American Chemical Society – Kalamazoo Local Section Bimonthly Newsletter

January 1, 2011



2011 KACS

Executive Officers

Chairperson Dr. Doug Williams, Kalsec, Inc. DWilliams@kalsec.com

Past-Chairperson Dr. Susan Stapleton, WMU – Chemistry susan.stapleton@wmich.edu

Chairperson-Elect Vacant

Secretary Carl Stachew <u>cstachew@yahoo.com</u>

Treasurer Dr. John Miller, WMU – Chemistry john.b.miller@wmich.edu

Councilor Dr. Lydia E. M. Hines, KVCC lemhwgh@gmail.com

Alternate Councilor Mr. Michael Kiella mike.kiella@charter.net

Comments from the Chair

Doug Williams

Seasons greetings, ACS members! I am eager to let you know what the Kalamazoo section has been doing and is planning in the next few months. Our new section Communications Chair and my colleague, David Bolliet, has volunteered to produce this revival issue of our section newsletter (formerly called the Kalchemist News) to keep you more informed. I hope that you enjoy and appreciate his efforts.

In lunch time visits to area employers this fall, I introduced myself to many of our members and listened for your ideas about local section activities. Some of you suggested additional social/science mixer events. I heard concerns about job security and career opportunities for chemists. The chemistry enterprise in the U.S. is going through fundamental changes in response to economic competition and technology developments. ACS has consistently promoted scientific education and innovation as the key to opportunity (see the ACS Policy and GC/CS Web pages). On a local level, we aim to represent that mission.

Recent local section events included a Science Café presentation by Dr. Mike Barcelona (WMU) on transport of ground water pollutants (Sep 28), a presentation on the chemistry of coffee by tour speaker Dr. Tracy Hamilton (Oct 13) and our annual Chemistry Day activity at the Kalamazoo Valley Museum in coordination with National Chemistry Week (Oct 16). Thank you to the 60+ volunteers who showed up to put on the Chemistry Day event and celebrate "Chemistry Behind the Scenes" in addition to many of our favorite, traditional science activities.

What's ahead? See our list of upcoming events for 2011 in this issue and our local section Web page (<u>http://www.wmich.edu/acs/</u>) for announcements, summaries, committee meeting minutes, etc. In January, we begin our celebration of the International Year of Chemistry (IYC) - 2011. ACS intends to participate in a <u>big way</u> with quarterly themes of (1) Environment/Water, (2) Energy, (3) Materials and (4) Health. We look forward to emphasizing these themes in our local programming and hope that you will celebrate with us.

Continued on page 2

Vol. 1 - Issue 1

KACS website:

http://www.wmich.edu/acs/

Do you have questions, comments, or would like to contribute to this newsletter? Send an email to: ACSkzoo@gmail.com

Upcoming events at glance (Jan-Mar 2011)

Jan 20 – Mixer from 6-8 pm,
 WMU Chemistry Building, room
 2401

 Feb 12 – Girl Scout chemistry badge event from 9 AM – 3 PM, WMU Chemistry

 Feb – Science Café (topic: Environment and Water), date/time/venue to be determined

- Feb 28-Mar 7 – Mass spectrometer users group meeting, date/time/venue to be determined

- Mar 22 – ACS Tour Speaker: Ned Heindel (ACS President, 1994), time/location to be determined

- Mar – Spring Science Symposium for local high schools at WMU, time and date to be announced

Help us choose our Spring Speaker Topic!

Our Spring tour speaker will be Ned Heindel, the Howard S. Bunn Professor of Chemistry at Lehigh University and President of ACS (1994). Dr. Heindel will speak on March 22 at a time and location to be announced in our next newsletter. Until then, please help us choose a topic from the list that Dr. Heindel has provided. Please go to http://www.wmich.edu/acs/ to view a profile of Dr. Heindel and a link to the electronic voting site. Doug Williams

Continued from page 1

New on our Web site: We have created a larger list of local companies that employ ACS members. If you are an ACS member and your employer is not listed, please let me know. Also, we are offering space to local employers for posting job openings. Listings and traffic for this have been light but it might be more helpful if interest builds.

I want to take this moment to thank Sue Stapleton for her service as our chair in 2010 and to Don Schreiber as our "retiring" past chair. Both will continue on the executive committee in 2011 (Sue as past-chair and Don as Education Committee Chair and WMU Student Chapter Advisor). We also congratulate and thank John Miller, who was reelected for another two-year term as treasurer in our fall elections. Our chair-elect position remains open at this time. Please contact Doug Williams if you are interested in learning more about the glamorous benefits and privileges that accompany this office.

A list of our current executive officers and associated chairs is below. We would like to hear your ideas about local section activities. Please, stay tuned and in touch.

January mixer-New Consultants and Old Posters

Doug Williams

Please mark your calendars for a social-science-career mixer event from 6-8 pm, Thursday, January 20 in room 2401 of the WMU Chemistry Building. The content depends on you.

I am seeking anyone who is willing to display an old, favorite poster that you still have around. We'll supply poster frames and refreshments. In addition, we will have an informal panel discussion to represent consulting companies that are operating from our section. If you are a self-employed consultant, please let me know if you would be interested in telling us about your work and your experience/advice in setting up your service. Look for an email announcement in January with more details. Please send a note to Doug Williams if you would like to hang a poster or participate on the panel discussion.

ACS Fall Tour Speaker – "Chemistry of Coffee"

Dr. Tracy P. Hamilton, University of Alabama, Birmingham, AL

Wednesday October, 13, 5:30pm, Chemistry 1260, WMU (photos courtesy of Andre Venter)



Left to right: Dr. Tracy P. Hamilton, Dr. John Miller.



Left to right: Dr. Doug Williams, WMU biochemistry student Phillup Macklin, Dr. John Miller.

Girl Scout Chemistry Badge Day-Call for Volunteers

Kim Greve

Volunteers are needed for Girl Scout Chemistry Badge Day to be held at WMU on Saturday, February 12th from 9 a.m. till about 3 p.m. The Program consists of 5 experiments, biochemistry, environmental, crime scene, polymer chemistry, and separation science/pH. Supplies for all of the experiments will be provided. Volunteers are with the same experiment for part or all of the day. We rotate the girls to the different labs. Each experiment takes approx. 50 minutes. Lunch will be provided for the volunteers. Please consider volunteering for all or part of the day. This event is being sponsored by the KACS Women's Chemistry Committee and the Girl Scouts Heart of Michigan Council. Please contact Kim Greve if you are interested (kfgreve@frontier.com or call 269-679-3036).

Mass Spectrometer Users Group Meeting Coming Up

Andre Venter

Plans are developing for an inaugural meeting of a Kalamazoo area mass spectrometry discussion group on an early evening during the WMU spring break (Feb 28-Mar 7). The meeting will follow an informal meet-and-greet format, and we will try to get as many local people to each give a short 5 minute PowerPoint introduction about their facilities / interests. Please contact Andre Venter at WMU (andre.venter@wmich.edu) if you are interested in participating in this group.

Sudoku challenge

Solve the puzzle, win a prize!

Here's how to win a prize:

- 1) Solve this Sudoku puzzle.
- 2) Email the solved puzzle, as a pdf or jpg, to <u>ACSkzoo@gmail.com</u>
- 3) Submission deadline is January 31, 2011.
- 4) Prizes will be awarded to the first 3 correct entries.
- 5) Winners and solution will be announced in the March newsletter.

Have fun!

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Medium difficulty

New to Sudoku? Click on the <u>link</u> to learn the few basic rules of the game.

American Chemical Society – Kalamazoo Local Section (Bi)monthly Newsletter

February 11, 2011



2011 KACS

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Comments from the Chair

Doug Williams

After all is said and done, more will be said than done. And so, to keep our sanity, let's try to have some fun.

Vol. 1 - Issue 2

With so much to say, we are sending our second "bimonthly" newsletter to you almost one month ahead of schedule. We are also working hard to keep our Web site updated and useful. For all of the details, see <u>http://www.wmich.edu/acs/</u>. Here's why -

- New job listings from local employers.
- Upcoming chemistry talks and events in our area.
- Summaries of recent KACS activities.
- Some boring details about Executive Committee work.
- Some <u>exciting</u> opportunities for volunteers (like chair-elect hint, hint). Please check these out.

Thank you to all who came to our mixer on Jan 20, especially our four consultant panelists: Bill Schinzer, Loretta Dubray, Shirley Smith and Scott Aldrich. If you missed it, a summary with photo and panelist presentations are on our web site under Past Events and News. Scott and his work were recently featured in the January issue of Encore Magazine: see Encore - January 2011.

Please don't let my poetic deficiencies stop you from mentioning the ACS illustrated poetry challenge for Earth Day 2011 and the International Year of Chemistry. A flyer with contest rules for grades K-12 is on our home page. Please feel free to distribute this to educators.

If you want to post chemistry-related events, job openings or announcements, please send a note with proposed content to (<u>ACSkzoo@gmail.com</u>).

KACS website:

http://www.wmich.edu/acs/

Do you have questions, comments, or would like to contribute to this newsletter? Send an email to: <u>ACSkzoo@gmail.com</u>

Upcoming events at glance (Feb - Apr 2011)

- Feb 12 – Girl Scout chemistry badge event (CANCELLED)

- Feb 22 – Science Café -"Kalamazoo River oil spill: Overview and prospects for recovery," Professor Steve Hamilton (Kellogg Biological Station/MSU), 7 pm, Martini's

- Mar 1 – High School Spring Science Symposium. (Contact donald.schreiber@wmich.edu for details)

Mar 22 – ACS Tour Speaker:
Ned Heindel (ACS President, 1994), 6:30 pm, Kalamazoo
Area Math & Science Center

- April – Earth Day and IYC Events (Energy theme), details to be announced

Do you have an event that you would like to have listed in this newsletter? Send an email to: ACSkzoo@gmail.com

Science Café

Tuesday Feb 22, 7 pm – Martini's Restaurant

Please join us to hear Prof. Steve Hamilton of the MSU-Kellogg Biological Station present "Kalamazoo River oil spill: Overview and prospects for recovery." Dr. Hamilton is an aquatic ecosystems expert and serves as a consultant to the EPA environmental advisory group that is monitoring impact and remediation of the Enbridge oil spill into the Kalamazoo River watershed last July. His talk will begin at 7 pm in the upper room at Martini's restaurant, 832 S.Westnedge, Kalamazoo. This event is part of our local section celebration of the International Year of Chemistry 1st quarter theme: Water and our Environment. Complimentary hors d'oeuvres and cash bar.

Spring Tour Speaker

Tuesday Mar 22, 6:30 pm - KAMSC

We are delighted to host former ACS President and professor of Lehigh University Ned Heindel to speak to our section on the topic of "Tinctures, Tonics, and Patent Medicines: A History of Commercialized Quackery." Ned's presentation will begin at 6:30 pm on March 22 at the Kalamazoo Area Math & Science Center (4th floor of the old Central High School, 600 W. Vine Street, Kalamazoo). See our <u>Web page</u> for a more detailed summary of Ned's topic and a printable flyer to post or share with your friends. Thank you to everyone who voted online in the speaker topic survey. It was a close vote.

High School Chemistry Awards – Call for Nominations

Lydia Hines

The Kalamazoo Local Section has budgeted annual awards to be given to deserving High School Chemistry Students, and to a **High Schoo**l teacher (and his/her school) nominated by his/her principal as an **outstanding chemistry teacher**. In the past few years we have received a very small number of nominations from principals, so we are appealing to you as members/parents or grandparents - if you have noticed that your child/grandchild has had an exceptional experience the study of chemistry in High School, the Education Committee (contact: donald.schreiber@wmich.edu) would very much appreciate your participation in nominating that teacher for consideration for the award. We look forward to hearing from you.

Chemists Celebrate Earth Day – Kalamazoo Nature Center

Lydia Hines

The **Kalamazoo Local Section** will participate for the fourth year with the Kalamazoo Nature Center to celebrate Chemists Celebrate Earth Day (CCED) on Saturday, April 16, 2011. On that day from 10 a.m. to 4 p.m. the Nature Center opens its campus free of charge to the public, and we are given a table where we can display learning materials relating to chemistry (and its relation to energy, this year's theme for CCED - chosen to coincide with the International Year of **Chemistry**'s 2nd quarter theme of energy). Members Lydia and Wallis Hines have represented the Section for the past 4 years; but any Section member who would like to have the joy of talking to patrons young and old, of giving materials to parents, teachers, and scout leaders for educational purposes, and of doing a simple hands-on experiment for the public that passes by the table, for all or any portion of that time, is invited to come and share the day. Please contact Lydia Hines (lemhwgh@gmail.com) if you are willing to be an ambassador for chemistry on April 16.

New explanation for heart-healthy benefits of chocolate

ACS Office of Public Affairs

WASHINGTON, Feb. 7, 2011 — In time for the chocolate-giving and chocolate-noshing fest on Valentine's Day, scientists are reporting discovery of how this treat boosts the body's production of highdensity lipoprotein cholesterol (HDL) — the "good" form of cholesterol that protects against heart disease. Just as those boxes of chocolates get hearts throbbing and mouths watering, polyphenols in chocolate rev up the activity of certain proteins, including proteins that attach to the genetic material DNA in ways that boost HDL levels. Their report appears in the Journal of Agricultural and Food Chemistry, one of 39 peer-reviewed scientific journals published by the American Chemical Society.

Midori Natsume, Ph.D., and colleagues note that studies have shown that cocoa, the main ingredient in chocolate, appears to reduce the risk of heart disease by boosting levels of HDL, or "good" cholesterol, and decreasing levels of low-density lipoprotein (LDL), or "bad" cholesterol. Credit for those heart-healthy effects goes to a cadre of antioxidant compounds in cocoa called polyphenols, which are particularly abundant in dark chocolate. Until now, however, nobody knew exactly how the polyphenols in cocoa orchestrated those beneficial effects.

The scientists analyzed the effects of cocoa polyphenols on cholesterol using cultures of human liver and intestinal cells. They focused on the production of apolipoprotein A1 (ApoA1), a protein that is the major component of "good" cholesterol, and apolipoprotein B (ApoB), the main component of "bad" cholesterol. It turns out that cocoa polyphenols increased ApoA1 levels and decreased ApoB levels in both the liver and intestine. Further, the scientists discovered that the polyphenols seem to work by enhancing the activity of so-called sterol regulatory element binding proteins (SREBPs). SREBPs attach to the genetic material DNA and activate genes that boost ApoA1 levels, increasing "good" cholesterol. The scientists also found that polyphenols appear to increase the activity of LDL receptors, proteins that help lower "bad" cholesterol levels.

DOWNLOAD FULL TEXT ARTICLE

Journal of Agricultural and Food Chemistry "Cacao Polyphenols Influence the Regulation of Apolipoprotein in HepG2 and Caco2 Cells"

Here is a Valentine's Day sampler of other recent research on the health benefits of chocolate published in ACS journals:

- New evidence that dark chocolate helps ease emotional stress
- <u>Study finds that people are programmed to love chocolate</u>
- Natural ACE inhibitors in chocolate, wine and tea may help lower blood pressure

Apply Now for the ACS Scholars Program

The ACS Scholars Program is now accepting applications for the 2011-2012 academic year; the deadline is March 1, 2011. Qualified students can get complete information and apply online at <u>www.acs.org/scholars</u>. Contact the ACS Scholars program with any questions by email at <u>scholars@acs.org</u>, or by telephone at 202-872-6250 (direct line) or 1-800-227-5558, ext. 6250 (toll-free).

A World Without Chemistry?...

Check out the video "<u>A Day</u> <u>Without Chemistry</u>", developed in conjunction with the ACS Younger Chemists Committee.



Sudoku Challenge – January Winners

Congratulations to **Hershel Jude**, **Bryce Assink**, and **Tim Evans** for submitting their winning entries to the January Sudoku challenge. They each received a \$5 gift certificate to Water Street Coffee Joint. Thanks to all who participated in this challenge. Below is the solved puzzle.

Up to the task for another Sudoku challenge? Go to page 6 of this newsletter for your chance to win a prize...

Solve the puzzle, win a prize!

Here's how to win a prize:

- 1) Solve this Sudoku puzzle.
- 2) Email the solved puzzle, as a pdf or jpg, to <u>ACSkzoo@gmail.com</u>
- 3) Submission deadline is February 28, 2011.
- 4) Prizes will be awarded to the first 3 correct entries.
- 5) Winners and solution will be announced in the next newsletter.

Have fun!

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Difficulty: HARD

New to Sudoku? Click on the <u>link</u> to learn the few basic rules of the game.

American Chemical Society – Kalamazoo Local Section {(Bi)monthly} Newsletter

March 13, 2011

Vol. 1 - Issue 3



2011 KACS

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Comments from the Chair

Doug Williams

We are entering our busy quarter of the year for academic achievements in chemistry with our annual high school competitive exam and selection of outstanding area teachers and students. However, this is not all as we are continuing to offer interesting talks and activities for our professional community. Please keep checking our web site <u>http://www.wmich.edu/acs/</u> for details and announcements. In addition to our KACS sponsored events, several recent WMU Chemistry Department seminar events have been featured on our web site in the past two months. As always, if you want to post chemistry-related events, job openings or announcements, please send a note with proposed content to <u>ACSkzoo@gmail.com</u>.

Our Feb 22 Science Café at Martini's Restaurant about the Kalamazoo River oil spill clean up was lightly attended due to challenging weather but thoroughly enjoyable. Professor Steve Hamilton of MSU Kellogg Biological Station is an outstanding speaker and authoritative spokesman for river preservation and natural remediation. We are grateful that he took time to share his knowledge with us. More details and photos are in the Past Events section of our web page.

KACS website:

http://www.wmich.edu/acs/

Do you have questions, comments, or would like to contribute to this newsletter? Send an email to: <u>ACSkzoo@gmail.com</u>

Upcoming events at a glance (Mar - Apr 2011)

Mar 22 – ACS Tour Speaker:
Ned Heindel (ACS President, 1994), 6:30 pm, Kalamazoo
Area Math & Science Center

Apr 16 – Earth Day celebration, ACS public outreach table (10 am – 4 pm), Kalamazoo Nature Center, free to the public

Apr 28 – IYC 2011 2nd
 quarter, presentation by Four
 Elements Energy on Small
 Wind and Solar Power
 Generation in Michigan, 6:30
 pm, location to be announced

May 3 – (rescheduled) High
 School Spring Science
 Symposium. (Contact
 donald.schreiber@wmich.edu
 for details)

Do you have an event that you would like to have listed in this newsletter? Send an email to: <u>ACSkzoo@gmail.com</u>

Section Service Award

Lydia Hines

Each year at our Section's Award Ceremony - where we recognize our outstanding High School chemistry students, a High School chemistry teacher and two College students - we also recognize at least one member of our Local Section who has served selflessly over an extended period of time. We have awarded this recognition for 21 years to 28 volunteers. If you would like to recommend a Section member for recognition, please send a note giving the individual's name and the rationale for the nomination to the chair of the Awards Committee at <u>lemhwgh@gmail.com</u> by April 30, 2011. Thank you.

Spring Tour Speaker – Prof. Ned Heindel

Doug Williams

We are in our final advertising push for the upcoming talk by Professor Ned Heindel on "Tinctures, Tonics, and Patent Medicines: A History of Commercialized Quackery" (6:30 pm, March 22, Kalamazoo Area Math & Science Center). Local schools have been notified and various event calendars have been updated. Plans have been made for a preview interview with Dr. Heindel on WMUK in advance of the talk. You can help us get the word out by distributing our <u>printable flyer</u> on our web site. We're looking for a big turnout. Please mark your calendars and plan to attend.

Local Section Annual Report Available

Our 2010 Annual Report for the Kalamazoo section can be viewed on our web site (see link under Executive Committee on our <u>home page</u>). Everything was submitted on time thanks to the diligence of our past chair Sue Stapleton and treasurer John Miller.

Earth Day

We still have openings for any member to come and represent ACS at our outreach table during the Kalamazoo Nature Earth Day celebration on April 16. See our last newsletter for more details. Please contact Lydia Hines (<u>lemhwgh@gmail.com</u>) if you are able to help for any amount of time.

Ideas for New Activities or Programs

Have you been thinking about something we should be doing to improve our local section program? If so, we'd love to hear it. ACS Innovative Program Grants of up to \$3000 are available to local sections for activities that 1) are new to the local section, 2) stimulate local section member involvement, and 3) serve as pilot projects for a continuing section activity or else take advantage of a unique upcoming opportunity for the local section. Please send ideas to <u>ACSkzoo@gmail.com</u>. We'd like to have a short list of ideas before our next executive committee meeting on Apr 13.

International Year of Chemistry

Introduction

Lydia Hines

2011 is being celebrated as the International Year of Chemistry (IYC) by the American Chemical Society (ACS) and Chemical Societies around the world. Our Local Section has been participating in these celebrations by sponsoring Science Cafe's, lectures, will attend a table at the Kalamazoo Nature Center for Earth Day on April 16, and will offer other activities which will be announced in the Newsletter as the year moves along. The year also offers the opportunity to celebrate the 100th anniversary of Marie Curie winning the Nobel Prize in Chemistry, and the 100th anniversary of the International Union of Pure and Applied Chemistry (IUPAC). The Unifying theme for the year is "Chemistry - our Life, our Future"; to that end the year has been apportioned into four themes, one per guarter, to be used to educate our public concerning the importance of Chemistry as it relates to Energy, the Environment, Materials and Health. There are many free downloadable materials which can be found at www.acs.org which contain ideas for activities appropriate for use with non-science audiences, and daily items of information concerning the applications of chemistry in our lives (365:Chemistry for Life). The worldwide experiment centered on the theme "Water: a chemical solution" is available for members, as well as High School students and teachers, at water.chemistry2011.org for collection and submission of data starting on March 22, 2011 - please let us know (lemhwgh@gmail.com) if you or any acquaintances participate in this worldwide experiment :) I hope that you will avail yourselves of the many ways in which ACS and we in our Kalamazoo Local Section are determined to make a difference in the public's perception of our profession.

Virtual Journal

David Bolliet

As part of this year's celebrations of IYC, ACS created a Virtual Journal where one can find highlights from scientific journals in the fields of energy, environment, health, and materials. Issue 2 can now be found online. Topics in the February issue include personalized solar energy, "karrikins" and the key role they play in post forest fires new plant growth, a more efficient and less expensive synthesis of Tamiflu®, and a new process for making conductive energy textiles. A link to the IYC Virtual Journal can be found on our <u>homepage</u>.

Google Virtual Science Fair

David Bolliet

Be a part of the first global online Google Science Fair. Chemistry is one of 11 categories in which youths aged 13 to 18 are encouraged to send their submissions through April 4.

In July, one of the three finalist winners (one in each age category: 13-14, 15-16, and 17-18) will get a chance to become the grand-prize winner and receive, among other things, a \$50,000 scholarship, and a National Geographic trip to the Galapagos Islands.

Further, we all can be a part of the Google Science Fair by viewing and voting on the work by the 60 semi-finalists, announced on May 9.

Watch the Rube Goldberg machine created specially to advertise for this event by clicking on the Google picture.

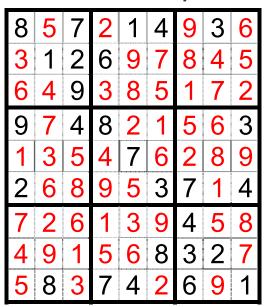


Sudoku Challenge – February Winners

Congratulations to **Tova Samuels**, **Miao-Miao Horng**, and **Tim Evans** for submitting their winning entries to the February Sudoku challenge. They each received a \$5 gift certificate to Fourth Coast Café, located in the Vine Neighborhood, at 816 S. Westnedge Ave.

Thanks to all who participated in this challenge. Below is the solved puzzle.

Up to the task for another Sudoku challenge? Go to page 6 of this newsletter for your chance to win a prize...



Difficulty: Hard

Newsletter, 2011, 1(2)

Solve the puzzle, win a prize!

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- 3) Submission deadline is March 31, 2011.
- 4) Prizes will be awarded to the first 3 correct entries (entries must be from Kalamazoo Local Section ACS members who have not won a prize in the two most recent newsletters).
- 5) Winners and solution will be announced in the next newsletter.

Have fun!

First Name:

Last Name:

Difficulty: EVIL

Email address:

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learn the few basic rules of the game.

American Chemical Society – Kalamazoo Local Section {(Bi)monthly}? Newsletter

May 9, 2011



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Alternate Councilor Mr. Michael Kiella mike.kiella@charter.net Vol. 1 - Issue 4

Comments from the Chair

Doug Williams

Thank you for reading our newsletter this year. David and I have enjoyed your comments and encouragement. Our leadership team has supported us by helping to create announcements and news for you to read. We've launched a new MS Users Group under Andre Venter's leadership. Since January, we've had monthly activities to feature local developments in small business and environmental issues in conjunction with IYC 2011 themes. We sponsored a distinguished and entertaining tour speaker. Our ongoing outreach and award programs to local schools have continued to emphasize the importance of the study of chemistry. As we approach the summer pause in our programs, we ask, are we making a difference?

I welcome your comments, ideas and, most of all, your participation. The best way for you to support and influence what we do is to get involved. Right now we are seeking a chair-elect to replace me as chair in 2012. I promise to help as needed next year as past-chair. By this September, nominations will open for election of Secretary (2012-2013), Councilor (2012-2014) and Chair-elect (to become chair in 2013). If you are interested in a more specific role, we are looking for helpers to coordinate National Chemistry Week activities (October 16-22) and updating our section archives. See the Volunteer Opportunities link on our web site http://www.wmich.edu/acs/ for details and, please, let us know if you are interested. We dearly need new (and old) leaders to step forward.

KACS website:

http://www.wmich.edu/acs/

Do you have questions, comments, or would like to contribute to this newsletter? Send an email to: <u>ACSkzoo@gmail.com</u>

Upcoming events at a glance (May 2011)

- May 13 – Home – the Movie, 7:00 pm, Kalamazoo College, Dow Science Center, Room 226

- May 14 – Home – the Movie, 8:00 pm, Western Michigan University, Wood Hall, Room 1001

May 23 – Annual Awards
 Reception, Western Michigan
 University, Chemistry Building
 Lobby, 6 pm reception, 6:45
 pm awards

Do you have an event that you would like to have listed in this newsletter? Send an email to: <u>ACSkzoo@gmail.com</u>

HOME YANN ARTHUS-BERTRAND

HOME – The movie

David Bolliet

The Kalamazoo Local Section of the American Chemical Society is inviting Kalamazoo residents to enjoy the movie 'HOME', directed by French photographer Yann Arthus-Bertrand and narrated by Glenn Close. HOME is the first major film about climate change that has been made using only aerial photography.

HOME is a visually stunning and spectacular voyage around the world. It is a unique film that approaches the current debate about climate change from a whole new angle, giving viewers the opportunity to see for themselves how our earth is changing.

Spanning 54 countries and 120 locations, all seen from the air, the film captures the Earth's most amazing landscapes, showcasing its incomparable beauty and acknowledging its vulnerability.

HOME is a non-for-profit film project, produced by the French film director and producer Luc Besson (Europacorp), Denis Carot (Elzevir Films) and supported by the PPR group.

HOME will be shown at two FREE events:

- Friday, May 13, 2011 at 7 pm (Kalamazoo College, DOW Science Center, Room 226)
- Saturday, May 14, 2011 at 8 pm (Western Michigan University, Wood Hall, Room 1001).

(Can't make it to these two big screen showings? HOME can be watched online on <u>YouTube</u>)

Please send an email to <u>ACSkzoo@gmail.com</u> if you have any questions.

KACS Newsletter, 2011, 1(4)

Pennies for PUR[™] Water

Doug Williams

As part of our celebration of the International Year of Chemistry, ACS is collecting donations to support Children's Safe Drinking Water, a foundation that is distributing low-cost water purification chemicals throughout the world. Look for us to collect donations at our local events through the rest of this year. More information about the program is online at <u>Pennies for PUR[™] Water</u>.

MS User Group Update – Andre Venter

Andre Venter

Our next event is tentatively planned as an outdoor poster session near the end of July. Details are to be determined. Meanwhile, all interested members are invited to follow updates on the MS User Group at the following Linked In web page: <u>http://tinyurl.com/4535ewr</u>

Spring Awards Reception

Doug Williams and Lydia Hines

Members are invited to attend our annual awards reception at the WMU Chemistry Department on Monday, May 23. The reception will begin at 6 pm and awards presentations will begin at 6:45 pm. Awards will be presented to outstanding teachers and students from local high schools and colleges, competitive chemistry exam winners and member for service and longevity.

Kalamazoo Section ACS Chemists Celebrate Earth Day 2011

Lydia Hines

On Saturday, April 16, 2011, our Kalamazoo Local Section (represented by Lydia E. M. Hines, Wallis G. Hines and P. Douglas Williams) for the 5th consecutive year participated with the Kalamazoo Nature Center at their Earth Day Event. Typical of April weather in Michigan, it was not only cold, it was also rainy; as a result our indoor activity/literature table was not as busy as in other years but we served about 200 patrons young and older. At that event we also began our publicity of the PUR water ACS-wide fund-raiser project initiated to provide for clean water in under-served areas worldwide (a community service which coincides with the Water sub-theme for the International Year of Chemistry).

Among our visitors were four individuals who visit area schools to present "earth-friendly" science programs so they were very pleased to have our Celebrating Chemistry publication to distribute to their students/teacher contacts. We also presented the international nature of our events during 2011.

It is always exciting to see the various levels of interest that are expressed when "Chemistry" or "Chemical" is noticed on our Banner or apparel – all who stop by hear encouragement to continue to be curious, to understand that science is a way of understanding the world around them, and to a one they are engaged in our hands-on experiment – the response is – "Is this really chemistry? It's Fun!"

An e-mail sent to area K-12 teachers, and a posting on our Section website, requested their students' participation in an illustrated poem competition on the theme of Energy - sponsored by the National ACS office; this netted one response from the Kazoo School (teacher Janice Russo) from an 8th grade student. Though the entry was not a national winner, the young lady was given a certificate and a furry Meg.A.Mole.

Science Café – Renewable Energy in Michigan

Doug Williams

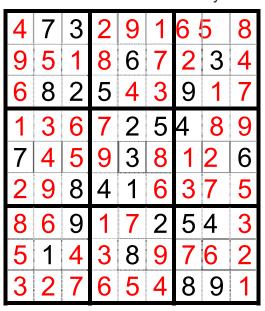
On April 28, approximately 25 local members and public audience heard excellent presentations from Lloyd LeZotte and Art Toy of Four Elements Energy (Lawrence, Michigan) on solar and wind power installations in Michigan and from five KVCC teachers and administrators of their program to design and build a wind turbine in a 15-week class (twice!). Check the past events summaries on our web site for more details and links to portions of the program. Lloyd and Art would like our members to know that Four Elements Energy gives Lunch & Learn presentations to local groups and companies as well as more targeted talks to leadership teams. See http://fourelements-energy.com/ for contact information.

Sudoku Challenge – March Winners

Congratulations to **Kate Shaw**, **Jeff Fleming**, and **Kevin Douglass** for submitting their winning entries to the March Sudoku challenge. They each received a \$5 gift certificate to The Big Burrito, located at 5036 W. KL Ave.

Thanks to all who participated in this challenge. Below is the solved puzzle.

Up to the task for another Sudoku challenge? Go to page 6 of this newsletter for your chance to win a prize...



Difficulty: Evil

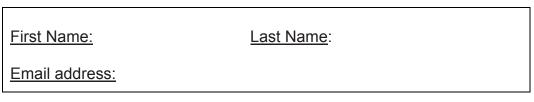
Solution: Newsletter, 2011, 1(3)

Solve the puzzle, win a prize!

Here's how to win a prize:

- Solve this Sudoku puzzle on your own. (please, <u>do not use</u> an online Sudoku solver)
- 2) Email the solved puzzle to ACSkzoo@gmail.com
- 3) Submission deadline is May 23, 2011.
- 4) Prizes will be awarded to the first 3 correct entries (entries must be from Kalamazoo Local Section ACS members who have not won a prize in one of the two most recent newsletters).
- 5) Winners and solution will be announced in the next newsletter.

Have fun!



Difficulty: HARD

5	6				9	2	
8				6	7	1	
			1			6	
	4	7					5
			8	7			
1					3	2	
	3			4			
	2	9	7				4
4	1				2	9	

New to Sudoku? Click on the link to

American Chemical Society – Kalamazoo Local Section Newsletter

August 29, 2011



2011 KACS

Executive Officers

Chairperson Dr. Doug Williams, Kalsec, Inc. DWilliams@kalsec.com

Past-Chairperson Dr. Susan Stapleton, WMU – Chemistry susan.stapleton@wmich.edu

Chairperson-Elect Dr. Elke Schoffers, WMU – Chemistry elke.schoffers@wmich.edu

Secretary Carl Stachew <u>cstachew@yahoo.com</u>

Treasurer Dr. John Miller, WMU – Chemistry john.b.miller@wmich.edu

Councilor Dr. Lydia E. M. Hines, WMU – Chemistry lemhwgh@gmail.com

Alternate Councilor Mr. Michael Kiella mike.kiella@charter.net **Comments from the Chair**

Doug Williams

We emerge from our "lazy" summer days with some good news about our leadership team. First, we welcome WMU Professor of Chemistry Elke Schoffers to the Executive Committee as our Chair-Elect for 2011. This appointment fills the final vacancy on our Committee just in time as we move into the fall election season for 2012. Secondly, we welcome Kevin Douglass as our representative of the WMU Chemistry Graduate Students Association. Thank you to Elke and Kevin for their interest and commitment to our Section.

Are you interested in getting involved in some way? Perhaps you have a mentor who inspired a love of chemistry that you want to share with others. Maybe you're thinking that it would be good to meet chemists outside of your workplace and expand your local professional network. You might just be reading this and telling yourself, "I could really help these guys." And, I would agree with you.

This fall, we are seeking nominations for 2012 Chair-elect (leading to Chair in 2013) and Secretary (two-year appointment). If you'd prefer a seasonal or shorter-term commitment, we have that too. Please check our web site <u>page</u> for specific volunteer openings and let us know what interests you. If you haven't checked our <u>web site</u> lately, please, browse around a little while you're there for other section news and links.

Our Fall 2011 program starts with a flavorful tour speaker event, continues with our annual celebration of National Chemistry Week and culminates in the 2011 Midwest/Great Lakes Joint Regional ACS Meeting in St. Louis. Please, read on below for more details. Lastly, (I can't say much about this yet) we are aiming to host a large member event in November that involves research presentations and an open bar. Look for more news about this in our next newsletter.

KACS website:

http://www.wmich.edu/acs/

Do you have questions, comments, or would like to contribute to this newsletter? Send an email to: ACSkzoo@gmail.com

Vol. 1 - Issue 5

Upcoming events at a glance (Sep - Oct 2011)

- Sep 28 – The Chemistry of Chocolate, Prof. Joe Vinson (Univ. of Scranton) and local chocolatier Dale Anderson (Confections with Convictions), 7:00-8:30 p.m., Kalamazoo Valley Community College (Texas Township), Student Commons Theater

- Oct 15 – Chemistry Day, Kalamazoo Valley Museum, 12:00 noon – 4:00 p.m.

Oct 19-22 – Midwest/Great
 Lakes Joint Regional Meeting,
 St. Louis, MO

Do you have an event that you would like to have listed in this newsletter? Send an email to: <u>ACSkzoo@gmail.com</u>

Announcements

The Chemistry of Chocolate – Fall Speaker Meeting

Doug Williams

The 3rd Quarter theme for the ACS celebration of IYC 2011 is <u>Materials</u>. We might be stretching the intention a little on this one but, personally, I can't think of a much more important material than food or, in particular, a more universally pleasing food than chocolate. Get ready to join us at 7 p.m. on Wednesday, September 28 at KVCC (Texas Township campus) for a scientific and <u>organoleptic</u> assessment of chocolate! Professor Joe Vinson (Univ. of Scranton) will talk about his research on the chemistry of chocolate and local chocolatier Dale Anderson (Confections with Convictions) will provide samples of his popular truffles for tasting. <u>Advance</u> registration is required for this event.

Send name(s) to <u>dwilliams@kalsec.com</u> or call Doug Williams at 349-9711 (x3298) by Wednesday, September 14 to reserve your place. ACS members and students are free. Guests are \$2 each (collected at the door). See our <u>website</u> for additional details and a printable poster. (Note: I apologize for scheduling this on the eve of Rosh Hashanah. Because of Professor Vinson's tour schedule with neighboring Sections, his appearance cannot be rescheduled. If you are unable to attend because of this, please let me know. – Doug Williams)

ACS Science Coaches

ACS has launched a new program to encourage members to share their expertise and enthusiasm for science through regular contact with middle or high school teachers and students. You choose the teacher and work with them to develop a plan and **ACS will provide up to \$500 for materials**. ACS expects to support 75 coaches in the 2011-2012 school year. See the ACS Science Coaches <u>web site</u> for details and, please, send a note to Lydia Hines at <u>lemhwgh@gmail.com</u> if you decide to sign up.

Midwest Great Lakes Joint Regional Meeting

Lydia Hines

This year's Great Lakes Regional Meeting will be held in St. Louis, MO, October 19-22, 2011. Abstract submissions are accepted until Wednesday August 31, and the deadline of early registration at a reduced cost is September 30. More information can be found at www.mwrm2011.org.

The Wabash Valley Local Section in our (Great Lakes) Region is acting as co-host with the St. Louis Local Section (Midwest Region) to conduct this Joint Regional Meeting. Because Regional Meetings are not often emphasized, some of our younger members may not be familiar with their history and importance. I have written a <u>short informational article</u> which I hope will encourage you to consider participating in, and even offer to help organize, a Regional Meeting at some point (how does 2017 sound?) in Kalamazoo.

Career Tools for Unemployed Members

The American Chemical Society offers special discounts and career assistance to its **unemployed members**; for information on all the available programs and tools visit **www.acs.org/unemployed**

For free career-assistance tools for all ACS members visit <u>www.acs.org/careers</u>

In addition, ACS members and non-members from around the world can take advantage of some great networking opportunities through the <u>ACS Virtual Career Fair</u>, at no charge. The virtual career fair is part of the 2011 National ACS Fall Meeting, Denver, CO, Aug. 28-Sept. 1.

Purifying Water with Banana Peels

Besides being used for polishing silverware, leather shoes and house plants, banana peels can also purify drinking water that may have been contaminated with heavy metals. Indeed, a Brazilian research group showed that minced banana peel could quickly remove lead and copper from river water contaminated by mining operations, farm runoffs and industrial wastes.

Their paper appeared in ACS's journal Industrial & Engineering Chemistry Research.

Appeal for Volunteers

Lydia Hines

Since 1988, when we hosted two, our Kalamazoo Section has been hosting a Chemistry Day at the Kalamazoo Valley Museum (KVM) in conjunction with our **N**ational **C**hemistry **W**eek (**NCW**) celebration. This year that week of excitement is coming soon - October 16-23 – and our annual outreach to our community at the KVM will be happening on **Saturday, October 15, from noon to 4 p.m. The theme is "Chemistry – Our Health, Our Future"**, so we will have an opportunity to share with those who come through the Museum doors (800-1000 visitors ages 4-104) much about how chemistry and chemicals contribute to a healthy lifestyle, how chemists have a hand in designing diagnostic methods and equipment, how our lifestyle from the food we eat, our medications, to our very breathing are results of chemistry and chemists at work.

This is our appeal to you to **volunteer** to set up and share an activity on that day with the goal of explaining in simple terms how chemistry is central to that activity. **Ideas** for appropriate activities may be found at <u>www.acs.org</u> (search for "**kids and chemistry**"). Examples of what has been done in previous years are Chromatography, pH/color changes, Liquid Nitrogen use, UV beads bracelets, effects of Emulsifying Agents, etc. Children love the fun at the KVM, learn the fun of chemistry, and they and their parents (and teachers) get reading/activity materials to take home and to school.

As a Local Section, we also conduct an **Illustrated Poem Contest for students K-12** in our Section (Kalamazoo, Allegan and Van Buren Counties) about a month before NCW. It will be greatly appreciated if you can pass along the e-mail address of a Middle school or Elementary school teacher so that they can be included in our mailing list for that contest.

Please mark your calendars for October 15 and **volunteer** for our 2011 Chemistry Day at the KVM. Indicate your availability by **sending** your name and e-address **soon** to our NCW coordinator, Lydia E. M. Hines at <u>lemhwgh@gmail.com</u> ! Please send your name even if you have participated in the past.

Thank you.

2011 High School Teacher Award – David Williams

Lydia Hines

If you still have your August 1, 2011, C&EN available (or if you get the online version) check out page 49 to see the picture of our 2011 High School Teacher (Lawton) Awardee, **David Williams**, along with his own High School Teacher and mentor, **Doreen Odziana**, a previous KACS High School Teacher (Paw Paw) Awardee. You can also read the complimentary comments made about him by Sherine Obare, one of our Section's evaluators of the teacher nominees, and incorrectly attributed to me (Lydia).



2011 KACS High School Teacher honoree David Williams with his mentor and former high school chemistry teacher, Doreen Odziana.

CGSA Barbecue Event

In what we hope to be a repeating event, the WMU Chemistry Graduate Student Association (CGSA), kindly hosted a barbecue for local ACS members and guests at Oshtemo Township Park on Friday, June 17. About 20 students and 20 nonstudents attended on a beautiful summer day. A <u>summary</u> with photos is on our web site.

Sudoku Challenge – May Winners

We did not receive any entries to the May Sudoku challenge. This was a tough one.

Below is the solved puzzle.

Up to the task for another (and easier) Sudoku challenge? Go to page 6 of this newsletter for your chance to win a prize...



Solution: Newsletter, 2011, 1(4)

KACS Newsletter, **2011**, 1(5)

Solve the puzzle, win a prize!

Here's how to win a prize:

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- 2) Email the solved puzzle to ACSkzoo@gmail.com
- 3) Submission deadline is September 15, 2011.
- 4) Prizes will be awarded to the first 3 correct entries (entries must be from Kalamazoo Local Section ACS members who have not won a prize in the most recent newsletter).
- 5) Winners and solution will be announced in the next newsletter.

Have fun!



Difficulty: **MEDIUM**

			6					
4	6				7	8	3	2
		2				9		5
	1			5	8			4
3			9	4			1	
2		9				1		
8	5	3	1				9	7
					9			

New to Sudoku? Click on the link to

learn the few basic rules of the game.

American Chemical Society – Kalamazoo Local Section Newsletter

October 4, 2011



2011 KACS

Executive Officers

Chairperson Dr. Doug Williams, Kalsec, Inc. DWilliams@kalsec.com

Past-Chairperson Dr. Susan Stapleton, WMU – Chemistry susan.stapleton@wmich.edu

Chairperson-Elect Dr. Elke Schoffers, WMU – Chemistry elke.schoffers@wmich.edu

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Treasurer Dr. John Miller, WMU – Chemistry john.b.miller@wmich.edu

Councilor Dr. Lydia E. M. Hines, WMU – Chemistry lemhwgh@gmail.com

Alternate Councilor Mr. Michael Kiella mike.kiella@charter.net **Comments from the Chair**

Doug Williams

Many of you know Dr. Lydia Hines, who has represented the Kalamazoo Local Section at national level as our Councilor for 27 years. She has served previously as our Section Chair and has been our primary coordinator over the last 25 years for many school programs and public outreach activities such as National Chemistry Week, Chemistry Day and Chemists Celebrating Earth Day. Fewer of you might be aware that Lydia has been a member of the ACS Great Lakes Region Steering Committee since 1984 and supported the Kalamazoo Section's sponsorship of regional ACS meetings in 1984 (as general chair), 1994 and 2001. For this work, Lydia has been selected as the 2011 recipient of the E. Ann Nalley Great Lakes Region Award for Volunteer Service. This distinguished honor will be presented to Lydia at the Awards Banquet on October 20 during the Midwest/Great Lakes Regional Meeting. Please congratulate Lydia on this achievement and plan to celebrate with her if you are going to the meeting in St. Louis.

Our fall program is in full swing (see below). Watch your email for election announcements in mid-October with internet voting instructions. We are still seeking nominations for a Chair-elect to join Elke Schoffers and me in our 2012 triumvirate. If you might be interested (and you should be), please contact one of us to discuss.

Thank you to all who registered for the Chemistry of Chocolate presentation on Sep 28. We had over 60 guests hear our speaker and taste chocolates. Check our <u>web site</u> for photos and a summary of our audience flavor scores for Hershey's® Kisses. I encourage all available members to get involved in Chemistry Day on October 15, one of our most recognizable annual events. Read below for first announcement of our upcoming SciMix at Bell's Eccentric Café in November. As always, see our Web site for the latest news on Local Section activities and news.

KACS website:

http://www.wmich.edu/acs/

Do you have questions, comments, or would like to contribute to this newsletter? Send an email to: ACSkzoo@gmail.com

Vol. 1 - Issue 6

Upcoming events at a glance (Sep - Oct 2011)

- Oct 15 – *Chemistry Day*, Kalamazoo Valley Museum, 12:00 noon – 4:00 p.m.

Oct 19-22 – Midwest/Great
 Lakes Joint Regional Meeting,
 St. Louis, MO

- Nov 1 – KACS SciMix Event: "Sustainable Science, Recycle a Poster", 5-9 pm, Bell's Eccentric Café

Do you have an event that you would like to have listed in this newsletter? Send an email to: <u>ACSkzoo@gmail.com</u>

Announcements

SciMix Poster Session:

"Sustainable Science - Recycle a Poster"

John Wendt

A SciMix poster event will be taking place on Tuesday, November 1st, 5-9 pm, Bell's Eccentric Café. Appetizers and refreshment will be provided.

The objective is to share research work presented in a poster media. Posters can be new or recycled from a previous event (e.g. ACS national or regional meetings, etc).

All local chemists, from all areas of chemistry (e.g. physical, inorganic, organic, medicinal, biochemistry and analytical such as mass spectrometry and chromatography, etc), are invited to the SciMix.

This event, sponsored by Pfizer Animal Health, is open to scientists from academia and commercial companies.

Poster presenters should email John Wendt (john.a.wendt@pfizer.com) for more information.

Fall 2011 ACS National Meeting Denver

David Bolliet

Members can find a summary from the Denver Fall 2011 ACS National Meeting, written by our Local Section Councilor, Lydia Hines, by visiting our <u>website</u>.

Project SEED Student Spends Summer Working in Chemistry Laboratory at WMU

Don Schreiber

This summer Kalamazoo Central High School graduate, Amarachi Nnebedum, spent her summer working in the lab of Dr. Shreine Obare at Western Michigan University. She was supported by the ACS Project SEED (Summer Educational Experience for the Disadvantaged) Program. The program pays High Schools students a stipend to work in a chemistry lab. The Kalamazoo Section of the American Chemical Society has participated in Project SEED for the last twenty years. This year's program concluded with a poster session and reception held on the morning of August 10, in the Haenicke Hall Atrium on the Campus of Western Michigan University. Amarachi's poster was entitled "Development of an Optical Sensor for the Detection of Arsenic Ions. Project SEED is supported on a matching funds basis. A portion of the stipends must be raised locally.

Companies or individuals interested in donating to or want more information about the local Project SEED Program should contact: Dr. Donald Schreiber (Department of Chemistry, Western Michigan University, 1903 W. Michigan Ave., Kalamazoo, MI 49008. Tel: (269) 387-2856, FAX: (269) 387-2909). Email: <u>donald.schreiber@wmich.edu</u>

Chemistry Alumnus Honored at WMU

Don Schreiber

On Friday October 7th at 2:30 PM, Western Michigan University's Department of Chemistry will honor its 2011 Outstanding Alumnus, **David Ansel**. He will receive the award at a ceremony in the lobby of the Chemistry Building followed by a reception. Both the ceremony and reception are open to the public.

David Ansel, a member of the American Chemical Society, is a 1974 graduate of the Chemistry Department. He went on to get his MS degree in chemistry at Colorado State University in 1980. After graduating from Colorado State he went to work for Wacker Chemical Corporation in Adrian Michigan, where he retired earlier this year. At Wacker, Ansel worked in technical support in their silicone technology area. David is not the first Ansel to be honored by WMU, his father James, a 1935 graduate in education, received an alumni award from the College of Education in 1999. In addition to being a graduate his father taught at WMU for 26 years. David will also be honored by the College of Arts and Sciences and the University latter in the day.

Gearing up! Please join the FUN!

Lydia Hines

NCW will be celebrated **October 16-22** this year, and its **theme**, as part of the 4th quarter of the International Year of Chemistry (IYC), is "Chemistry – Our Health, Our **Future**". By far our largest and most extensive annual outreach to the community is our Chemistry Day at the Kalamazoo Valley Museum where our own members (YOU and I) and friends spend 4 hours on a Saturday afternoon – this year October 15 from 12 noon to 4 p.m. - presenting chemistry-related hands-on activities and the joy of chemistry's pervasiveness in ALL that we eat, drink, do, wear, play with, and so much more. Youngsters and their parents who come to visit the Museum will learn about chemistry as well as receive materials to take home and read, do and share with their parents and teachers. The first plea in the August Newsletter and e-mails distributed to past volunteers have resulted in commitments from 30 individuals to present 16 activities. The invaluable cooperation of Annette Hoppenworth at the Kalamazoo Valley Museum continues to assure the success of this outreach event, and her commitment as we approach this 25th celebration continues unabated. Though there still is time to express your interest, time is of the essence for good planning to occur. I would love to hear of your willingness to participate; so please contact me, Lydia E. M. Hines at lemhwgh@gmail.com or 269-375-7349, ASAP. I will forward you the particular information necessary at that time. Thank you very much.

For a re-cap of NCW-related initiatives so far:

- information has been e-mailed to our Section's (Allegan, Kalamazoo, Van Buren counties) High School and Middle School teachers concerning our US-wide Illustrated Poster contest, related to this year's theme, for students in grades K-12; submissions will be accepted if received at my address, 5596 Parkview Avenue, Kalamazoo, MI, by October 14.
- (b) hygiene-product drives will be conducted through our College/University Student Member Clubs during NCW, with the objective of providing all collected items to local homeless shelters/food pantries
- (c) we continue our participation in the drive to collect "pennies" for <u>Pennies for PUR</u> <u>Water</u>®, a program in which ACS and Procter & Gamble are working together to provide water-purifying packets (at 3.5 cents per packet, with each packet safely cleaning 2.5 gal of water) through the Children's Safe Drinking Water program (http://www.csdw.org/csdw/home.shtml);

the American Chemical Society's goal, as our "heart" contribution for IYC2011, is to gather enough funds to enable the provision of 1.5 million gallons of clean water.

Middle School Curriculum

Lydia Hines

For members with their own, or friends', Middle School children or grandchildren, we would like to encourage you to bring the following free online middle school chemistry curriculum unit,

<u>www.middleschoolchemistry.com</u> to the teacher's attention.

The curriculum offers fully developed lesson plans to teach chemistry concepts at the middle school level; it was developed by the American Chemical Society's Office of K-8 Science in its Education Division in response to the National Academy of Sciences' newly drafted national science education standards.

Rube Goldberg Machine Contest

David Bolliet

Rube Goldberg Machine (RGM). We have all seen these complex contraptions assembled together and that, once started, will go through a series of elaborate steps creating a seemingly endless chain reaction resulting in performing a simple task.

At the 2011 Theta Tau National Rube Goldberg Machine Contest that took place on March 26 at Purdue University, West Lafayette, IN, the winning team, University of Wisconsin, Stout, created a RGM with 135 steps to water a plant. The machine took 9 months and 2,000 hours to build.

Here's the video of the RGM in action.

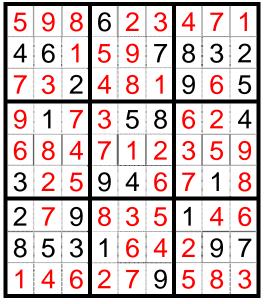
Sudoku Challenge – August Winners

We received two winning entries to the August Sudoku challenge. Congratulations to Jane Guido and Donna Seibert.

They will each receive a \$5 gift certificate to **Studio Grill**, located at 312 W. Michigan Avenue in downtown Kalamazoo.

Below is the solved puzzle.

Up to the task for another Sudoku challenge? Go to page 6 of this newsletter for your chance to win a prize...



Difficulty: MEDIUM

Solution: Newsletter, 2011, 1(5)

Solve the puzzle, win a prize!

Here's how to win a prize:

- Solve this Sudoku puzzle on your own. (please, <u>do not use</u> an online Sudoku solver)
- 2) Email the solved puzzle to ACSkzoo@gmail.com
- 3) Submission deadline is October 15, 2011.
- 4) Prizes will be awarded to the first 3 correct entries (entries must be from Kalamazoo Local Section ACS members who have not won a prize in the most recent newsletter).
- 5) Winners and solution will be announced in the next newsletter.

Have fun!

 First Name:
 Last Name:

 Email address:
 Difficulty: MEDIUM

			5		3			1
		5	2		9	3		
	7	2					4	5
				5			7	8
			7	1	6			
7	5			3				
5	9					4	1	
		7	8		4	6		
2			1		5			

New to Sudoku? Click on the link to

learn the few basic rules of the game.

American Chemical Society – Kalamazoo Local Section Newsletter

October 26, 2011

Vol. 1 - Issue 7



2011 KACS Executive Officers

Chairperson Dr. Doug Williams, Kalsec, Inc. DWilliams@kalsec.com

Past-Chairperson Dr. Susan Stapleton, WMU – Chemistry susan.stapleton@wmich.edu

Chairperson-Elect Dr. Elke Schoffers, WMU – Chemistry elke.schoffers@wmich.edu

Secretary Carl Stachew <u>cstachew@yahoo.com</u>

Treasurer Dr. John Miller, WMU – Chemistry john.b.miller@wmich.edu

Councilor Dr. Lydia E. M. Hines, WMU – Chemistry lemhwgh@gmail.com

Alternate Councilor Mr. Michael Kiella mike.kiella@charter.net **Comments from the Chair**

Doug Williams

At various times this year, I have reflected on the return of our Local Section newsletter and our intention to make it a "bimonthly" publication. First, I thank David for his steady hand in preparing these for us, for making them fun and interesting, and for managing their distribution to you. Some of you have sent your encouragement and appreciation, for which we are grateful. Secondly, I smile when I think about the challenge of wrestling this publication into a bimonthly schedule. This is our seventh issue this year and our second one in October. Let's call this a bimonthly approximation. More importantly, we hope that these have been timely and informative for you. October is traditionally a busy month for our Section. Chemistry Day, as always, engages a lot of volunteers and public participants. Read on for a summary of this year's event. Two key activities that I want everyone to consider: (1) Elections – by Oct 31, go to http://www.surveymonkey.com/s/W9QHRZY to vote for our nominees for Councilor and Secretary and (2) SciMix poster session - join us at Bell's Eccentric Café on Nov 1 for an evening to celebrate chemistry research in our section (see below for details).

KACS website:

http://www.wmich.edu/acs/

Do you have questions, comments, or would like to contribute to this newsletter? Send an email to: ACSkzoo@gmail.com

Upcoming events at a glance (Oct - Nov 2011)

- Oct 31 – Deadline to vote online for Local Section officers

- Nov 1 – KACS SciMix Event: "Sustainable Science, Recycle a Poster", 5-9 pm, Bell's Eccentric Café

Do you have an event that you would like to have listed in this newsletter? Send an email to: ACSkzoo@gmail.com

Announcements

SciMix Poster Session: "Sustainable Science - Recycle a Poster"

Doug Williams

Please join us between 5:00-9:00 pm, Tuesday, Nov 1, at Bell's Eccentric Café (355 East Kalamazoo Ave.) for "Sustainable Science - Recycle a Poster," a celebration of local chemistry. Dr. Bob Gadwood will speak at 6 pm on "Creating Chemistry Jobs in Kalamazoo: The Story of Kalexsyn." Others will present posters of recent work in all areas of chemistry. We will provide appetizers and an open bar for the occasion. This event has been graciously funded with a special grant from Pfizer Animal Health and we are looking forward to a good turn out to help us celebrate the 4^{th} quarter theme of Health in the International Year of Chemistry 2011. If you or a colleague would like to present a poster, please notify John Wendt (john.a.wendt@pfizer.com) to reserve an easel. For more details or a printable announcement of the event, please go to our web page.

Expired or Unwanted Medicine – Free Disposal

Donna Seibert

Do you have unwanted medicines? Don't flush'em, and don't throw'em in the trash can. Instead, protect our natural resources and drop them off at a local police station. Collection sites will be open on **Saturday, October 29 from 10 am – 2 pm** at the Kalamazoo Township Police Department (on Riverview) and Kalamazoo Department of Public Safety (on Crosstown).

Also, **starting November 1**, red medicine boxes will be available for 24/7 dropoff of unwanted medications at four local police stations:

- Kalamazoo Township Police Department (Riverview)
- Kalamazoo Department of Public Safety (Crosstown)
- Portage Police Department (Shaver Rd)
- Kalamazoo Sheriff's Department (Lamont)

Report

Lydia Hines

What a pleasure to be greeted by "our own" Sheryl Loux on arrival at the Registration Area at the Joint Great Lakes-Midwest Regional Meeting in St. Louis on Thursday evening, October 20. 2011; she remains active in outreach in the St. Louis Section just as she was with our Section. She sends regards.

The Meeting was well attended (1070 attendees, 640 papers/posters) with many student and faculty presenters and a lively exhibit area (53 exhibitors) which included a large number of colleges and universities "recruiting" graduate students. KACS Chair-elect Elke Schoffers and four of her students presented their work, as did Ben McCall, a 1991 KACS High School Award recipient, now an Associate Professor of Chemistry (Astrochemistry) at the University of Illinois Champaign-Urbana. It was wonderful to see him and hear that he now chairs the East Central Illinois Section.

The Awards banquet was a time of good conversation and celebration. The Great Lakes Region Teacher Award, given to Jeff Christopherson of Normal Community High School in Normal, IL, and the E. Ann Nalley Great Lakes Region Award for Volunteer Service, given to KACS Executive Committee member Lydia Hines, were presented by the District II (our District) director, George Bodner; the Great Lakes Region's Stanley Israel Award for Advancing Diversity in the Chemical Sciences was awarded to Chicago State **University**, whose primary service area is the South Side of Chicago, and was presented by ACS President Nancy Jackson. Other governance members present for interaction with Meeting participants were Region V director Peter Dorhout, Director-at-Large Marinda Wu, ACS Past-president E. Ann Nalley and 2011 President-Elect Bassam Shakhashiri; Dr. Shakhashiri hosted a lunch and panel discussion on Chemistry and Chemists' Responsibility to Society which was very well received and generated lively discussion.

This Meeting was another example of a well-planned and executed Regional Meeting which met its objective of giving an intimate setting in which good chemistry could be exchanged by seasoned and aspiring chemists at various levels. The Great Lakes Region was very pleased to be a part of its success.



A Retrospective

Lydia Hines

1. *Publicity* – we had announcements published in the <u>Kalamazoo Gazette (4)</u> and the <u>Three Rivers Commercial-News</u> (1) over the 2 weeks prior to the event.

2. *The Event* - On a windy Fall Saturday afternoon, October 15, from 12 noon to 4 p.m. the Kalamazoo Valley Museum (KVM) was busily keeping 650 patrons warm with lots of chemistry-related educational activities. Twenty-three (23) KACS members, along with 32 students (Grades 11-16) and 11 museum volunteers were assigned to 21 displays throughout the first two floors of the KVM. Judging from the enthusiasm of the patrons as they exited the facility the event continued its past tradition of demonstrating the fun and relevance of chemistry **safely** to those who did the hands-on activities. From our exit survey we note that after having gone through the event respondents "think that chemistry is interesting" and they "will let someone else know what they learned". This year we also had a more extensive collaboration with representatives of NOBCChE (National Organization of Black Chemists and Chemical Engineers). Though the number of teachers, home-schooling families and Cub Scout troop leaders and members was smaller than in prior years, our Chemistry Activity publications were happily taken for use at home. Patrons showed surprise and gratitude for these educational materials, all generously provided by ACS free of charge to the recipients.

The assistance of Annette Hoppenworth and other of the Museum staff was, as usual, invaluable.

3. Three bonus comments

• our event likely resulted in a new member

• our event piqued the interest of a member employed at MPI

• our outreach as a Section is fondly remembered by at least one retired teacher, Carol McCarthy of Mattawan, who brought her grandchild and really enjoyed the event



2011 Chemistry Day fun at KVM

Chemistry Day at the Kalamazoo Valley Museum



Penny in a Cup.



Cleaning pennies with Taco



Volcano!

KACS Newsletter, 2011, 1(7)

Photo by Elena C. Hines

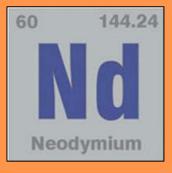
Dr. Brian A. Zeider Memorial

Kevin Douglass and Dr. Sherine Obare

Dr. Brian A. Zeider, born October 19, 1979, passed away on Friday, September 9, 2011. A recent doctoral graduate of Western Michigan University (WMU), he was a dear friend and colleague to students and faculty alike. He served as President of the WMU Chemistry Graduate Student Association (CGSA) from 2009-10.

On Sunday, October 23, 2011, a memorial service for Dr. Zeider was held in the Chemistry Building at WMU. Organized by the Department of Chemistry and CGSA, the memorial was attended by forty students and faculty as well as his parents, siblings and girlfriend. The attendees heard remarks from Dr. Michael Barcelona, Dr. Donald Schreiber, Dr. David Huffman, Ms. Alia Hinz and Ms. Mariana Kondon. The ceremony concluded with the commemoration of the element neodymium (Nd) from the Elemental Chemistry Fund to Dr. Zeider's memory; he was a passionate fan of the Notre Dame football team.

Dr. Zeider received his bachelor's degree from Indiana University in 2002 and received his doctorate from WMU in 2010. He held a postdoctoral position at the University of Utah before his untimely death.



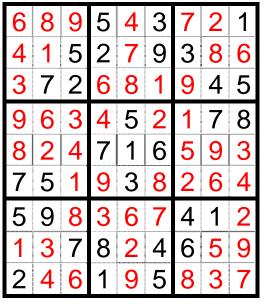
Sudoku Challenge – October Winner

We received one winning entry to the October Sudoku challenge. Congratulations to Tim Evans.

Tim will receive a \$5 gift certificate to **Something's Brewing**, located at 120 W. South St. in downtown Kalamazoo.

Below is the solved puzzle.

No new puzzle in this newsletter, as the Sudoku Challenge is going on a short sabbatical.



Difficulty: MEDIUM

Solution: Newsletter, 2011, 1(6)

KACS Newsletter, **2011**, 1(7)

American Chemical Society – Kalamazoo Local Section Newsletter

December 15, 2011



2011 KACS

Executive Officers

Chairperson Dr. Doug Williams, Kalsec, Inc. DWilliams@kalsec.com

Past-Chairperson Dr. Susan Stapleton, WMU – Chemistry susan.stapleton@wmich.edu

Chairperson-Elect Dr. Elke Schoffers, WMU – Chemistry elke.schoffers@wmich.edu

Secretary Carl Stachew <u>cstachew@yahoo.com</u>

Treasurer Dr. John Miller, WMU – Chemistry john.b.miller@wmich.edu

Councilor Dr. Lydia E. M. Hines, WMU – Chemistry lemhwgh@gmail.com

Alternate Councilor Mr. Michael Kiella mike.kiella@charter.net

Comments from the Chair

Doug Williams

I have enjoyed my year as your Chair. I am indebted to our capable Executive Committee and associated committee leaders. In spite of obvious changes in our local market for chemistry jobs, we remain well supported by a variety of academic and industrial partners. This is a great Section. We were particularly encouraged by the turnout for our recent SciMix poster event at Bell's (see page 2). This looks like something that we will consider doing as an annual event, as long as funding support remains adequate. Please let us know your ideas for how we can improve programs and engage our members. Now that our elections are complete, we confirm our officer changes for 2012: Elke Schoffers will be Chair and Carolyn Pugh will be Secretary (through 2013). I will become Past Chair. Lydia Hines was reelected to serve as our Councilor (2012-2014). John Miller will continue as Treasurer through 2012. We are still seeking persons interested in our Chair Elect position.

Comments from the Chair-Elect

Elke Schoffers

As 2011 draws to a conclusion I would like to wish everybody a pleasant holiday season. This is also the time to share that I look forward to working with the many talented chemists in our Section as I will assume the Chair position for 2012. Please note that our first social event will be a meet and greet in early February – please look for details in our next newsletter. Wishing everybody a healthy and successful new year.

KACS website:

http://www.wmich.edu/acs/

Do you have questions, comments, or would like to contribute to this newsletter? Send an email to: ACSkzoo@gmail.com

Vol. 1 - Issue 8

Upcoming events at a glance (Dec - Jan 2011)

> Happy Holidays!

Do you have an event that you would like to have listed in this newsletter? Send an email to: <u>ACSkzoo@gmail.com</u>

Announcements

Lydia Hines Receives Volunteer Award

Doug Williams

Congratulations to Lydia Hines recognition as the 2011 recipient of the E. Ann Nalley Great Lakes Region Award for Volunteer Service (mentioned in our early October newsletter). Lydia (left) is shown below with Ann Nalley (right) receiving her award at the Joint Regional Meeting in St. Louis on Oct 22.



Lydia Hines (left) receiving her award from Ann Nalley.

SciMix Poster Session:

"Sustainable Science - Recycle a Poster"

Doug Williams

Our poster session mixer on Nov 1 at Bell's Eccentric Café was a very enjoyable event. About 85 people attended (predominantly Local Section members). Keynote speaker Dr. Bob Gadwood presented "Creating Chemistry Jobs in Kalamazoo: The Story of Kalexsyn." We had over 45 posters in the café with lively discussion, good appetizers, and great beverages. We thank Pfizer Animal Health for underwriting and Dr. John Wendt of Pfizer for promoting, organizing and chairing the event. Our expenses for the event totaled \$1631. We are looking forward to trying this again in 2012. Let us know what you thought of it. See our <u>website</u> for a brief summary and photos.

ACS Kalamazoo Local Section Participation in Pennies for PUR^R Water

Lydia Hines

In cooperation with our national organization's project during the International Year of Chemistry 2011, we collected donations at the beginning of each Executive Committee meeting and at several of our Section meetings, as well as our Chemistry Day at the Museum in connection with our NCW celebration. The total contribution was **\$60.00**; at 3.5 c per packet, our contribution supplied **1714 packets**, for a total contribution of **4826 gal of potable water** through ACS's partnership with Procter & Gamble's Children's Safe Drinking Water (CSDW) Coalition.

Thank you to all who participated so generously!

A KACS High School Awards Program Success Story

Lydia Hines

Readers who may have been involved with the Local Section in **1991** may remember a young man from KAMSC who received one of our CRC Handbooks as an award for his success in our series of high school examinations. He still has his award on his office shelf at the **University of Illinois at Urbana-Champaign where he is now Associate Professor of Chemistry and Astronomy and Affiliate in the Department of Physics**, after taking his post-High School education at Caltech, the University of Chicago and the University of California – Berkeley.

The young man is **Benjamin J. McCall** (website: <u>http://bjm.scs.illinois.edu</u>). Among his recent oral presentations was one at the Joint Midwest-Great Lakes Regional Meeting in St. Louis, Mo., on October 20, 2011, where we met to reminisce and give him our Section's congratulations.

The KACS Executive Committee invites others who have been encouraged by any one of our programs over the years (or who know of any such individual) to share the story with us. You may send it to me at lemhwgh@gmail.com