

# American Chemical Society – Kalamazoo Local Section Newsletter

September 6, 2013

Vol. 3 - Issue 5



## 2013 KACS Executive Officers

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Vacant

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### Councilor

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### Alternate Councilor

Dr. Doug Williams, Kalsec, Inc.  
[dWilliams@kalsec.com](mailto:dWilliams@kalsec.com)

## Comments from the Chair

Elke Schoffers

Dear Colleagues,

The busy summer season has come to an end. If you didn't follow KACS closely during that time you may have missed some exciting news. Our Local Section received a glowing review from Section Activities (Local Section Activity Committee) and our "Chemistry & Culture: Elements of Dance"



Elke Schoffers, Ph.D.  
(KACS Chair)

event is a **ChemLuminary Finalist**. It is only a matter of days until we learn the results. Join us on Tuesday evening, Sept. 10 at the Westin Indianapolis Hotel at 8 PM, where the section will also participate in a poster session. Please keep your calendar free for a **Science Café** on Horticultural Chemistry on Sept. 17 at Wedel's and for a **Sci-Mix Poster Session** on Oct. 8 at Bell's Eccentric Café (sponsored by Zoetis). We also need volunteers to help out during **Chemistry Day at the Museum** (Oct. 12), to become the **Awards co-Chair for the 2015 JGLCRM**, and to serve as **new EC Officers (Secretary and Chair-Elect)**. There is more to come. Please stay in touch, join us for upcoming events and help out to support our Local Section.

Thank you!

246<sup>th</sup> ACS National Meeting in  
Indianapolis, IN. Sept. 8-12



KACS website: <http://kalamazooacs.org/>

Do you have questions, comments, or would like to contribute to this newsletter?  
Send an email to: [ACSKzoo@gmail.com](mailto:ACSKzoo@gmail.com)

# Welcome New Volunteers

By Elke Schoffers

## Mark Wolf is KACS Web Master for New Site: [KalamazooACS.org](http://KalamazooACS.org)

We welcome Mark Wolf (Kalsec) as our new web master. He already transitioned our site to a new host at <http://KalamazooACS.org/>. We invite you to take a look and to follow ongoing changes to our online presence. Last but not least, we thank our outgoing web master Dr. Steve Bertman (WMU), who has been very helpful in recent years.

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## Roxana Manta-Bielanski joins KACS Photography Team

We welcome Roxana Manta-Bielanski, a WMU Chemistry major and undergraduate researcher, who is helping us document KACS activities as ad hoc photographer. Please contact us if you are interested in taking pictures as well.

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## Dr. Megan Grunert is New Chair of the KACS Education Committee

We are pleased to announce that Dr. Megan Grunert, Assistant Professor of Chemical Education ([megan.grunert@wmich.edu](mailto:megan.grunert@wmich.edu)) at WMU, has assumed the role of Chair of the KACS Education Committee. She conducts research related to academic motivation, career decision-making, teaching practices, graduate student professional development, and student experiences in novel learning environments. Among others, she will be in charge of organizing the annual KACS Awards Ceremony during which high school students from Kalamazoo, Allegan and Van Buren counties are recognized. The Local Section thanks Dr. Donald Schreiber for having served in this capacity for many years.



Feel free to contact KACS at [Elke.Schoffers@wmich.edu](mailto:Elke.Schoffers@wmich.edu) if you would like to announce specific events or share links.



Find us on  
**Facebook**

# KACS Launches New Site at <http://KalamazooACS.org/>

By Elke Schoffers

## KACS

Kalamazoo Section of the American Chemical Society

ACS  
Chemistry for Life®

News  
Newsletter  
Past Events  
Job opportunities  
KACS History  
Memorials

About Us  
Message from the Chair  
Executive Committee  
EC Meeting Minutes  
Bylaws  
Operations Manual  
Annual Reports  
Councilor Reports  
Volunteer Opportunities

Student Chapter Activities  
WMU Chem. Grad. Student Assoc.  
WMU Chem. Club  
Kalamazoo College Chem. Club

Other Links  
ACS Presentations on Demand  
Content from recent ACS Meetings  
Directory of Graduate Research  
Career Services  
Articles from ACS National  
The ACS Staff: How Does It Support Governance?  
Kalamazoo Links  
Chemical Abstracts Service  
Chemistry News Groups  
Chemistry Educational Resources  
Go to the ACSWeb  
Safety Advice by Dow

### KACS NEWS

The Local Sections Activity Committee (LSAC) gave KACS a glowing review. [Read more here.](#)

Pictures by DIB Photography



Prev Next

1 2 3 4 5 6 7 8 [More pictures](#)

Thanks to our donors!



KACS is a ChemLuminary Award finalist. Join us when all the recipients will be announced and the presentation of awards will occur at the 240th ACS National Meeting in Indianapolis, IN at 8 PM on Tuesday, September 10, at The Westin Indianapolis Hotel. Our "Chemistry and Culture: Elements of Dance" event (11/9/12) at the Kalamazoo Institute of Arts is a finalist for the ChemLuminary Award in the category of "Most Innovative Activity or Program". We thank all the donors and volunteers who helped us make this event a success (179 attendees).

- Chemistry and Culture: Elements of Dance
- Elements of Dance Report [PDF]

### MISSION STATEMENT:

We are a dynamic and visionary organization committed to improving people's lives in our community through the transforming power of chemistry. We strive to advance the broader chemistry enterprise and its practitioners for the benefit of Kalamazoo, Allegan and Van Buren counties.

Stay connected with your colleagues in the Kalamazoo ACS Local Section by liking our Facebook page.



KACS strives to provide helpful resources for its membership and the public through its website. We have launched a new site. I hope that you will regularly check in with us at

<http://KalamazooACS.org/>

to learn about upcoming and past section activities in addition to useful links. With the help of Mark Wolf, our new web master, we have incorporated some new features such as rotating pictures of our **Chemistry & Culture: Elements of Dance** event, a current **ChemLuminary Finalist**. Over the summer, the KACS EC Committee has formulated an official mission statement, which can also be found online:

### ***KACS Mission Statement:***

*We are a dynamic and visionary organization committed to improving people's lives in our community through the transforming power of chemistry. We strive to advance the broader chemistry enterprise and its practitioners for the benefit of Kalamazoo, Allegan and Van Buren counties.*

# Special Announcements

## Seeking Volunteers for our Chemistry Outreach in October

By Lydia Hines

National Chemistry Week (NCW) is coming up again – October 20-26 this year – with the theme “Energy: Now and Forever!” Our Section’s popular annual outreach to the community at the Kalamazoo Valley Museum (KVM) will be on **Saturday, October 12, from noon to 4 p.m.**, and as always I am **urging you to volunteer as a science activity presenter**. It takes about 50 volunteers to present the 20-25 activities we try to offer. Thus far I have heard from only ten (10) willing members, so I am asking that you make this a professional priority and let me know **immediately** of your willingness to be a part of this event and to put the date on your calendar. Some sample activities we have had in the past are *electrolysis*, *super-absorbent polymer*, *“magic” sand*, *elephant toothpaste*, *slime*, *chromatography*, *iron in cereal*, *volcano*, etc. For ideas of other activities you may want to consider go to [www.acs.org/ncw](http://www.acs.org/ncw) and peruse the *Celebrating Chemistry* publication for this year. I look forward to hearing from you either by e-mail at [lemhwgh@gmail.com](mailto:lemhwgh@gmail.com) or by telephone at (269)375-7349.

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## Changing Climates Speaker Series

Bill McKibben: “Notes from the Front Lines of the Climate Fight”  
October 10, 2013, at 7 PM  
Miller Auditorium, WMU

Bill McKibben is not a person you’d expect to find handcuffed in the city jail in Washington, D.C. But that’s where he spent three days in the summer of 2011, after leading the largest civil disobedience in thirty years to protest the Keystone XL Pipeline. A few months later the protesters would see their efforts rewarded when President Obama agreed to put the project on hold. His new book is *Oil and Honey: The Education of an Unlikely Activist*.

McKibben realizes that this small and temporary victory on the Pipeline is at best a stepping-stone. With the Arctic melting, the Midwest in drought, and Sandy scouring the Atlantic, the need for much deeper solutions is obvious. Some of those would come at the local level, and McKibben recounts a year he spends in the company of a beekeeper raising his hives as part of the growing trend toward local food. Other solutions would come from a much larger fight against the fossil-fuel industry as a whole. *Oil and Honey* is McKibben’s account of these two necessary and mutually reinforcing sides of the global climate fight—from the absolute center of the maelstrom and from the growing hive of small-scale local answers to the climate crisis.

For more information, see <http://www.wmich.edu/humanities/events/bill-mckibben.html>



# Kalamazoo Local Section of the American Chemical Society and Project SEED 2013

By Lydia Hines and Elke Schoffers; photos by Roxana Manta-Bielanski

This summer the KACS had 3 students (2 Summer II and 1 Summer I) who participated in the Section's annual SEED (Summer Experience for the Economically Disadvantaged) program organized by Dr. Donald Schreiber of the WMU Chemistry Department.

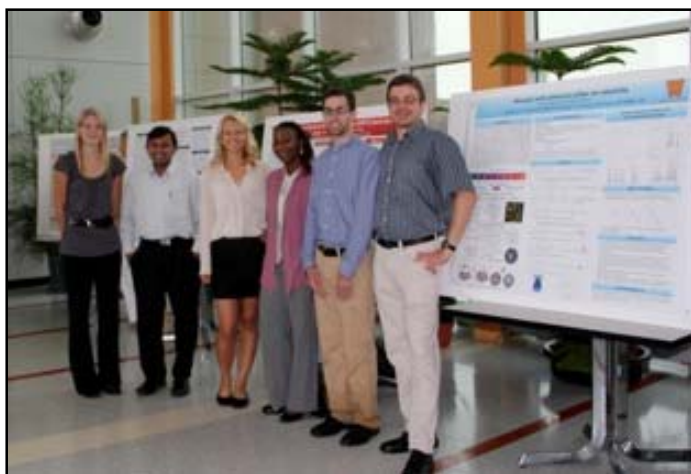
We are most grateful for the faculty mentors who shepherded these high school students for 8 weeks through their summer projects. This year the mentors were Dr. Gellert Mezei (Summer I student: Robert "Brice" Calco), Dr. Ramakrishna Guda (Summer II student: Mikayla Markus) and Dr. Sherine Obare (Summer II student: Tayler Martin).

The students presented posters of their work and fielded questions from attendees at a poster session in WMU's Haenicke Hall Atrium on August 7, 2013, from 10 a.m. -12n. The pictures below show the students with their posters and their respective mentors. What will our students be doing come fall? Mikayla Markus will continue as a Senior at Mattawan high school with the long-term goal of becoming a pediatric nurse; Tayler Martin of Bloomington high school will begin her college career at WMU in Engineering; and Robert Calco of Portage high school / KAMSC will matriculate at Kalamazoo College as a science student via a Heyl Scholarship.

Optical Sensors based on Dipyrrophanazine (DPPZ) Derivatives  
Tayler Martin with Dr. Sherine O. Obare

Protein Folding and Aggregation Towards Early Detection of Alzheimer's Disease  
Mikayla Markus with Dr. Ramakrishna Guda

Nanojars with enhanced Sulfate Ion Selectivity  
Robert Brice Calco with Dr. Gellert Mezei



Left to right: Mikayla Markus, Dr. Guda, Tayler Martin, Dr. Obare, Robert Calco, Dr. Mezei



The Project SEED poster session took place in Haenicke Hall, concurrent with the WMU-HHMI (Howard Hughes Medical Institute) poster session.

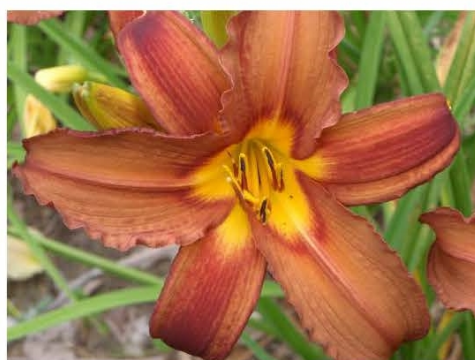
# Special Event #1

The KALAMAZOO Section  
of the American Chemical Society  
presents a Science Cafe:



## Horticultural Chemistry: Colors in Flowers

Presented by Dr. Gus Guzinski



6 PM, Tuesday, September 17, 2013  
Wedel's, 5020 Texas Drive, Kalamazoo, (269) 345-1195

**Public event - refreshments served**

This presentation will describe the effect of pigments present in flowers and other parts of plants. The slides will show colors produced by the different types of pigments in flowers with the chemistry of these pigments described in "popular science" terms. That is, **the average gardener should find this talk as informative as the average chemist.** Flower pigments produce an amazing range of colors. Despite this, the bio-synthetic pathways of pigment production is very similar in all plant genera; this is true whether describing flowers or fruit or vegetables. This talk will describe carotenoid and anthocyanin pigments and their visual interactions to produce a range of colors. Pigment color is also modified by the chemical environment and its position in plant cells. There is a reason that no one has produced a blue rose or a blue daylily despite the presence of this color in other flowers.

For questions, contact the Chair at [Elke.Schoffers@wmich.edu](mailto:Elke.Schoffers@wmich.edu).  
Learn more about KACS at <http://kalamazooacs.org/>.  
Like us on Facebook at [www.facebook.com/ACSKalamazoo](http://www.facebook.com/ACSKalamazoo).





# Special Event #2



ACS  
Chemistry for Life®

## The KALAMAZOO Section

presents

### Kalamazoo Sci-Mix Poster Session

## “Sustainable Science - Recycle a Poster”

5:00-9:00 pm, Tuesday, October 8, 2013

BELL'S®



Inspired Brewing®

Bell's Eccentric Café  
355 E. Kalamazoo Ave

*Open bar. \* Complimentary hors d'oeuvres will be provided.*

The Kalamazoo area has always been historically rich with exciting chemistry. Please join us and share the area's wealth of exciting chemistry by bringing a poster of your chemistry accomplishments. Your poster can either be newly prepared or a recycled poster from a previous event. This Mixer invites local academic and industrial chemists from all areas of chemistry: Analytical, Biochemistry, Inorganic, Organic, and Physical, in addition to Food and Medicinal Chemistry. See you there!

### *Present Science, Network, Mingle, Celebrate Kalamazoo Chemistry*

\*Please note that attendees must be (1) a current ACS member, or (2) a poster presenter or (3) a Zoetis employee. **Poster presenters should email Dr. John Wendt at [john.a.wendt@zoetis.com](mailto:john.a.wendt@zoetis.com) by Thursday, October 3 to reserve an easel by sending: (a) the title of the poster and (b) a list of authors.**

Stay in touch with KACS at <http://KalamazooACS.org/>

Funding provided by **zoetis**

# Sudoku Challenge (Solution to July 2013 Puzzle)

Congratulations to Doug Williams for solving our last Sudoku puzzle. Doug will receive a \$5 gift certificate to [Bell's](#). Below is the solution. No new puzzle this week: the Sudoku Challenge is going on vacation for a little while...

Difficulty: **EVIL**

Digits in **black** were given.  
Digits in **red** were blank.

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

## Final thoughts

By David Bolliet

When is the last time you checked your medicine cabinet for these expired or unwanted medications? When you do, instead of flushing them down the toilet or putting them in your household trash, take advantage of this special medication recycling program: [Red Med Box](#). With 5 convenient locations in Kalamazoo, Portage and Schoolcraft, disposing of your unwanted medicine is easy: Just look for the red med box.

### Red Med Box will accept

- Expired and unused medications
- Over the Counter medications
- Antibiotics/steroids
- Cold and flu medications
- Vitamins and herbal supplements
- Medication samples
- Pet Medications
- Medicated ointment/lotion/drops
- Unopened Epi-Pens
- Liquid medications



This local program is brought to you by a number of local law enforcement departments, the Kalamazoo Household Hazardous Waste Center, Kalamazoo County Substance Abuse Task Force, and many other Community Partners.