohio at the end of March. We are all looking forward to experiencing this fantastic display of Quaternary geology that is just down the road. There have been some recent personnel changes as well. We congratulate Treasurer Matt Schiffert on graduating last semester, and we welcome Richard Merz as our new Treasurer. Additionally, Dr. Gellasch has succeeded Dr. Clark as the chapter's Faculty Advisor. We thank Dr. Clark for her mentorship and look forward to working with Dr. Gellasch on our current and future endeavors.







<http://www.cascade-environment.com>

Thank you for sponsoring
the 2017 AIPG Michigan
Environmental Risk
Management Workshop as a
Huron Level Sponsor!

Applied Water Quality and
Environmental Sciences
Since 1992



Great Lakes Environmental Center
glec.com

- Ecological Assessments
- Vibracore Sediment Sampling
- Water and Sediment Toxicity Testing
- Groundwater - Surface Water Interface Studies

• John Barkach ph:238-538-0900 jbarkach@glec.com

Field proven remediation technologies for the most challenging sites.

- *In Situ* Chemical Oxidation
- *In Situ* Chemical Reduction
- Bioremediation
- Stabilization




www.peroxychem.com/remediation



To Learn More Visit Us at VaporPin.coxcolvin.com

Advantages of the Vapor Pin® over other methods include:

Use **Coupon Code aipg17** for 10% off your next order. Valid until 3/31/2018.

- No leaks during sample collection, improving sample quality;
- Disposable seal eliminates the need for grout, increasing productivity;
- Connects easily to sampling equipment;
- Easily installed, sampled, and retrieved for reuse;
- Improves diagnostic testing, spatial resolution;
- Reduces sampling time allowing more samples for less cost.



Applications include, but are not limited to:

- Sub-slab soil gas sampling
- De-pressurization studies/testing
- Stray gas evaluations
- Source area characterization
- Mitigation progress monitoring

Vaporpin@gmail.com

HAMP MATHEWS & ASSOCIATES

<http://hampmathews.com/>

Thank you for sponsoring
the 2017 AIPG Michigan
Environmental Risk
Management Workshop as a
Huron Level Sponsor!



David A. Wardwell
President

1477 South Shore Drive
Holland, Michigan 49423
T 616.377.7043
M 616.450.5788

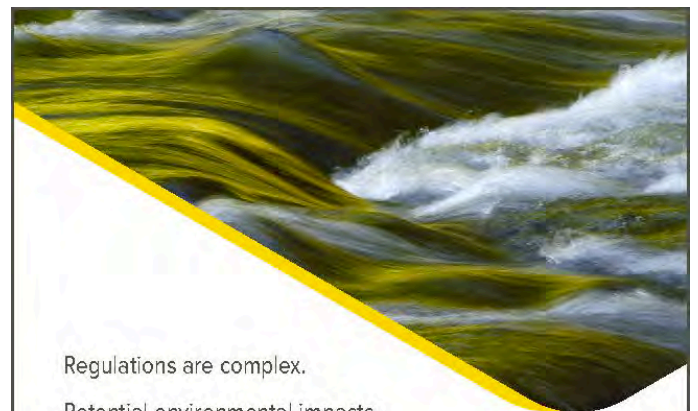
dave@dunetechnologies.com
www.dunetechnologies.com

In-Situ Remediation & Instrumentation

FONDRIEST
ENVIRONMENTAL PRODUCTS

when your
research
demands
quality data

888.426.2151 fondriest.com



Regulations are complex.

Potential environmental impacts
put your business at risk.

Getting stakeholders onboard is critical.

Environmental due diligence addresses
the issues upfront.

We thrive
on challenges

golder.com



The Choice of Environmental Professionals

Make Fibertec Your One-Stop Shop for:

Analytical Laboratory
 Geoprobe/Subsurface Investigations
 Industrial Hygiene
 Private Utility Locating
 Drum Disposal
 NELAC Accredited
 Electronic Data Deliverables (EDDs)



Holt • 517-699-0345
 Brighton • 810-220-3300
 Cadillac • 231-775-8368
 E: lab@fibertec.us
 W: www.fibertec.us



Did You Know?

This article is intended to remind members of various aspects of AIPG and benefits of membership. If there is something you would like to see featured in this column, please contact the Editor...

According to the Section 2.2 of the AIPG Bylaws, "The categories of Members shall be: Certified Professional Geologist (CPG), Nationally Accredited Professional Geologist (NAPG), Honorary Member, Professional Member, Young Professional Member, Emeritus Member, and Non-Practicing Member."

Section 2.3.6 states, "A Certified Member may be designated "Emeritus" upon request at the age of 65 or older, provided that the Member is no longer actively engaged in the practice of geology for financial gain on a full-time basis. An Emeritus Member may be paid for the occasional professional opinion. The Executive Committee shall have the authority to reduce or waive dues payments for Emeritus Members, individually or as a category."

Section 2.7.2 states, "A Member or Adjunct shall be suspended for failure to pay dues or other amounts owing to the Institute by or

within a period of time specified by the Executive Committee after the due date thereof, and shall be notified of the suspension. Upon such notice, all privileges shall be suspended until such obligations have been satisfied. If such obligations have not been satisfied within a period of time fixed by the Executive Committee, a Member or Adjunct may be terminated by the Executive Committee "with prejudice," meaning that the person has not fulfilled the responsibilities and obligations of a Member or Adjunct. Such termination may be recategorized as being "without prejudice" if the individual meets any outstanding obligations, but elects not to remain a Member or Adjunct, within a period of time determined by the Executive Committee."

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 adam.heft@wsp.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 building a database of geologic photographs on our website. Please submit photographs that you are willing to share to Adam Heft at adam.heft@wsp.com. Don't forget to include your name and a short explanation of what the photograph depicts. The photographs will be uploaded to the website periodically.

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.

Interesting Geology Links

The Editor has received links to various interesting geology-related sites. Some of the more interesting links are included here. If you have any links to geology-related links that you would like to share, please forward them (with a citation, if applicable) to the Editor.

Thanks to Mark Francek of Central Michigan University for sharing via the "Earth Science Site of the Week" emails.

Dinosaurs Might Not Be Extinct Had the Asteroid Struck Elsewhere:

<https://www.nytimes.com/2017/11/09/science/dinosaurs-asteroid-chicxulub-extinction.html?smid=tw-nytimes&smtp=cur>

How Does Geoscience Affect Your State?

<https://www.americangeosciences.org/policy/factsheet/states>

Employment Opportunities

To serve our members, and provide added value, the Michigan Section posts ads for employment or other opportunities 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.

Seeking Employment:

My name is Mac Gaikema, and I am a graduate of Central Michigan University with a BS in geology. I am seeking a position as an entry level geologist, environmental scientist, or environmental consultant. I am located in Ann Arbor, MI. I have various experience with environmental field equipment as well as level 1 site assessments. I am proficient in Microsoft Word and Excel, as well as SampleTracker and ElmTree engineering software. My email address is gaikem1mg@cmich.edu and my cell number is 269-430-7093.

Employment Opportunity:

WSP is currently initiating a search for a Supervising Hydrogeologist/Environmental Engineer for our Detroit, Lansing, or Kalamazoo office. The minimum qualifications for this position include:

- 10 years of experience as a hydrogeological specialist with experience in the engineering consulting industry an asset
- Licensed PE or PG or eligibility in Michigan
- Experience completing hydrogeological and environmental investigations or monitoring programs
- Knowledge and experience in field practices, site investigation and characterization techniques, including

environmental management principles and regulations

- Ability to work in a fast-paced environment with flexibility to work on a variety of projects, tasks and assignments at one time, responding easily to changing priorities
- Excellent English (verbal /written) communication skills

No Members Corner articles were received for this edition of the newsletter.

2018 Michigan Section Executive Committee

Here are the current officers of the Michigan Section. Be sure to talk with them at the Section's events when you see them...

2018 AIPG Michigan Section Executive Committee



Past President
Linda Hensel



President
Tim Woodburne



Vice President
Amy Hoeskema



Treasurer
Sara Pearson



Secretary
Bill Mitchell



Newsletter Editor
Adam Heft

- Some travel will be required
- Working knowledge of Microsoft Office products
- Must have access to a vehicle and a valid driver's license

Additional information regarding this posting is available at:

http://search.smartsearchonline.com/pb/jobs/jobdetails.asp?reg=US¤t_page=1&site=int&city=&location=&job_type=&emp_status=®ion=&country=&k1=&k2=&k3=&k4=&k5=&k6=&k7=&k8=&salary_min=&co_num=&apply=yes&job_number=36697&pagename=process_jobsearchUS

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.

Coming Events

April 10, 2018: MDEQ Volatilization to Indoor Air Pathway (VIAP) Workshop, Crowne Plaza, Grand Rapids. Register for the workshop at: http://www.michigan.gov/deq/0,4561,7-135-3308_3333-459064--,00.html.

April 12, 2018: AGI/AIPG Geoscience Online Learning Webinar on Professionalism and Geoeconomics: Creating a Workplace Environment Where Everyone Can Succeed. Cost for students is \$20, CPGs is \$65, AIPG members \$75, non-members is \$90 and for a college class is \$100. Link to online registration is: <http://crm.americangeosciences.org/civicrm/event/register?reset=1&id=101>.

April 12, 2018: Michigan Section AIPG Meeting, University Center of Central Michigan University, Mt. Pleasant. Stephan Hlohowskyj, Ph.D. student, will be speaking on "A Geologist's Journey to the Galapagos: How the Climate Influences Geochemistry."

Dinner: Buffet style dinner and choice of desert.

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 April 9, 2018: RSVP for the meeting on the Eventbrite website at: <https://www.eventbrite.com/e/a-geologists-journey-to-the-galapagos-how-climate-influences-geochemistry-tickets-44123819532>.

April 13, 2018: MDEQ Volatilization to Indoor Air Pathway (VIAP) Workshop, Lansing Community College West Campus, Lansing. Register for the workshop at: http://www.michigan.gov/deq/0,4561,7-135-3308_3333-459064--,00.html.

April 17, 2018: MDEQ Volatilization to Indoor Air Pathway (VIAP) Workshop, Holiday Inn, Ann Arbor. Register for the workshop at: http://www.michigan.gov/deq/0,4561,7-135-3308_3333-459064--,00.html.

April 25, 2018: IL/IN Section Meeting at the Morton Arboretum in Lisle, IL.

May 4-6, 2018: Kalamazoo Rock and Mineral Show. Kalamazoo County Expo Center, 2900 Lake Street, Kalamazoo. Information at www.kalamazoorockclub.org.

May 15, 2018: Michigan Section AIPG Golf Outing, Moose Ridge Golf Course, South Lyon. Details in the attached flyer and on the Section website.

June 12-13, 2018: Annual Michigan Section Technical Workshop – Environmental Risk Assessment: Emerging Contaminants and Pathways: A New Paradigm. At the Ralph A. MacMullan Conference Center in Roscommon, MI. Registration is open! Check out the Section website at: <http://mi.aipg.org/workshop.htm> for additional information.

June 16-21, 2018: Resources for Future Generations: Energy – Minerals – Water – Earth. Vancouver, Canada.

September 8-11 2018: 55th Annual AIPG Meeting to be held in Colorado Springs, CO.

September, 2018: Joint Michigan Section AIPG and MAEP meeting. Location, meeting topic, and date TBD.

November 29, 2018: Michigan Section AIPG Annual Meeting, Weber's Inn, Ann Arbor.

Fall 2019: 56th Annual AIPG Meeting to be held in the Burlington, Vermont; dates TBD.

Fall 2020: 57th Annual AIPG Meeting to be held in Sacramento, California; dates TBD.

Fall 2021: 58th Annual AIPG Meeting to be held in Marquette, Michigan; dates TBD.




PROVIDING SUSTAINABLE SOLUTIONS FOR DEVELOPMENT, CONSTRUCTION, RESTORATION AND REDEVELOPMENT CHALLENGES FOR OVER 50 YEARS

Passionate People Building and Revitalizing our World

(800) 837-8800
www.sme-usa.com
Indiana • Michigan • Ohio

NTH Consultants, Ltd.
Proudly Celebrates



50
NTH
est. 1968

50 Years of Engineering Excellence



**High Resolution
NAPL Characterization
Since 1993**

UVOST®

TarGOST®

Darts™

DyeLIF™

learn more at www.dakotatechnologies.com



Service from a larger **footprint**

Conestoga-Rovers & Associates (CRA) and GHD have come together in an exciting merger unparalleled in our industry

We have joined together to create a global leader in engineering, environmental consulting, architecture, and construction services

For more information about GHD, visit **www.ghd.com**



Specializing in engineering services vital to our community and quality of life.

- Environmental Engineering
- Construction Testing
- Civil Engineering
- Geotechnical Engineering
- Structural Engineering
- UVOST Services

660 Woodward Avenue
Suite 2430
Detroit, Michigan 48226

313.963.2721
www.somateng.com

Detroit ■ Taylor ■ Grand Rapids ■ Cleveland ■ Brooklyn Heights ■ Beltsville ■ Washington, DC

Many Thanks to
Somat Engineering
for sponsoring the
2017 AIPG Michigan
Environmental Risk Management Workshop
as a
Superior Level Sponsor!

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

April 12, 2018

**A GEOLOGIST'S JOURNEY TO THE GALÁPAGOS; HOW THE CLIMATE INFLUENCES
GEOCHEMISTRY**

Featured Speaker

[Stephan Hlohowskyj, Ph.D. Student, Department of Earth & Atmospheric Sciences, CMU](#)

Location: University Center, Central Michigan University, 103 East Preston Street, Mt. Pleasant, MI 48859 (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: Buffet style dinner with choice of desert.

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 9th at:
Select your payment option.

[Register Here](#) 

Abstract: The Galápagos archipelago is an excellent natural laboratory for a variety of scientific inquiries from geochemistry to paleoclimatology, and of course evolutionary biology. Located in the Eastern Pacific along the equator about 1000 km west of the Ecuadorian mainland, the archipelago consists of 21 unique islands. The endemic flora and fauna of the Galápagos have evolved with two distinct seasons; hot and rainy from January to mid-May, and a cool dry from June to December. These seasons are exaggerated every 2-7 years by the El Niño Southern Oscillation (ENSO), when above average warm (rainy) or cool (dry) ocean temperatures occur. One of the most important drivers of climate in the Pacific Ocean, ENSO is a complex interplay between oceanic and atmospheric processes on a global scale. This phenomenon affects the islands in drastic ways; for example, during El Niño (warm ocean temperatures) nutrient rich upwelling water is reduced causing significant die-offs of plankton, seabirds, large mammals, and fish.

Due to the location and effects of ENSO, the Galápagos offer a unique opportunity to study climate variability since there are many climate sensitive coral, lake, and geochemical archives responding to oceanic temperature changes. However, a lack of accurate climate records, long term observations, and model data have made interpreting Holocene climate variability very difficult. To solve this problem our team traveled to the Galápagos on three separate research excursions between 2015 and 2016 to collect samples, install monitoring equipment, and measure the intensity of ENSO. Using geochemical tools our research has been able to develop several new climate records using coral reefs, lakes, and sediment records.

Speaker Bio: Stephan Hlohowskyj is currently a PhD student and member of the STARLAB at Central Michigan University in the department of Earth and Atmospheric Sciences. His dissertation research focuses on trace metal molecular geochemistry. He has a bachelor's degree in Geology from the University of Nevada Las Vegas and a Master of Science in Soil and Water Science from the University of California, Riverside. Prior to returning to school at CMU, he worked as a laboratory manager in a paleoclimate science lab at the University of Arizona Geosciences department, and as a staff research associate at the University of California Santa Barbara Earth Sciences department. His research interests include exploring how redox sensitive trace metals cycle in environment, and how trace metals have been preserved in the geologic past. Through his investigations he has traveled around the world, from the tropical pacific Galapagos islands, to the Canadian Rocky Mountains to extreme desert environments in Death Valley California. To date his research has been published in the scientific journals, Chemical Geology and Paleoceanography.

AIPG Michigan Section Meeting April 12, 2018

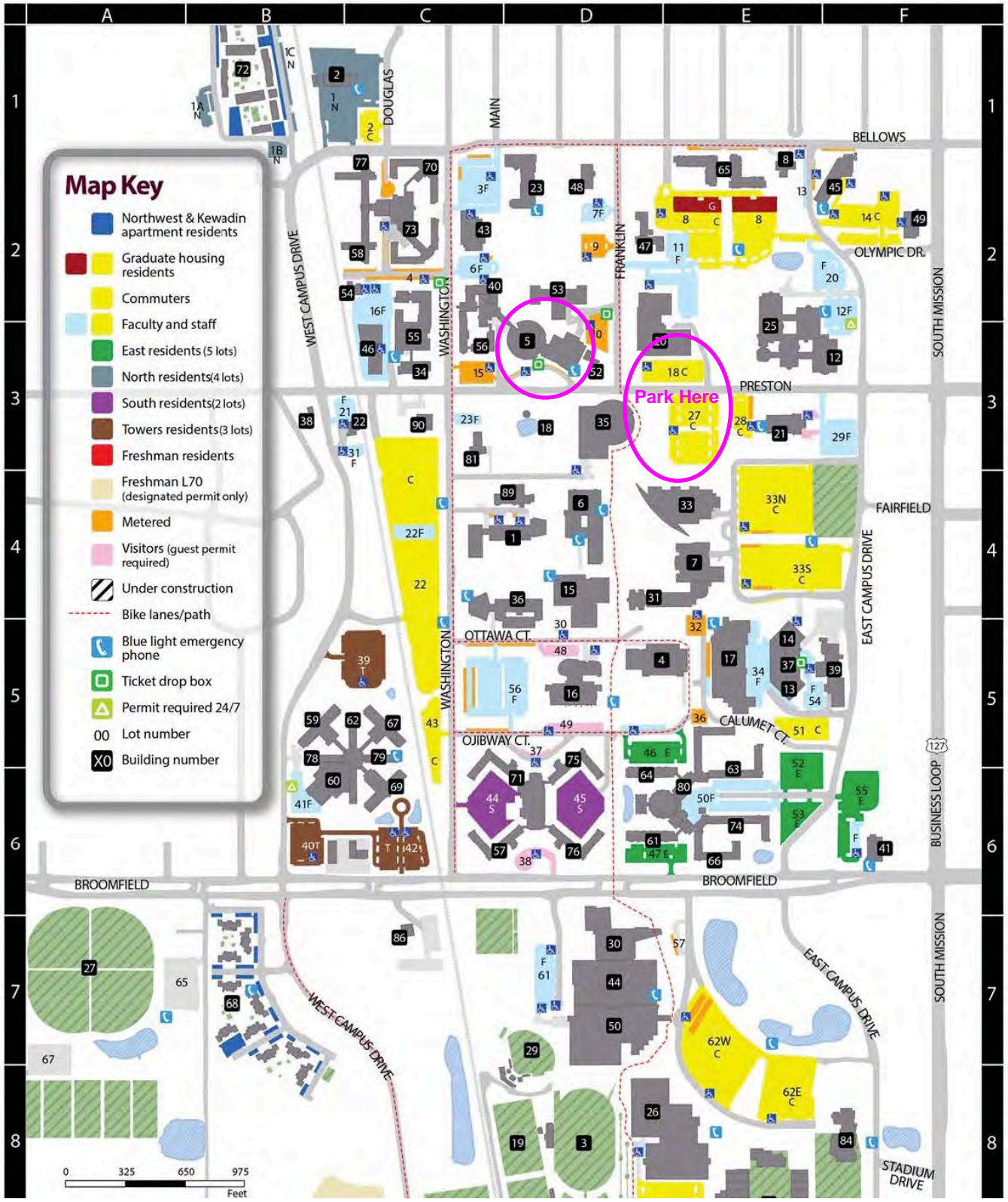
Bovee University Center, 103 East Preston Street, Central Michigan University, Mt. Pleasant

Map of Mount Pleasant, MI 48859



Map Key

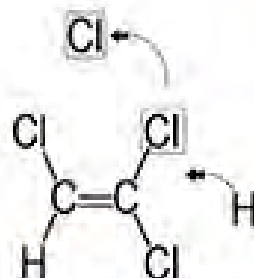
- Northwest & Kewadin apartment residents
- Graduate housing residents
- Commuters
- Faculty and staff
- East residents (5 lots)
- North residents (4 lots)
- South residents (2 lots)
- Towers residents (3 lots)
- Freshman residents
- Freshman L70 (designated permit only)
- Metered
- Visitors (guest permit required)
- Under construction
- Bike lanes/path
- ☎ Blue light emergency phone
- ☑ Ticket drop box
- ⚠ Permit required 24/7
- 00 Lot number
- X0 Building number



ORIN Technologies



Chemical Oxidation



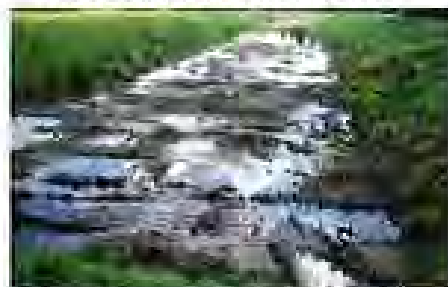
Reductive Dechlorination



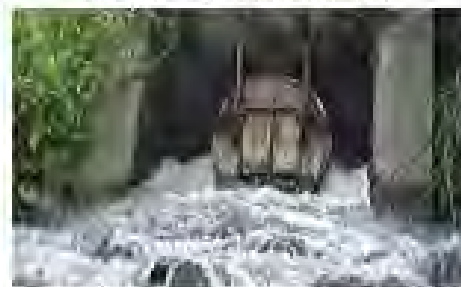
Free Product Removal



Metal Remediation



Traditional and Advanced
Oxidation



Wastewater Treatment

ORIN Technologies, Inc. (ORIN)
*mission is to provide innovative
remediation and water treatment
services using emerging and proven
technologies resulting in total client
satisfaction.*

ORIN TECHNOLOGIES
405 INVESTMENT COURT
VERONA, WI 53593
(608) 838-6699
lkinsman@orinrt.com
<http://ORINRT.com>

14th Annual AIPG Michigan Section Golf Outing Tuesday May 15, 2018

The 14th Annual AIPG Michigan Section Golf Outing promises to be another successful event. Proceeds generated from the outing benefit the AIPG K-12 Education Grant fund, which provides thousands of dollars to a variety of worthy projects every year. Your generosity has been, and will continue to be the key to enabling organizations/schools to provide meaningful educational programs and activities in the Geosciences.

This event also offers our sponsors exposure to many of the most influential professionals in our industry.

The outing will take place at Moose Ridge Golf Course in South Lyon, Michigan.

Place: Moose Ridge Golf Course
11801 Doane Road
South Lyon, MI 48178

Event: 18-Hole Scramble

Date: May 15, 2018

Registration: 8:00 to 9:15 am

Shotgun Start: 9:30

Rainout Date: May 17, 2018 (based on availability)

Registration

Register/Pay by May 5, \$600/foursome, \$170/Individual
Register/Pay after May 5, \$680/foursome, \$190/Individual

Golfer 1: _____

Golfer 2: _____

Golfer 3: _____

Golfer 4: _____

Accepted forms of payment include:

Eventbrite-search AIPG Michigan

<https://www.eventbrite.com/e/aipg-mi-section-golf-outing-tickets-41703835294?aff=eivtefrnd>



or



Make Checks to:
Michigan Section-AIPG
c/o ERG
28003 Center Oaks Ct., Suite 106
Wixom, Michigan 48393

Attn: Bob Reichenbach bob.reichenbach@ergrp.net

Company: _____

Contact: _____

Email: _____

CALL 248-773-7986, or
FAX 248-924-3108 to reserve your place!
The AIPG-MI Section is a nonprofit
501(c)(6) Organization.

Phone: _____

Includes: Continental Breakfast, green fees, range balls, Lunch at turn, networking opportunities, and DINNER. Also includes: 50-50 and Grand Prize raffles along with other prizes including, \$10,000, vacations, or sets of clubs for a "Hole in One", Putt-4 Dough \$2,500, men's and women's Longest Drive and Closest to Pin contests, and goodie bags for all participants.

14th Annual AIPG Michigan Section Golf Outing

Tuesday May 15, 2018

Sponsor Package Information

Executive Copper Sponsor - \$2,500

- 1 foursome and 33% discount for additional golfers
- Highest Visibility Signage at the Event
- Corporate recognition at the awards presentation

Exclusive Dinner Sponsor- \$2,000

Investment includes:

- 1 foursome and 33% discount for additional golfers
- Signage at the Dinner
- Corporate recognition

Beverage Sponsors - \$1,000 (2 available)

Investment includes:

- Signage at the club house and on the Beverage Cart or Oasis.
- Corporate recognition

Breakfast/Luncheon Sponsor - \$1,000

Investment includes:

- Signage at the grill/tent.
- Corporate recognition

Hole-in-one Sponsors - \$800 (4 available)

Will have visible exposure on Par 3 Holes.

If a golfer hits a hole-in-one, the prize will be, either \$10,000, a golf vacation or a deluxe set of irons.

Tee Box or Hole/Flag Sponsor - \$280

(18 available)

Investment includes:

- Tee box signage and
- Pin Flag with logo

Skill Sponsors – \$500

Investment includes:

(4 available)

“Longest Drive”, “Closest to Pin” awards to Male/female for each.

Practice Tee Sponsor – \$300

Investment includes:

(1 available)

Exclusive Signage at the Practice Tee

Putt-4-Dough – \$400 Signage on the putting area, corporate* recognition during the event (includes contest coordination at the turn and following golf provided by you). Provides interaction with all participants.

Team Photo Sponsors:

\$500 SPONSOR FEE – Signage and option to provide a photographer from your organization.

Goodie Bag Sponsor - Give-away items for 120 or more golfers

AIPG Michigan Section Announces the



8TH ANNUAL

**Environmental Risk Management Workshop
Emerging Contaminants & Pathways:
A New Paradigm**



Registration Information

Registration is now open for the 8th Annual AIPG Michigan Workshop on June 12 and 13, 2018, at the Ralph A. MacMullan Conference Center on Higgins Lake in Roscommon, Michigan. Early bird discounts are available. Click on the “Sign up here!” below.

The 8th workshop in the series of annual training events hosted by the AIPG Michigan Section focuses on providing quality technical information and case studies. These environmental workshops bring together a broad base of topic expertise from consulting, regulatory, academic, and owner perspectives.

The workshop will provide the same thought provoking, high quality presentations and discussions as have come to be expected of the Michigan Section’s annual workshop. As professionals working in the environmental industry, we make decisions regarding potential and real exposures daily using tools developed from the latest advances in science and technology, statutory requirements, and professional experience.

This year we are thrilled to have our National Executive Director,

Aaron Johnson, Ph.D., as our keynote speaker!

Additionally, this year’s topic, *Emerging Contaminants and Pathways: A New Paradigm* will bring information from experts in the field on everything from the global perspective to the new Michigan-specific program for managing emerging contaminants like Per- and Poly-Fluoroalkyl Substances (PFAS) and 1,4-Dioxane and pathways like vapor intrusion. Case studies from sites here in Michigan and outside are the main focus of the workshop allowing for information sharing amongst environmental practitioners. Look for the program agenda in upcoming announcements and on our web page at www.mi.aipg.org.

We are also featuring field demonstrations and would like to encourage anyone who has a service or equipment that would be great for a demo to please contact Sara Pearson or Rick Dunkin at the email addresses below.

[Sign up here!](#)



See you at the workshop!

Contact Sara Pearson (pearsons@michigan.gov) or Rick Dunkin (ecorock2009@gmail.com)

AIPG Michigan Section Announces the



8TH ANNUAL

**Environmental Risk Management Workshop
Emerging Contaminants & Pathways:
A New Paradigm**



Sponsor Invitation

The AIPG Michigan Section is offering sponsorship opportunities for the 8th Annual AIPG Michigan Workshop to be held June 12 and 13, 2018, at the Ralph A. MacMullen Conference Center on Higgins Lake in Roscommon, Michigan.

The 8th workshop in the series of annual training events hosted by the AIPG Michigan Section focuses on providing quality technical information and case studies. These environmental workshops bring together a board base of topic expertise from consulting, regulatory, academic, and owner perspectives.

This unique workshop forum creates excellent opportunities for

- *Networking*
- *Knowledge Transfer*
- *Collaborative Problem Solving*
- *Innovative Product Introduction*
- *Field Demonstrations*

Leadership and Break Sponsors are available at various levels!

This year the AIPG Michigan Section is featuring exhibitors during one of the presentation sessions giving exhibitors at the Michigan and Superior Glacial Lobe levels an opportunity to speak about their services for 2-3 minutes.

The workshop will provide the same thought provoking, high quality presentations and discussions as have come to be expected of the Michigan Section's annual workshop, As professionals working in the environmental industry, we make decisions regarding potential and real exposures daily using tools developed from the latest advances in science and technology, statutory requirements, and professional experience.

Sponsorship Questions: Contact Sara Pearson
(pearsons@michigan.gov).

Be sure to join us in June!



Field Demonstration Openings Available
Contact Sara Pearson (pearsons@michigan.gov) or Rick Dunkin (ecorock2009@gmail.com)

Sponsorship Opportunities and Benefits

<i>2018 AIPG Michigan Section Environmental Risk Management Workshop Sponsorship</i>			Free Workshop Registration	Overnight Accommo- dations at the RAM or Hotel	6ft. Display Table in Sponsor Room	2-3 Minute Presentation to Attendees at Workshop	Ad in AIPG Michigan Section Publications for 1 Yr.	Advertisement in Workshop Materials
Leadership Sponsors	\$\$	#Available						
Michigan Glacial Lobe	\$1600	6	X(2)	X(2)	X	X	X	Full Page
Superior Glacial Lobe	\$1100	6	X	X	X	X	X	1/2 Page
Huron Glacial Lobe	\$600	10	X	--	--	--	X	1/4 Page
Break Sponsors								
Tuesday Morning Registration Snacks	\$150	1	--	--	--	--	--	--
Tuesday Lunch	\$250	1	--	--	--	--	--	--
Tuesday Afternoon Break	\$150	1	--	--	--	--	--	--
Tuesday Dinner	\$350	2	--	--	--	--	--	--
Tuesday Evening Mixer	\$350	4	--	--	--	--	--	--
Wednesday Morning Breakfast	\$200	1	--	--	--	--	--	--
Wednesday Morning Break	\$150	1	--	--	--	--	--	--
Wednesday Lunch	\$250	2	--	--	--	--	--	--
Wednesday Afternoon Ice Cream Social	\$200	1	--	--	--	--	--	--