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 provide a positive view of science and engineering.

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Mid-Michigan Section

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In this issue...

Words from the Chair	2
Scenes from the Annual Spring Banquet	
Meet the Section Award Recipients Hank Kohlbrand, Laura Dietsche, and Mike Trippeer	
Read About Scholarship Recipients Kimberly Dinh, Ryan Hernden, and Gabe Bartosiewicz	
Meet the Newly Elected Officers	
Review the Section's Contact Information	
Meet our Sponsors	



Victor Atiemo-Obeng, Director, congratulates Kip Mercure, Outgoing Chair, on a successful year. This scene is from the Section's Annual Spring Banquet held May 26 at the Great Hall in Midland. See page 4 for additional photos.

Words from the Chair...

The timing of this issue provides an opportunity to reflect on this past year's accomplishments and to describe some of the preparations the Section is making for the next season of activities which officially begins in September. This past year certainly counts as a successful one for the Mid-Michigan Section of AIChE. Our members led a number of important activities serving local chemical engineers and the community. The Section is indebted to Kip Mercure, our outgoing Chair, for all his efforts to keep the Section on track.

Newly Updated Bylaws. Early in the year it was recognized that the bylaws needed to be updated to streamline the way we carry out the business of the Section. Originally written in 1952 and last updated in 1980, the old bylaws did not provide for e-mail communications and were somewhat vague about how decisions were to be made. So, a new set of bylaws was drafted to address these points. They were reviewed by the national organization in April and then approved by the local membership in May, just in time for us to hold our elections – by e-mail balloting.

A Full Slate of Officers and Committee Chairs. We have a full team of officers in place for the coming year. In addition to my role as Chair, we have Rich Helling (Chair-Elect), Kip Mercure (Past Chair), Eric Stangland (Treasurer), Bruce Holden (Secretary), Victor Atiemo-Obeng (Director), Paul Kehl (Director), and Norm Lake (Director). All are enthusiastic about the Section and ready to make things happen. I invite you to learn more about the officers from their profiles published later in this issue. We are also fortunate to have enthusiastic members actively chairing our various committees, including Mike Durisin (Membership), Maxine Cottrell and Josh Maurer (Scholarships), Katherine Nies (Continuing Education and School Donations), Rose Peterson (Programming), Drew Powers (Education Outreach), Leaelaf Hailemariam (Young Professionals Discussion Group), and Joe Anderson (Webmaster). My thanks to all for taking on these important roles.

Continuing Service to the Profession and the Community. This year the Section continued a number of important service traditions. Drew Powers organized a schedule of classroom demonstrations held in the middle schools in Midland. He led a group of volunteers in presenting fun demonstrations and discussions of science and technology in the classroom. I had a chance to help with several of the demos, so I could see first hand the enthusiasm of the presenters, the students, and their teachers. The demos were very well received, particularly the one about the various methods used to clean up oil spills. This was, of course, a particularly timely topic this year considering the large oil spill in the Gulf of Mexico, and the students were very interested in learning about the methods being used for the clean up. I also want to congratulate Maxine Cottrell and Josh Maurer and their team for the great job they did this year selecting our scholarship winners. This is another important tradition of our Section in service to the community. And Mike Durisin, Victor Atiemo-Obeng, Paul Kehl, and Norm Lake served on the Awards Committee to recognize three of our members with special awards for professional accomplishment: Hank Kohlbrand (Noland Poffenberger Award), Laura Dietsche (Chemical Engineer of the Year), and Mike Trippeer (Young Chemical Engineer of the Year). My congratulations go to the award winners for their impressive achievements! I also want to point out the activities of the Young Professionals Discussion Group organized by Leaelaf Hailemariam. Leaelaf has done a fine job introducing us to webinars and other new ways of networking that members can use to interact with others in the profession and gain new insights. These are all important activities contributing to the local community of chemical engineers, and I congratulate all for a job well done. You can read more about many of the individuals involved in these activities in the pages of this newsletter.

Updates to the Section's Website. Joe Anderson has been doing a great job as Webmaster to update our website. I encourage everyone to visit our site at http://www.mmaiche.org to keep abreast of the Section's activities. Joe will be introducing a new look for the website in the next several months.

(continued next page)

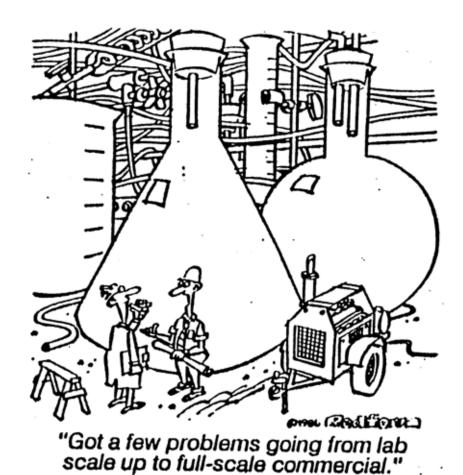
A Successful Spring Banquet. The Section held the annual Spring Banquet on May 26 of this year at the Great Hall Convention Center in Midland. Kip Mercure presided over the evening's activities which included the presentation of awards and scholarships and the introduction of the newly elected officers. Hank Kohlbrand, the 2010 President of national AIChE, was our keynote speaker. Hank gave an excellent presentation on the future of chemical engineering and how AIChE will provide members with skills and resources to meet this future. A copy of Hank's presentation slides can be downloaded from our website.

Planning the Next Season. This summer, the officers and committee chairs are busy working together as a group to prepare the programming schedule for next year. We are planning a season of 6 regular meetings, 2 continuing education classes, plus the annual Spring banquet. We hope to finalize everything in time to announce the full schedule at our kick-off meeting in September, tentatively scheduled for Wednesday, September 15. Look for an announcement coming soon.

I am looking forward to another great year. I hope to see everyone in September as we begin the new programming season!

Tim Frank

Chair, Mid-Michigan Section of AIChE



Scenes from the Annual Spring Banquet

Photos by Joe Anderson, Section Webmaster

The Annual Spring Banquet was held Wednesday, May 26, 2010 at the Great Hall Convention Center in Midland. Kip Mercure, the 2009 - 2010 Chair of the Section, presided over the evening's activities which included the presentation of awards and scholarships and introduction of the newly elected officers. The following is a collection of scenes from the evening. See pages 10 - 14 for more information about the evening's activities.



Hank Kohlbrand, 2010 President of AIChE was the featured speaker for the evening.



Hank spoke about "The Future of Our Profession & How AIChE is Changing to Support You!" A copy of Hank's presentation can be downloaded from the Section's website at http://www.mmaiche.org.



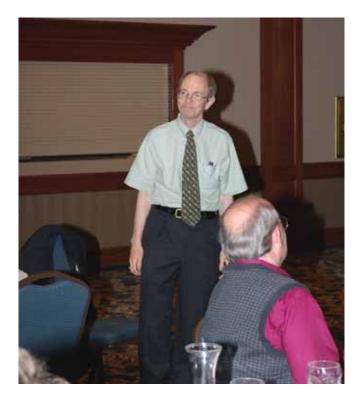
Laura Dietsche, 2010 Chemical Engineer of the Year, and Vern Fauver, Past Chair (1979)



Paul Kehl (far left) and Josh Maurer (far right) congratulate Kimberly Dinh.



Passing of the gavel from Kip Mercure (Outgoing Chair) to Tim Frank (Incoming Chair).



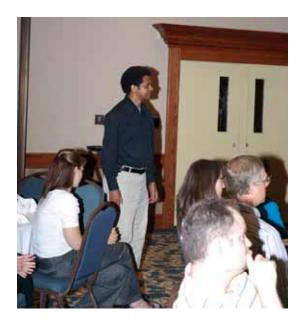
Rich Helling, Chair-Elect



Katherine Nies, Continuing Education and School Donations Chair



Maxine Cottrell, MTU Summer Program Scholarship Chair



Leaelaf Hailemariam, Chair of the Young Professionals Discussion Group



Lowell Youngquist and Hank Kohlbrand



Mike Durisin, Past Chair (2002) and Tim Frank, Chair (2010)



Norm Lake, Director, and Fred Justice



Jim Malek (camera man) recorded the evening's events for broadcast on local MCTV channel 99.



A delightful evening was had by all...

Meet the Section Award Recipients Hank Kohlbrand, Laura Dietsche, and Mike Trippeer

At the Spring Banquet, Mike Durisin, Chair of the Awards Committee, announced the winners of the Section's Awards. Please join us in congratulating them for their many accomplishments!

Noland Poffenberger Award - Hank Kohlbrand

Henry T. (Hank) Kohlbrand is the recipient of the 2010 Noland Poffenberger Award given by the Mid-Michigan Section of AIChE for outstanding vision and leadership within the chemical engineering profession. The award honors the memory of Noland Poffenberger who helped found the Section in 1952 and served as the Section's first Chair.

Hank Kohlbrand is a 36-year member of AIChE and a long-standing member of the Mid-Michigan Section. As a Global R&D Director at Dow, Hank actively encouraged others in the company to participate in local and national AIChE activities by supporting their attendance at meetings and workshops -- in recognition of the value that participation in AIChE activities can provide in terms of professional development opportunities. Perhaps most importantly, Hank has encouraged others by his example; he has served the Mid-Michigan Section as a Director and an active member of the Executive Committee, and has distinguished the Mid-Michigan Section by serving as a member of the national AIChE Board of Directors and as the 2010 President of the national AIChE organization.

In June, Hank announced his retirement from The Dow Chemical Company after a highly successful 36year carreer. Most recently, he held the position of Global R&D Director for Process & Manufacturing Technology R&D with responsibility for the Corporate R&D Process Technology Portfolio and successful transition of new processes and products from R&D into operations. Prior to this role, Hank was responsible for Engineering & Process Sciences R&D, a group of over 250 people in the U.S., India, and Europe. Previously, Hank was the Business R&D director for New Businesses which included the Industrial Biomaterials Platform, Industrial Biotechnology, Electronics Materials, and Pharma Technologies.

Hank has also been Dow's global director of external technology and intellectual asset management and was responsible for all external R&D and for Dow's Offices of Science & Technology in Europe and the Pacific. He has served as Dow's global manager of process waste elimination in Manufacturing & Engineering, and held a number of other technical management positions, including manufacturing manager – new monomer systems, research manger – engineering and market development, director of the Engineering Laboratory of Central R&D, and director of the Engineering Research & Process Development Laboratory of Global Core Technologies R&D. Hank joined Dow in 1974 after receiving a BSChE degree from the Illinois Institute of Technology.

Hank is an internationally recognized expert in reactive chemicals engineering and process-scale up. He is a Fellow of AIChE and a member of the Institution of Chemical Engineers, the American Chemical Society, and the American Association for the Advancement of Science.

Chemical Engineer of the Year - Laura Dietsche

Laura J. Dietsche is the recipient of the 2010 Chemical Engineer of the Year Award given by the Mid-Michigan Section of AIChE. Laura is an accomplished chemical engineer, a long-standing member of the Mid-Michigan Section, and an active participant in the national AIChE where she is a leader in the development of standards for accreditation of chemical engineering programs at the college level.

Laura Dietsche is a Research Scientist in the Engineering Sciences Laboratory at The Dow Chemical Company. Over a period of more than 20 years at Dow, Laura has distinguished herself as a leader in the application of computational fluid dynamics (CFD) methods to solve difficult problems in chemical manufacturing. She is an expert in the simulation of complex flows within chemical process equipment, including specialty heaters, coolers, and polymerization reactors. Laura's work in CFD and CFD-based

http://www.mmaiche.org page 10 http://www.aiche.org/

optimization has had a tremendous impact in improving the cost-effective manufacture of numerous Dow products including polyethylene, polypropylene, FilmTec(R) membranes, extruded polystyrene board, styrene-acrylonitrile co-polymers, Dow Automotive sealants, as well as numerous agricultural chemicals.

In addition to her career accomplishments, Laura is very enthusiastic about passing along her experience and knowledge in CFD to others, both inside and outside of Dow. Inside of Dow, Laura is well known as a mentor to others. She is a leader of a bi-monthly CFD discussion group implemented to help others in Dow utilize various CFD-related tools including FLUENT, FIDAP, and POLYFLOW. Outside of Dow, Laura serves as a member of the AIChE Accreditation and Education committee charged with developing standards for chemical engineering education at the college level. Laura also serves as a member of the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). In this capacity, she regularly visits campuses to participate in the review and renewal of their accreditation status. Laura is also a member of the Computer Aids for Chemical Engineering (CACHE) Task Force that is working to bring CFD training into the undergraduate chemical engineering curriculum. CACHE is a not-for-profit organization originally founded by the National Science Foundation to champion the development and use of computer-based tools in chemical engineering education.

Laura has a Ph.D. in chemical engineering from the University of California at Berkeley.

Young Chemical Engineer of the Year - Mike Trippeer

Michael L. Trippeer, at age 35, is the recipient of the 2010 Young Chemical Engineer of the Year Award given by the Mid-Michigan Section of AIChE, in recognition of exceptional technical and project leadership accomplishments acheived at a relatively early stage in his career. Mike has been a member of the local section for many years, and he is active at the national level, currently helping to organize several sessions on extraction at the upcoming annual meeting in Salt Lake City.

Mike Trippeer is a Research Scientist in the Engineering Sciences Laboratory at The Dow Chemical Company. Mike joined Dow in 1996, and since then has held positions in manufacturing (Dowtherm/Dowfax), in Process Engineering, and in Dow's Engineering Sciences R&D Laboratory. Currently, he is a member of the Process Separations Group within the Engineering Sciences Lab. Mike is well-known within Dow for expertise in an unusually broad range of technologies, including distillation, steam stripping, extraction, and crystallization. Mike has demonstrated exceptional project management skills as well as exceptional technical understanding. He has contributed to numerous commercial implementations, including projects for Dow Automotive and Dow's Methocel(R) methylcellulose ethers. Since joining the Engineering Sciences Laboratory, Mike has also led the development of new distillation technology for robust distillation of reactive monomers, new reaction-distillation technology for production of ultra-pure agricultural chemicals, and new technology for cost-effective stripping of impurities from agricultural chemicals.

Mike is a 1995 graduate of Purdue University with a B.S. degree in chemical engineering.

Scholarships Awarded to Kimberly Dinh, Ryan Hernden, and Gabe Bartosiewicz

The activities of the Annual Spring Banquet included the awarding of a \$2000 scholarship toward study of chemical engineering at the college level (\$500 per year for 4 years of study) and two scholarships for the Michigan Tech Summer Youth Program. The scholarship presentations were made by Maxine Cottrell and Joshua Maurer in their roles as Co-chairs of the Scholarship Committee. This year's recipient of the University Scholarship is Kimberly Dinh. Kimberley is a graduating Senior at Dow High. She plans to attend the University of Wisconsin to study chemical engineering. She has earned an outstanding 4.77 GPA, achieved a composite ACT test of 36, is a National Merit Finalist, and is active in Model United Nations, Key Club, Science Olympiad, Symphonic Band, and the National Honor Society. She also has the distinction of winning the Division 2 State Championship in golf.

http://www.mmaiche.org page 11 http://www.aiche.org/

This year's winners of the MTU Summer Youth Program scholarships are Ryan Hernden, Bay City Central High School, Class of 2011, and Gabe Bartosiewicz, Nouvel Catholic Central High School, Class of 2013. The scholarship covers room, board, tuition, and a \$100 travel allotment. Ryan has demonstrated a keen interest in physics and computers. He has applied his interest in computer and electrical engineering already in a variety of ways, one of which was the creation of a user-friendly website for his German teacher, Ms. Elder, and her students. He demonstrated a high degree of personal responsibility, willingness to learn, and good time management, as well as the drive to go above and beyond expectations. He will be participating in the Computer and Electrical Engineering exploration program. Gabe is involved with the Science Olympiad at his school, demonstrating a practical interest in science and a good understanding of the wide variety of career paths that are open to engineers. Gabe is enthused about making the effort to learn more and try to find a focus for his own career path. He will be participating in a medicine-related exploration program at MTU this summer.

The Mid-Michigan Section of AIChE is excited to have the opportunity to help support Kimberley, Ryan, and Gabe in their study of science and technology.

Meet the Newly Elected 2010 - 2011 Officers

Chair – Tim Frank

Tim Frank has spent 26 years in process R&D at The Dow Chemical Company. Currently he is a Dow Fellow and Senior Technical Manager of the Process Separations Group in the Engineering Sciences Laboratory at Dow. Tim is also the editor and co-author of Section 15 on liquid-liquid extraction in the new 8th edition of Perry's Chemical Engineers' Handbook. Since joining the Executive Committee in 2009, Tim has worked with others in the Section to update the bylaws, help restart the awards program, and streamline the election process. As Chair of the Section, Tim is focusing efforts on a number of initiatives including: 1) increasing the frequency of newsletter and web-based communications to members (with Joe Anderson, Webmaster); 2) preparing a full schedule of regular meetings for members (with Rose Peterson, Program Chair); 3) revitalizing the Section's continuing education offerings for members (with Katherine Nies, Continuing Education and School Donations Chair); and 4) increasing fund raising efforts to grow and sustain the Section's scholarship fund. Tim has a B.S. degree from Montana State University and M.S. and Ph.D. degrees in chemical engineering from the University of Colorado.

Chair-Elect – Rich Helling

Rich Helling has spent 23 years in manufacturing and process R&D positions at The Dow Chemical Company. Currently, he is the Senior Technical Manager of the Process Development and Analysis Group within the Process Chemistry & Development Department at Dow. Before joining Dow, Rich served as a Station Director of the David H. Koch School of Chemical Engineering Practice at MIT. Rich is well known for his expertise in process R&D including distillation and reactor design. He has also led the development of methods to measure sustainability and environmental footprint, and has published a number of Dow reports and external articles on life cycle assessment. As Chair-Elect Rich works with the Executive Committee to help conduct the business of the Section. He also works with the various Committee Chairs to help organize and promote the Section's activities including programming for local section meetings, member recognition, the scholarship program, continuing education offerings, and fundraising activities. Rich has a B.S. in engineering from Harvey Mudd College and M.S. and Sc.D. degrees in chemical engineering from MIT.

Secretary – Bruce Holden

Bruce Holden has spent 33 years in process R&D, process engineering, and environmental services at The Dow Chemical Company. He is currently a Principal Research Scientist in the Process Separations Group of Dow's Engineering Sciences Laboratory, and is a recipient of the 2008 Doug Leng Award for

excellence in engineering research at Dow. Bruce is also a co-author of Section 15 on liquid-liquid extraction in the new 8th edition of Perry's Chemical Engineers' Handbook. Bruce serves the Section with a focus on timely communications and detailed record keeping. He has B.S. and M.S. degrees in chemical engineering from Clarkson University.

Treasurer - Eric Stangland

Eric Stangland is a Senior Research Scientist in the Chemical Sciences, Applied Materials & Catalysis Laboratory of The Dow Chemical Company, having joined the company in 2000. He has previously served the Section as Membership Chair, Webmaster, and Editor of the newsletter. Eric also serves as a Director for the Michigan Catalysis Society and is a Technical Program Chair for the 22nd North American Catalysis Society meeting to be held in Detroit in 2011. As Treasurer of the Section, Eric handles the accounts and maintains the financial records. Eric has a B.S. degree from the University of Wisconsin and M.S. and Ph.D. degrees in chemical engineering from Purdue University.

Director – Victor Atiemo-Obeng

Victor Atiemo-Obeng is a long-standing member of the Mid-Michigan Section, having served as Chair of the Section in 1991-1992. Victor has spent 32 years in process R&D and process engineering at The Dow Chemical Company, where he currently is a Dow Fellow in the Process Chemistry & Development Department. Victor is also an editor of the Handbook of Industrial Mixing (Wiley, 2004). In recognition of his expertise in mixing technology, Victor was recently awarded the 2009 North American Mixing Forum award for excellence and sustained contributions to mixing research and practice. As a Director of the Section, Victor works with the Executive Committee on all aspects of governance. He is particularly interested in encouraging Dow employees to participate in the local section, and in supporting new continuing education offerings and fund-raising efforts for the scholarship program. Victor has a B.ChE. degree from The Catholic University of America and a Ph.D. in chemical engineering from the University of Wisconsin.

Director - Paul Kehl

Paul Kehl moved to Mid-Michigan in 2001 where he performed technical service and development focusing on silicones. He is now involved in manufacturing at Dow Corning where he is well-known for his technical expertise. As Director of the Section, Paul participates as a member of the Executive Committee in conducting the business of the Section. He is particularly interested in encouraging Dow Corning employees to participate in the local section, and in pursuing efforts to grow and sustain the scholarship fund. Paul has a B.S. in chemical engineering from the University of Wisconsin.

Director - Norm Lake

Norm Lake has been an active member of the Mid-Michigan Section for many years, serving three terms as treasurer, eleven years as chair of the MTU Summer Youth Program scholarship committee, and more recently as Director of the Section and member of our scholarship committees. His career spans more than 28 years at Dow Corning in TS&D, process R&D, and as the Process Engineering representative on several Personal Care and Urethane Foam commercialization teams. More recently, he spent 5 years at Dow as a Process Engineering contractor working on a variety of Production and FM&E projects. Recognitions include an IR-100 award, 11 Dow Corning technical excellence awards, the AIChE Service to Society award, and the Boy Scouts of America Silver Beaver award. Norm continues his active support of the Section as a voting member of the Executive Committee. He encourages continuation of our scholarship programs and other community outreach activities and supports efforts to make our Section relevant to chemical engineering professionals in Mid-Michigan. Norm has a BSE degree in engineering unified science and an MSE in chemical engineering from the University of Michigan.

Mid-Michigan Section Contact Information AIChE Mid-Michigan Section 2010-2011 Officers and Committee Chairpersons

(all phone numbers are in the 989 area code unless otherwise noted)

Position	Name	Address	E-mail	Phone	Fax
Chair	Tim Frank	The Dow Chemical Co. 1319 Bldg. Midland, MI 48667	tcfrank at dow.com	636-4310	636-4616
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Director	Victor Atiemo- Obeng	The Dow Chemical Co. 1776 Bldg. Midland, MI 48674- 1776	Victor.Atiemo- Obeng at dow.com	636-3972	638-9674
Director	Paul Kehl		pjkehl2000 at yahoo.com		
Director	Norm Lake		thelakes at juno.com		

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Publicity/New Hire Chair	Mike Durisin	Hemlock Semiconductor Corporation 12334 Geddes Rd., Mail #090-S26 P.O. Box 80 Hemlock, MI 48626	mike.durisin at hscpoly.com	642-5201 x2653	642-8043
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Education Outreach Chair	Drew Powers	The Dow Chemical Co. 25 Bldg. Midland, MI 48667	agpowers at dow.com	638-6637	636-2700
AIChE Scholarship	Josh Maurer	Dow Corning Corp. Mail #128 Midland, MI 48686- 0995	joshua.maurer at dowcorning.com	496-6912	496-6243
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Webmaster	Joe Anderson	The Dow Chemical Company 845 Bldg. Midland, MI 48667	jjanderson at dow.com	636-2045	636-3939
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Young Professionals Discussion Group Chair	Leaelaf Hailemariam	The Dow Chemical Co. 1707 Bldg. Midland, 48667	lhailemariam at dow.com	638-4994	

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