The Newsletter of

The Mid-Michigan Section of AIChE
American Institute of Chemical Engineers

Mission: To provide opportunities to continuously develop our members professionally – while working with the community to improve the understanding of science and engineering and their impact on society.

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The Section’s Kick-off Meeting was held September 16 at Oscar’s Cornerstone Pub in downtown Midland. See pages 4 – 6 for additional photos.
Autumn has definitely arrived, with the cooler temperatures, colorful leaves, and (of course) the Kick-off Meeting for the Mid-Michigan Section of AIChE, followed closely by the Fall Newsletter. A few months ago, we were wrapping up the previous season of activities at our May Banquet (covered in the last newsletter). This might lead you to believe that we take the summer off, but that is far from true. We spend the summer lining up seminar speakers and tours, planning our STEM outreach activities, and in general getting ready for the new season. This summer we had a couple of extra activities with the kick-off of the beer brewing contest (see the article by Anshul Agarwal), and a special meet-n-greet session with Cheryl Teich (AIChE President-Elect) at LaZeez Indian Restaurant. Besides some great appetizers, we had a spirited Q&A session with Cheryl about her vision for AIChE in the coming year, the benefits of joining the global AIChE organization, and improving communication and interaction between the Home Office and the local sections. Cheryl will be returning as President of AIChE to be our guest speaker at the Spring Banquet in 2015.

Speaking of the benefits of joining, please read the article about the more local benefits of joining MMAIChE. Your membership fees fund Section activities and local scholarships. They benefit not only you, but also the engineering and scientific community in the Mid-Michigan area, and future engineers and scientists. We invite you to not only join, but also to get involved in the many activities and opportunities described in this newsletter and on our webpage. For additional background of our Section, please read the article that Chair-Elect Tom Gregory recently wrote for the Local Sections Committee Quarterly Newsletter.

Thanks to Kip Mercure, we have some great photographs of the fun we had at the Kick-off Meeting in mid-September. Our thanks go out to John Anderson and Bill Heeschen for the mellow music setting the mood. Special thanks go to John for the donation to MMAICHE of the proceeds from the sales of his latest CD, which were made available at the end of the meeting. I have thoroughly enjoyed listening to my own copy of the CD. (If you would like your own copy, with proceeds donated to MMAICHE, please contact John, jeanderson@dow.com.) We started the more formal presentation time with some chemical engineering related trivia questions (provided by another local section). In many cases they generated a number of groans due to their simplicity, so I want to challenge our Section to come up with some tougher questions. If you have some ideas, please send them to me. We then moved on to geography-based trivia with map pin points and clues concerning the birth cities of our officers and committee chairs. For example, did you know that Warren Avis, founder of Avis Car Rental, graduated from high school in Bay City, MI; or that North Platte, NE is the home of the largest rail yard in the world? We gave each committee chair an opportunity to describe the activities of their committees and in many cases the volunteer opportunities that are coming up. Some of these are described in the articles below, including the Young Professionals Beer Brewing competition and the seminar schedule for the next eight months. Please take a look at these many activities and opportunities and get involved.
I would like to express my thanks to Kristen Gooshaw for all of her efforts in getting our web and social media pages in shape, and for her leadership with the Young Professional group. Her skills and presence will be missed as she moves on to a new job opportunity out of the Mid-Michigan area. I would like to welcome our new Webmaster, Kyle Andrews, who will be helping to keep you informed of all that is happening within MMAICHE. We have a great slate of committee chairs (listed at the end of this newsletter), who are the backbone of this Section. In the spirit of work distribution and succession planning, we would like to identify co-chairs for each of the committees. If you are interested in any of these positions, please feel free to contact the committee chair or any of the leadership team members for more information.

I am looking forward to a great year and having an opportunity to meet up with you at our seminars and other activities. If you have any questions or suggestions, please do not hesitate to contact me or any member of the leadership team.

Laura Dietsche
Chair, Mid-Michigan Section of AIChE
Scenes from the Season Kick-off Meeting
Photos by Kip Mercure

The September Kick-off Meeting was held Tuesday, September 16, 2014 at Oscar’s Cornerstone Pub in downtown Midland. The meeting was held to introduce the new calendar of events for 2014 - 2015. See pages 7 to 11 for more information about this year’s program.

Laura Dietsche served as Master of Ceremonies, and John Anderson and Bill Heeschen, saxophonist and pianist extraordinaire, provided the music. The following is a collection of scenes from the evening.

Laura Dietsche engages the group by asking everyone to guess where the officers and committee chairs were born. For each one, Laura gave several clues and asked the group to identify the location on the map.
Here Rich Helling (in the hat) tells the group about his home town, Seattle, Washington.

Many thanks to Bill Heeschen and John Anderson for providing the evening’s music!
And here are some additional scenes from the evening.
The Calendar of Events for 2014 – 2015*

– Upcoming Events Sponsored by the Mid-Michigan Section of AIChE –

Be Sure to Reserve These Dates on Your Calendar!

- **Chem-E-Car team**, Michigan State University
  *Chem-E-Car at Michigan State University*
  Wednesday, **October 22, 2014**, 6:00 p.m. dinner (optional), 7:00 p.m. presentation

- **Jozef Bicerano**, Founder and President, Bicerano & Associates Consulting, Inc.
  *Environmentally Sustainable Polymer Development through Feedstock Selection*
  Wednesday, **November 12, 2014**, 6:00 p.m. dinner (optional), 7:00 p.m. presentation

- **Bill Donberg**, President/CEO, Aetos Group Inc.
  *Unmanned Aircraft Systems – They are coming!*
  Thursday, **December 11, 2014**, 6:00 p.m. dinner (optional), 7:00 p.m. presentation

- **Dan Hickman**, Fellow, Dow Chemical (recipient of 2014 Chemical Engineer of the Year award)
  *Scale-Up of Two Industrial Trickle Bed Hydrogenations Using Laboratory Reactor Data*
  Wednesday, **January 21, 2015**, 6:00 p.m. dinner (optional), 7:00 p.m. presentation

- **Margie Pierce**, Owner, Sourcing Engineers Inc.
  *Entrepreneurship in Engineering*
  Wednesday, **February 18, 2015**, 6:00 p.m. dinner (optional), 7:00 p.m. presentation

- **Aaron Johnson**, Global Application Development Leader, Dow Water & Process Solutions
  *Potential and Controversies of Fracking*
  Wednesday, **March 11, 2015**, 6:00 p.m. dinner (optional), 7:00 p.m. presentation

- **Joe VanderKelen**, President, SMI Snow Makers
  *SMI Snow Makers and the Sochi 2014 Olympics*
  Tuesday, **April 7, 2015**, 6:00 p.m. dinner (optional), 7:00 p.m. presentation

**Annual Spring Banquet**

- **Cheryl Teich**, 2014 AIChE President Elect
  *Keynote Speaker*
  Wednesday, **May 20, 2015**, 5:30 p.m. to 9:00 p.m.

*Be sure to check our website throughout the year for any changes in the scheduled dates and times.

[www.mmaiche.org](http://www.mmaiche.org)
Locations

Regular meetings with invited speakers will be held at:  Grand Traverse Pie Company
2600 North Saginaw Road
Midland, MI 48640

The Spring Banquet will be held at:   Great Hall Convention Center
Valley Plaza Hotel and Resort
5221 Bay City Road
Midland, MI 48642

Admission to regular meetings is free, and may be accompanied by a limited supply of free sandwiches or pizza with other food available for purchase. Meeting times and locations are subject to change. Be sure to check http://www.mmaiche.org for meeting locations and any updates to the schedule.

Continuing Education Hours

Licensed Professional Engineers in Michigan are required to earn continuing education hours (CEH) “to bring licensees up to date on a particular area of knowledge or skills relevant to a licensee’s area of professional practice”. Seminars and tours offered by the Mid-Michigan section of AIChE will usually qualify as CEH. A certificate of CEH will be available to event participants on request.

This Year’s Speakers

Chem-E-Car at Michigan State University
Jacob Anibal and Carl Herman
Wednesday, October 22, 2014. Dinner at 6:00 p.m.  Presentation at 7:00 p.m.
Each year, the American Institute of Chemical Engineers (AIChE) sponsors the national Chem-E-Car competition between the collegiate AIChE chapters. Teams design and build small, chemical powered cars to carry a water load over a given distance. The teams then compete against each other at the spring AIChE regional conferences, using a load and distance specified at the competition site. Accuracy in the distance traveled determines the winner, with the best cars stopping within a few centimeters. This seminar covers the basics of the Chem-E-Car competition and design process, along with an opportunity to see a real Chem-E-Car.

Jacob Anibal is a junior at Michigan State University. This year marks his second as the Chem-E-Car team captain. After rebuilding the team last year, he is looking forward to working with a core group of returning team members this year. In addition to his Chem-E-Car involvement, Jacob also conducts research at Michigan State. Currently, he works as an undergraduate researcher in Dr. Scott Calabrese Barton’s electrochemical energy research group, researching oxygen reduction catalysts for fuel cell applications. Prior to his current position, Jacob conducted thermodynamics research for four semesters as a professorial assistant under Dr. Carl Lira.

Carl Herman has been a part of the Chem-E-Car design team for two years. Last year his focus was on calibrating a “clock reaction”, which served to stop the car. This summer he worked for Baker Hughes Incorporated as a R&D Intern, working on the monitoring of sour corrosion using electrochemical techniques. He wishes to use these insights into electrochemical processes to further refine battery designs used in Chem-E-Car. He is currently employed by The Dow Chemical Company as a Co-op, and his projected graduation date is May, 2017.
Environmentally Sustainable Polymer Development through Feedstock Selection

Jozef Bicerano
Bicerano & Associates Consulting Inc.

Wednesday, November 12, 2014. Dinner at 6:00 p.m. Presentation at 7:00 p.m.

The commercialization of products that are "greener" than virgin polymers prepared from fossil fuel based feedstocks is an important and rapidly growing benefit of sustainable polymer technology development. For example, in formulating a polymer or polymer matrix composite product, one can use (a) ingredients obtained or derived from biobased feedstocks, or (b) ingredients obtained or derived from recycled polymer wastes, or (c) combinations of mixtures (a) and (b). The pursuit of any of these options [(a), (b), or (c)] generally provides environmentally friendlier alternatives to polymeric products derived entirely from fossil fuel based virgin feedstocks. A broad overview will be given of the types of biobased feedstocks (such as monomers, oligomers, and biobased fibers) used in manufacturing biobased polymeric products, the types of plastics recycling technologies (such as mechanical recycling, chemical recycling, and energy recovery) used to derive value from post-consumer as well as industrial scrap plastics wastes, and some of the challenges that need to be overcome for such products to enhance their market shares significantly.

Dr. Jozef Bicerano runs a polymer and composite materials consulting business. Previously he worked at Dow Chemical where he was recognized with a Special Achievement Award and five Special Recognition Awards. He received B.A. and M.S. degrees in Chemistry from Northwestern University and a Ph.D. in Physics from Harvard University; and was a post-doc at Berkeley. He is best known for his book “Prediction of Polymer Properties” and for commercial software implementing the techniques described therein. He is also the editor of two books, author of many scientific papers, and an inventor with many patents. He is a Fellow of the American Physical Society, and a member of the American Chemical Society and the Society of Plastics Engineers. He has served as a member of the American Society of Mechanical Engineers and has contributed to the Editorial Boards of three scientific journals.

Unmanned Aircraft Systems – They are Coming!

Bill Donberg
Aetos Group Inc.

Thursday, December 11, 2014. Dinner at 6:00 p.m. Presentation at 7:00 p.m.

Aetos is an unmanned systems service provider helping companies in the petrochemical and oil & gas industries integrate emerging unmanned aircraft and ground robotics technology into alternative solutions to current methods of infrastructure inspections, environmental monitoring, and disaster relief. Bill will discuss this emerging industry, the various technologies being offered and the opportunities they present for significantly reducing costs and improving safety in a multitude of applications.

William Donberg is the President/CEO of Aetos Group Inc. Bill spent 30 years with the Dow Chemical Company as Global Vice president for a variety of businesses and was part of Dow’s global business management team. Earlier he led Dow’s New Product and Market Development. For the past 10 years, he has been involved in strategic realignment of the aviation program at Northwestern Michigan College including its entry into unmanned aircraft training. Three years ago, Bill along with his partners, established Aetos Group Inc. Bill has a BS in Aeronautical Engineering from The Ohio State University.

Scale-Up of Two Industrial Trickle Bed Hydrogenations Using Laboratory Reactor Data

Dan Hickman
The Dow Chemical Company

Wednesday, January 21, 2015. Dinner at 6:00 p.m. Presentation at 7:00 p.m.

Reactor hydrodynamics and transport limitations often influence observed reaction rates in trickle bed reactors. The chemical reaction engineer must account for these effects when designing a commercial scale reactor. This report describes the two different experimental approaches used to generate kinetic data for two trickle bed hydrogenation scale-up projects. In the first approach, the active catalyst particles were diluted with inert fines. This diluted catalyst was used in a steady-state, single-pass, continuous reactor. The second experimental system used an alternative approach that measured apparent reaction kinetics under conditions of hydrodynamic equivalence to a full-scale reactor. In this approach, a batch recycle trickle bed reactor utilized complete recycle of the liquid reactor product, which was collected in a well-mixed vessel. The second of these two projects culminated in the successful design, construction, and operation of a commercial reactor where the scale factor from the laboratory to the final design was more than six orders of magnitude.
Dan Hickman is a Fellow in the Reaction Engineering group in the Engineering and Process Science department of Dow’s Core R&D organization. He received his B.S. in chemical engineering from Iowa State University (1988) and his Ph.D. in chemical engineering from the University of Minnesota (1992). After a year in the Research Assignments Program, Dan joined the Central R&D Engineering lab. Since then, Dan has been a subject matter expert and technical leader in reaction engineering and process development for numerous reaction systems across a variety of Dow businesses and technologies. Dan has led the development of kinetic and reactor models for many developmental and commercial reactor systems, including stirred tank reactors, trickle bed reactors, and fluidized bed reactors. Dan currently serves the global reaction engineering community as a member of the board of directors for ISCRE. Dan was recently recognized as the 2014 Chemical Engineer of the Year by the Mid-Michigan AIChE Section.

**Entrepreneurship in Engineering**
Margie Pierce  
Sourcing Engineers Inc.

*Wednesday, February 18, 2015. Dinner at 6:00 p.m. Presentation at 7:00 p.m.*

*This presentation will focus on drawing a connection between the attributes of a successful engineer to those needed for success in starting a business. The presentation will also examine the history of entrepreneurship in engineering and analyze the future for engineers working independently in their own businesses. The speaker will offer a brief overview of her own business, the field of sourcing outsourcing, and her experience in starting a business. Finally, the speaker will offer practical step-by-step advice for starting a small business and offer some resources for learning more.*

Margie Pierce is a chemical engineer who specializes in procurement of technical goods and services. She is the owner of Sourcing Engineers, Inc., a small consultancy which helps clients increase value by implementing the strategic sourcing methodology to technical purchasing. Margie has worked in the petrochemical, oil and gas, and power industries, with major engineering, licensing firms, and equipment manufacturers. She graduated from the University of Michigan in Ann Arbor with a bachelor’s degree in Chemical Engineering and German Language.

**Potential and Controversies of Fracking**
Aaron Johnson  
Dow Water & Process Solutions

*Wednesday, March 11, 2015. Dinner at 6:00 p.m. Presentation at 7:00 p.m.*

Aaron M. Johnson is Global Application Development Leader for Dow Water & Process Solutions’ (DW&PS). Since 2009, Johnson has been responsible for establishing and leading Dow’s Oilfield Water R&D program to meet water treatment challenges facing the hydrocarbon E&P industry. Dow’s programs for produced water and injection water treatment include development of new water treatment components as well as new applications research in membranes, ion exchange resin and specialty adsorbent technologies. With the acquisition of Clean Filtration Technologies, LLC by The Dow Chemical Company in 2012, Johnson now leads Dow’s newest produced water business effort in the macro-filtration market.

**SMI Snow Makers and the Sochi 2014 Olympics**
Joe VanderKelen  
SMI Snow Makers

*Tuesday, April 7, 2015. Dinner at 6:00 p.m. Presentation at 7:00 p.m.*

*This presentation will focus on SMI Snow Makers and the Sochi 2014 Olympics story. A brand new resort was built to host the Winter Olympics’ Alpine, Freestyle and Extreme events in the Caucasus region of Russia. Challenges from a construction and engineering perspective over a 6 year period will be highlighted. Organizing the water, power, access and working on steep slopes are all a part of the solution.*

Joe VanderKelen is the President of SMI Snow Makers. Joe joined SMI Snow Makers in 1987 and has over 25 years of engineering experience related to snowmaking system design and installation worldwide (over 400 systems). He has been a guest speaker at trade shows and seminars in the US, Canada, Austria, Sweden, Korea, Russia, China, New Zealand and Australia. He serves as Chairman of the Board at Snow Machines, Inc. and Director and Chair of Compensation Committee at Wolverine Bank. In the past, he has served as Director and Chair of Human Resources Committee at West Midland Family Center, and also on the NSAA and MSAA Board of Directors. Joe has a B.S. degree in Mechanical Engineering Technology and a Masters degree in Business Administration from Michigan State University.

http://www.mmaiche.org  
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http://www.aiche.org/
Spring Banquet
Cheryl Teich
Keynote Speaker
Wednesday, May 20, 2015, 5:30 p.m. to 9:00 p.m.

Cheryl Teich is the current (2014) AIChE President-Elect. She is also an AIChE Fellow and a Trustee of the AIChE Foundation. Cheryl served on AIChE’s Board of Directors (2007–2009) while chairing the Executive Board of the Program Committee (2008). She is a founding member of the Process Development Division. Cheryl’s day job is the Reaction Engineering Expertise Leader in Dow Chemical’s Engineering Solutions Technology Center. She joined Dow during its 2009 Rohm and Haas acquisition, and recently marked her 30th anniversary with the combined company. There is a strong synergy between Cheryl’s “day job” and her AIChE contributions: the ability to see common factors among disparate groups and leverage their individual strengths across organizational boundaries. Cheryl holds BS (MIT), MS (MIT), and PhD (Stevens Institute of Technology) degrees in chemical engineering. She has spent her career negotiating the interfaces between R&D, manufacturing, and business functions. She considers herself an “expert generalist” in process development, reaction engineering and problem solving.

Mid-Michigan Section of AIChE
(Taken from a recent contribution to the National Local Sections Committee Newsletter)
by Tom Gregory, Mid-Michigan AIChE Chair-Elect

The Mid-Michigan Section of AIChE, about 120 members strong, was formed in 1952 and serves an area that is home to about 450 AIChE members, many of whom are employees or retirees from The Dow Chemical Company, Dow Corning Corporation, and Hemlock Semiconductor Corporation. We receive strong support from these companies as well as from Omni Tech International, Ltd. and HTSE Inc. Past and present members of the Section include a number of AIChE Fellows, including present Chair Laura Dietsche, Secretary Bruce Holden, and Director Tim Frank. Section members are active in sharing their knowledge of a variety of chemical engineering topics through contributions to publications such as Perry’s Chemical Engineers’ Handbook and AIChE’s Chemical Engineering Progress, as well as presenting continuing education seminars through AIChE. Our mission is to provide opportunities to continuously develop our members professionally while working with the community to improve the understanding of science and engineering and their impact on society.

Section activities center on monthly meetings from September through May which are technically oriented and are open to the general public; section business is conducted at separate executive committee meetings. Monthly technical meetings typically include seminars on a topic of timely interest to our membership or tours of local facilities. Meeting topics during the 2013/2014 program year included talks by faculty members at Michigan State University and The University of Michigan on chemical products from biomass and automotive emissions controls, talks by noted local executives on keys for success in the chemical industry and new product and market development, a presentation by local high school students that participated in the FIRST® Robotics competition, and tours of the Tri-City Brewing Company and B&P Process Equipment. We wrapped up the year with our Spring Banquet where we recognized section officers and volunteers, presented awards for outstanding achievement in the field of chemical engineering to both young and experienced professionals, and awarded scholarships to both a graduating high school senior intending to study chemical engineering in college and to a younger high school student to attend an Engineering Exploration session of the Summer Youth Program at Michigan Technological University.

The Section also engages in STEM outreach activities, such as area science fairs and classroom presentations at local middle schools, often in collaboration with the Midland section of the American Chemical Society (ACS) and the Mid-Michigan Technician Group. We are currently co-sponsoring a home beer brewing competition along with the Young Chemists Committee of Midland ACS, with expert coaching from local brewmasters. Further information about our section and our activities is available on our website at www.mmaiche.org and on our Facebook page at https://www.facebook.com/pages/Mid-Michigan-AICHE/430571753718185.
Homebrew Beer Tasting and Competition – Part I
by Anshul Agarwal

The Mid-Michigan Section of AIChE (MMAIChE) is collaborating with the Younger Chemists Committee of the American Chemical Society (ACS YCC) to sponsor and organize a Homebrew Beer Tasting and Competition. This is the first time such a competition has been organized by MMAIChE. The purpose of the event is to provide an opportunity for professionals to connect, socialize, and network with each other, particularly the ones who have an interest in beer making. The competition is not limited to expert brewers; all experience levels including first-time brewers are welcome to participate. The spirit of the event is to provide a casual medium for professionals in and around Midland to interact through an activity that they are interested in or want to develop an interest for through a friendly competition.

The competition started off with a kick-off social event on July 19, 2014 at WhichCraft Taproom in Midland, MI. It not only provided homebrewers, beer enthusiasts, and interested participants the opportunity to meet each other and the event organizing team (Anshul Agarwal, Michael Vagnini, John McKeen, Kristen Gooshaw, and Kyle Andrews), but also to get more information about the competition and homebrewing in general. WhichCraft provided appetizers and also helped the organizing team set up the logistics (microphones, tables, chairs, etc.) for the event.

The kick-off started with the organizing team providing a brief description of the various initiatives, programs, and career development and networking opportunities offered by Mid-Michigan AIChE and ACS YCC to local professionals. Next, the event featured expert tips and presentations from Kevin Peil from Tri-City Brewing, and Cody Smith and Chris Younk from Oracle Brewing. Kevin talked about the history of craft brewing, his own beer making experiences, and encouraged first-time brewers to consider this as a challenge and not get discouraged and quit if they run into problems with the first few batches. He stressed the importance of homebrewing and how it influences the development of the brewing industry and the profession. Cody and Chris covered the technical aspects of beer making and provided many details on how the type of equipment, the raw materials and malts, hops for flavoring, and temperature and other operating conditions can impact the flavor and quality of the beer. Their presentation involved quite a healthy Q&A session in which the attendees asked many specific detailed questions and got a chance to learn from the brewing experiences of Chris and Cody. As a token of appreciation, the organizing team presented gift cards to the speakers.

The kick-off event also featured local homebrewing equipment and material suppliers, Hop Head Brew Supply from Bay City, MI, and Michigan Brew Supply from Midland, MI. After the presentations from Kevin, Chris, and Cody, the representatives from these shops talked about different supplies and equipment available for beer brewing in their stores. They also talked about the special offers that they are running for the participants of this competition. They had some merchandise to sell at the kick-off. The vendors are also sponsoring some of the prizes that will be awarded to the winners of the competition.

Finally, after the talks from the vendors, the organizing team described the timeline and the rules of the competition, and encouraged people to sign-up on the spot, if they had not signed-up using the online form. WhichCraft, and the local homebrew shops also posted the online sign-up link on their respective Facebook pages in order to promote the event. Below we show a couple of pictures from the kick-off event.
The timeline and rules of the competition are as follows:

- **July 19, 2014**: Competition kick-off social event

- **August 1, 2014**: Deadline to sign-up in order to participate in the competition using the following online form. The participants provide information on all co-brewers, their past brewing experience, if they own brewing equipment, and if they are willing to share their equipment with other competition participants
  
  [https://docs.google.com/forms/d/1_mGDoFnRPGoVw6GF_Yk8iS_UZuzjDuLSmAAMgym07zo/viewform?usp=send_form](https://docs.google.com/forms/d/1_mGDoFnRPGoVw6GF_Yk8iS_UZuzjDuLSmAAMgym07zo/viewform?usp=send_form)
September 20, 2014: Deadline to register each homebrew beer entry using the following online form (extended to September 27). The participants submit name of the beer, beer style according to the BJCP style guidelines (http://www.bjcp.org/docs/2008_Guidelines.pdf), and a brief beer description. This information will be used to organize the judging session and will be helpful for the attendees of the tasting event. https://docs.google.com/forms/d/1S7Tjvu7npImgkr6FHoSlbiBPVnM7rHzJ3opTHD7vxsE/viewform
Participants are allowed to submit multiple beer entries. For each entry, a separate form must be submitted.

October 12-17, 2014: By October 12, the participants should have the beer ready for submission for each of their registered beer entries. During this week, the participants will bring two 12 oz. bottles of each entry to WhichCraft Taproom during normal business hours for the closed judging session at the end of the week. Bottle label forms will be provided to the participants. WhichCraft will store the bottles with no space rentals.

October 18, 2014: The beers will be judged at WhichCraft on this day by expert judges. The rubric used for judging will be similar to the BJCP guidelines.

October 25, 2014: The Homebrew Beer Tasting Event! The tasting event will be held at the WhichCraft Taproom on Saturday 1-4pm. WhichCraft has a Class C license which gives them a right to serve home-brewed beer as long as they are not selling it and the event is not public. Therefore, the event will be open only to the competition participants and each brewer and co-brewer will be invited to bring along one or two guests. The participants will be given entry tickets in order to restrict entry and keep the event private. Also, no money transaction will happen during the event; WhichCraft will not charge any entry cover charge. WhichCraft has also agreed to assume liability of the event. During the event, participants will be able to serve their competition beer(s) from either bottles or growlers with the help of volunteers. The tasting portions cannot be more than 3 oz. according to the Michigan Law. The participants are recommended to bring at least 64 oz. of each entry, and preferably a gallon or more.

Prizes will be awarded to the best in show brew -- as determined during the closed judging session -- as well as to the first and second runners-up. There will also be recognition for the best brew from a first-time homebrewer, if there are enough entries from the first-time brewers. Category recognition for beer styles will be determined based on the number of entries per style.
The Benefits of Joining the Mid-Michigan Section of AIChE
by Anshul Agarwal

Engineers bring great value to our society through creatively solving problems and passion for addressing global challenges. To keep this spirit alive and to promote the chemical engineering profession in the Mid-Michigan region, the Mid-Michigan Section of the American Institute of Chemical Engineers (MMAIChe) was founded in 1952. Since its inception, the Mid-Michigan Section has provided a platform for local professionals to expand their scientific knowledge, build network connections, enrich their professional development, as well as help the local community to better understand science & engineering and its impact on society.

Members of the Mid-Michigan Section are presented with numerous benefits, such as
- Networking opportunities with leaders, colleagues, and technical peers from other local companies through social gatherings and networking events.
- Exposure to the state-of-the-art technological advancements and cutting edge research
- Opportunities to listen to distinguished speakers from the scientific community through our regular seminar series
- Networking with new hires and young professionals through the Young Professionals Initiative
- Continuing education classes offered to members at reduced cost
- Member discounts for the Annual Spring Banquet
- Opportunity to interact with the local community and promote the value of Science, Technology, Engineering and Math (STEM) through educational programs in the area schools and scholarship offerings
- Platform to celebrate accomplishments of local professionals at the Annual Spring Banquet
- Career development through US-wide job postings on our website
- Regular communication through our newsletters highlighting our activities and achievements

Membership in the Section is open to everyone: being a chemical engineer is not a requirement for involvement. Membership dues of $25/year help support section’s scholarship programs, outreach events, seminar series, and various other initiatives. For more information on various programs of MMAIChe and how to join the section, contact membership@mmaiche.org or consult the website www.mmaiche.org.

Summary of Membership Benefits
- Interact with eminent speakers from industry and academia through seminars.
- Network with fellow professionals and share common interests through various social gatherings.
- Learn about state-of-the-art technical advancements and cutting edge research.
- Interact with the local community and promote the value of Science, Technology, Engineering, and Math (STEM) through educational programs in our area schools and scholarship offerings.
- Connect with young professionals through the Young Professionals Initiative.
- Celebrate accomplishments of local professionals at the Annual Spring Banquet.
Mid-Michigan Section Contact Information
AIChE Mid-Michigan Section 2014-2015 Officers and Committee Chairpersons

(all phone numbers have a 989 area code)

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<thead>
<tr>
<th>Position</th>
<th>Name</th>
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<tbody>
<tr>
<td>Chair</td>
<td>Laura Dietsche</td>
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<tr>
<td>Past-Chair</td>
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## Committee Chairs

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<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Organization</th>
<th>Address</th>
<th>Email</th>
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