100th Anniversary of the Delaware Section and ACS Membership Milestones

For information on section activities visit our website at:
www.delawareacs.org
Celebrating National Chemistry Week (NCW) 2018

Theme: Chemistry is out of this World

Date: Saturday, November 3, 2018

Time: 12:00 – 4:00 PM

Location: The Independence School, 1300 Paper Mill Road, Newark, DE 19711

Contact: Maggie Schooler at schoolermj@gmail.com or 302-753-5799

Come celebrate National Chemistry Week as we discover why Chemistry is out of this World! Join us for a day of discovery, hands-on science experiments, and chemistry demonstration!

Celebrating Chemistry:
The Celebrating Chemistry publication is designed to engage and educate children in the basic principles of chemistry and is available in both English and Spanish. This National Science Education Standards-aligned hands-on activity publication for elementary school students highlights multiple, fun experiments that can easily be done right in your own kitchen or backyard.

K-12 Contest:
The National illustrated poem contest will focus on this year’s NCW theme. Participants are encouraged to illustrate concepts related to the topic. The illustrated poems relate to common applications of chemistry that people might not normally think is related to chemistry. More information will be available on our website (www.delawareacs.org) by September 1st. Prizes will be available at the event.

Each year National Chemistry Week reaches millions of people with positive messages about the contributions of chemistry. Join in the celebration of NCW 2018! Visit www.acs.org/ncw for more information.

National Chemistry Week is a program of the American Chemical Society’s Department of Volunteer Support.
Celebrate, Celebrate, Celebrate!

On Monday evening, October 8th (Columbus Day), we will celebrate the achievements of Dr. Xinqiao Jia, University of Delaware, during our Awards Dinner at the Hilton – Wilmington/Christiana. (This Awards Dinner was postponed from March 21st due to a snowstorm.) On Sunday afternoon, October 28th, we will be celebrating the Delaware Section’s 100th Anniversary and recognize our 50-, 60-, 70- and 70+-years of ACS members at DuPont Country Club, Wilmington. Then, Saturday afternoon, November 3rd, we will celebrate National Chemistry Week 2018 with the theme “Chemistry is out of this World” at The Independence School, Newark.

Hope to see you at these fall celebrations!

Martha Hollomon
Interim Chair

Disclaimer: The views and opinions expressed in the columns are those of the contributors and do not necessarily reflect those of the Delaware Local Section.
The Nobel Passover Party –
This is scheduled for Wednesday, October 3rd at Skipjack Dining in the Louviers Shopping Center on Paper Mill Road across from the Bank of America. A Panel of U.D. chemists will discuss the importance of the award and the people being honored.

Please come between 5:30 and 6pm to join us for dinner in the Banquet Room. The program will be from 7 to 8 pm, after which you can purchase champagne by the glass from the Land of Lavoisier. Please sign in to be eligible for door prizes. To make a dinner reservation, call Skipjacks at (302) 456-1800 and note that you are with the Chemists!

Senator Chris Coons, the only one in the Senate with a degree in chemistry, will be invited, along with ACS CEO Dr. Tom Connelly.

This event is sponsored by the Delaware Academy of Chemical Sciences as a way of promoting chemistry. It also gives you a chance to grieve publically about being passed over yet again!

Congrats to Cathy Mulzer of Dow DuPont (Midland) for her recognition as one of the “Talented Twelve” at the ACS meeting in Boston in August. You can read about her impressive research in C&E News (August 13/20 issue).

Heroes of Chemistry in 2018 were also honored at the Boston meeting. One of the four teams is at DuPont! They were honored for the development of Solamet PV17X, a metallization paste that pioneered the use of lead tellurite chemistry for solar energy applications. The awardees are Alan Carroll, Ken Hang, Brian Laughlin, Kurt Mikeska, Carmine Torardi and Paul Ver Nooy.

Historic Preservation –
Last spring there was great news for Delaware. The historic DuPont Country Club was purchased by Ben duPont and Don Wirth (a former company V.P.). They plan to spend about $18 million on upgrades and increase membership.

This is prime land that many of us feared would be converted into houses, condos, apartments and strip malls. The Club House has been the site of countless ACS meetings that featured many of the world’s great chemists. I once attended a lecture there by Prof. Herman Mark, the great polymer chemist.

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If we owned a home adjacent to the Club, I would send each of these guys a case of beer every month!

**U.D. is #1!**

Perhaps you recently read that our prime institution of “Higher Learning” was ranked as “Top Party School” in the U.S., up from #6 last year. This dubious honor comes from the annual survey by the Princeton Review to produce “The Best 384 Colleges” in the country.

I assure you that any survey conducted at U.D. must not have included the science and engineering majors. For the most part they have impressed me as a diligent group.

Having spent a good part of my life on college campuses as a student and faculty member, I understand that intense scholarly pursuits also require social relief, especially on weekends. As a faculty advisor to a fraternity at U.W.-Eau Claire, I even had to meet with the local District Attorney on several occasions!

One of my former chemistry students was quite a “Party Animal.” I even had doubts about his future in chemistry. He eventually got his act together and is now a Professor at U.C. - Berkeley!

**“Chemistry is Fun” –**

That was the title of my humble attempt to amuse and entertain residents at a local Rehabilitation facility. I visited this place twice a day while Val was recovering from a fall.

The facility employed an “Activities Director” who had the task of providing performances, shows, etc. to help the patients cope from day to day. In an attempt to be helpful, I offered a Chem Demo Show. My offer was quickly accepted after I said – no fires or explosions!

It was scheduled for 2 pm on a weekday. Luckily I had available 25 colorful, laminated Periodic Tables as handouts. I gathered up a collection of common chemical elements and compounds. Martha Hollomon loaned me a Periodic Table throw. Dana Chatellier provided a small Dewar flask with liquid nitrogen plus some dry ice. Linda Staib typed a handout.

The good news is that nobody died! Quite a few fell asleep in their wheelchairs (it was nap time). The average age of my audience was about 80. The good news is that I helped amuse and entertain a group of senior citizens for an hour. My reward was a “Certificate of Appreciation.” I slept well that night.

**Hope to see you October 3rd!**
October General Meeting

Awards Ceremony, High School Awards and 100th Anniversary Celebration

Date: Sunday October 28, 2018
Time: 2:00 – 5:00 pm
Location: DuPont Country Club, 1001 Rockland Road, Wilmington, DE 19803
Cost: $10, refreshments/light meal will be provided. Cash bar available.

Registration:
Please RSVP at http://www.delawareacs.org/. If you are not able to register online, please contact Martha Hollomon at drmhollomon@gmail.com or (302)294-1694.

The program will include the awards ceremony followed by a presentation of the 100 year history of the Delaware Local Section of the American Chemical Society.
October Section Event

Rescheduled

ACS Delaware Section Awards Ceremony

Delaware Section Awardee:

Dr. Xinqiao Jia,
Department of Materials Science and Engineering,
University of Delaware, Newark, DE 19716, USA

Date: Monday October 8, 2018
Time: 6:00 - 8:30 pm
Location: Hilton Wilmington/Christiana,
100 Continental Drive, Newark,
DE 19713
Cost: $10, refreshments/light meal will be provided. Cash bar available.

Registration: Please RSVP at http://www.delawareacs.org/. If you are not able to register online, please contact Martha Hollomon at drmhollomon@gmail.com or (302)294-1694.

The Delaware Section Award recognizes conspicuous scientific achievement in an area of chemistry or chemical engineering by a Delaware Section member. Following the presentation of the awards, Dr. Xiaqiao Jia will give a lecture based on her work, entitled “Modular and biorthogonal approaches to the synthesis of functional biomaterials”.

Abstract:
We are developing novel biomaterials that effectively guide stem cell differentiation and promote the assembly of complex tissues. Using cytocompatible polymer or peptide building blocks and employing an ultrafast cycloaddition reaction between s-tetrazine and strained trans-cyclooctene (TCO), we demonstrated the first example of interfacial bioorthogonal crosslinking: the use of tetrazine ligation, to create hydrogel materials through a diffusion-controlled reaction at the gel-liquid interface. The interfacial bioorthogonal crosslinking method has been used as a general tool for the creation of a biomimetic 3D environment with well-defined heterogeneity to modulate cell behaviors spatially. When combined with a slower Michael type addition reaction, interfacial bioorthogonal reaction enabled a time-delayed, user directed modification of cell-laden hydrogel constructs to alter cell morphology, phenotype and gene expression temporally. We have also successfully applied tetrazine ligation to the synthesis of multiblock copolymers using homo-difunctional tetrazine and TCO derivatives via interfacial bioorthogonal polymerization.
As the polymerization proceeded, high molecular weight polymer microfibers were continuously pulled out of the immiscible oil-water interface. These protein mimetic polymer fibers provide contact guidance to cells and promote fiber-mediate cell migration. The modular nature of the design, coupled with the chemical nature of the synthesis, permits facile adjustment of mechanical, morphological and biological properties of the resulting biomaterials to promote tissue repair and regeneration.

**Biography:**
Dr. Xinqiao Jia is Professor of Materials Science and Engineering at the University of Delaware. She received her B.S. in Applied Chemistry from Fudan University in China in 1995 and her Ph.D. in Polymer Science and Engineering from the University of Massachusetts Amherst in 2002 in the laboratory of Professor Thomas McCarthy. She conducted her postdoctoral training with Professor Robert Langer at MIT prior to joining the University of Delaware in 2005. Dr. Jia serves as the Graduate Program Chair for Materials Science and Engineering and is the Core Director of an NIH-funded COBRE center. Dr. Jia’s research lies at the interface of materials and biology. Her group is developing intelligent biomaterials that closely mimic the molecular composition, biological functions, mechanical responsiveness and multiscale organizations of the natural extracellular matrices. Using biologically inspired paradigms, the Jia Group is developing methodologies for the engineering of healthy, replacement tissues such as cartilage, vocal folds and salivary glands, as well as disease models, such as prostate cancer tumor spheroids. Dr. Jia’s research activities are supported by the National Science Foundation, National Institutes of Health, OsteoScience Foundation, W. L. Gore & Associates, Inc., the DuPont Company and the State of Delaware. She received the National Science Foundation CAREER Award in 2006 to develop mechano-responsive biomaterials. She has been recognized as an Outstanding Junior Faculty of Engineering and DuPont Young Professor in 2010. She received the Delaware BioScience Association’s Academic Award in 2011. She was the Thematic Program Chair of the 244th American Chemical Society (ACS) National Meeting & Exposition. She currently serves as a program co-chair for the Division of Polymeric Materials Science and Engineering (PMSE) in ACS. Work from the Jia group has been featured by CNN, ACS and C&E News.
ACS Membership Milestones in 2018

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Dr. Mark C. Chen
Dr. Robert L. Dawson
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Ms. C. M. Foris

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Dr. Alan L. Goodman
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There are several web sites that may help you search for these open positions.

- www.mboservices.net/recr_disp.php
- http://membership.acs.org/D/Del/#Jobs
- http://pubs.acs.org/chemjobs/

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Calendar of Events

October 3  Delaware Academy of Chemical Sciences, Nobel Prize Passover, SkipJack Dining, Newark, 5:30-8:00 pm
October 8  Delaware Section Award Meeting, Hilton Christiana, 100 Continental Drive, Newark, 6:00-8:30 pm
October 28 Combined Celebration of 100th Anniversary of the Delaware Section and Recognition of 50-, 60-, 70-year ACS Members, DuPont Country Club, Wilmington, 2:00-5:00 pm
November 3 National Chemistry Week Celebration, The Independence School, Newark, 12:00-4:00 pm
November 16 National Chemistry Week Celebration, The Independence School, Newark, 12:00-4:00 pm
November 16 Ullyot Public Affairs Lecture, Science History Institute, Philadelphia, 6:00-8:00 pm