

The Minnesota Chemist



2021 Great Lakes Regional Meeting (GLRM): Elevating the Importance of Diversity and Inclusion in Chemistry.

The registration for the 2021 Great Lakes Regional meeting is now open. The meeting will take place virtually June 6th to 9th. Registration cost is \$25, and for undergraduate students includes 1 year of ACS membership.

Details, including names and contact information for program and session chairs, can be found on the meeting website at www.glr2021.org. The keynote symposium will highlight elevating the importance of diversity and inclusion in chemistry. In addition to 29 technical symposia the virtual meeting will include: a variety of limited capacity networking discussion sessions, workshops on "Chemistry and the Law" and "Empowering Academic Researchers to Strengthen Safety Culture", ACS leadership workshops and a virtual career fair.

The symposium sessions include "Agricultural and Food Chemistry"; "Agribusiness"; "Biologically Related Molecules and Processes"; "Biotechnology"; "Chemical Biology"; "Chemical Business: Resources and Best Practices"; "Chemical Education Research"; "Chemical Research in Toxicology"; "Chemical Safety"; "Crystallography in the Undergraduate Curriculum"; "Distance Learning in Chemical Education"; "Elevating the Importance of Diversity and Inclusion in Chemistry"; "Green Chemistry"; "General Topics in Analytical Chemistry"; "General Topics in Inorganic Chemistry"; "General Topics in Physical Chemistry and Spectroscopy"; "Materials Chemistry"; "Medicinal Chemistry"; "Medical Devices"; "New Organic Reaction Development"; "Sustainable Polymers"; "Metal Organic Framework"; "Nanomaterials"; "Obtainable Sustainability in Industrial Applications"; "Organic Chemistry at PUIs"; "Organometallic Chemistry"; "Reflections of Senior Chemists"; "Sustainable Polymers"; "Natural Product Synthesis"; and "Undergraduate Research in the Inorganic Curriculum". Each symposium will include an option for PIs, professionals, post-docs, graduate students, and undergraduates to present.

UPCOMING EVENTS

MN ACS Event: The Joint Safety Team at the University of Minnesota, Twin Cities: A Model for Student-Led Safety



Presented by: Taysir Bader and Zoe Maxwell

When: April 29th, 7:00 PM

Zoom Webinar

Abstract: The Joint Safety Team (JST) was conceived in 2012 by the Departments of Chemical Engineering and Materials Science and Chemistry at the University of Minnesota and the Dow Chemical Company as a model student-led safety organization. The JST initiative was aimed at improving academic safety through four core areas: compliance, awareness, resources, and education. Since its inception, the JST has taken great strides to develop a culture of peer-led safety at Minnesota. We describe the evolution of the structure of the organization over the last 9 years and the innovative methodologies employed by the JST to educate and evaluate safety in academic laboratories. The continuous efforts of the student members of the JST have enabled the organization to be recognized as a leader in peer-to-peer safety. The Minnesota model of “inform and reform” is now being adopted at other academic institutions to develop safety organizations emulating the JST. We will also discuss our new committee, community connections, which is focused on safety related outreach to improve the culture of safety among our young MN chemists.

Registration to receive zoom link can be found [here](#)

Sea to Source: Reducing Plastics in our Environment

Presented by: Dr. Jenna Jambeck

When: April 23rd, 12:00 PM CT

Zoom Webinar

Abstract: Plastic debris and its impacts in the environment have been widely documented, but the quantity entering the ocean from land was previously unknown. By linking worldwide data on solid waste, population density, and economic status, we estimated the mass of land-based plastic waste entering the ocean at 5 – 13 million metric tons. Cumulative global plastic production reached 8 billion metric tons in 2017 and 6.4 billion metric tons has become waste that has overwhelmed some waste management systems around the world that have not been able to keep up infrastructure with economic growth. In addition, the global trade of plastic waste intended for recycling and has influenced what countries can do with plastic as a recycled material with economic impacts worldwide. Dr. Jambeck will



Dr. Jenna Jambeck
University of Georgia

Georgia Athletic Association
Distinguished Professor in
Environmental Engineering

National Geographic Fellow

not only discuss the methods and results of her research on plastic waste inputs, flows and recovery, but the related impacts and policies around the world. She will present an intervention framework to reduce plastic ending up in our environment, while sharing stories of integrating technology and citizen science, science communication, and community-level efforts to address plastic pollution around the globe.

Registration: z.umn.edu/covestro2021



Updates from the Local MN ACS Section

Shaping the Future of Chemistry

By Chuck Wheeler Handlon, MN ACS Education Chair,

Greetings, I'm the new Education Chair of the MN ACS Chapter. I am retired from a 40 year career teaching high school chemistry and other sciences. I live in Rochester and continue to be active in science education. My wife and I have two sons and a one year old Yellow Lab.

I accepted this position because I believe ACS members have an opportunity to support chemistry educators and students as well as assist in the transition to the new science standards <https://education.mn.gov/MDE/dse/stds/sci/>. My first step in this process has been to build collaborations between organizations such as the Minnesota Science Teachers Association (MnSTA) Minnesota Department of Education (MDE) and educational "cooperatives. I created a list of National ACS resources and made this available to teachers through the MnSTA website and MDE updates.

Now I would like to encourage all members of the ACS to consider engaging with teachers and students to promote chemistry STEM careers and provide the expertise and knowledge of the applications of chemistry in many science and engineering fields.

There is a web program that can facilitate volunteering. Called, Future Forward, <http://www.futureforward.org/> it is a free tool which is being utilized to connect industry and business professionals with educators and students. Future Forward was recently rolled out to over fifty private and public schools of southeast Minnesota including Rochester. I encourage ACS members and their companies to visit Future Forward and to consider creating a profile. I will highlight more about this tool in a later issue of the Minnesota Chemist. Please contact me via [email](#) if you would like more information.

The Joint Safety Team Wins an American Chemical Society Innovative Project Grant

The new Joint Safety Team committee, Community Connections, has been awarded a Local Section Innovative Project Grant (IPG) from the American Chemical Society. The

ACS Committee on Local Section Activities funds new local section projects through IPGs and funds one proposal per section. More information about this funding mechanism can be found [here](#). The grant will help fund the activities of the committee over the next year including a networking lunch series with industry professionals, updates to include safety in demos for the department and outreach, and building connections between the JST and local PUIs and high schools. The members of the committee are chair Zoë Maxwell (top), Vilma Brandao (middle left), Jeffrey Paz Buenaflor (middle center), Steven Butler (middle right), Xin Dong (bottom left), Erin Maines (bottom middle) and Cole Scholtz (bottom right).





Senior Chemists

Past Virtual Events

The Senior Chemists Group of MnACS have held two virtual coffee mornings, with discussions. The first one was held on Tuesday February 23rd from 10:30 am to 11:30 am, via Zoom. Before the meeting, those planning to attend listened to a podcast about how fake theories (such as QAnon) spread and why some people believe them. An interesting discussion took place. The second meeting was held on Wednesday March 17th. A link to a short article from "Science" called "Was Science on the Ballot" was sent out to senior chemists, for discussion at the meeting. Thanks to Joan Newmark for suggesting this topic, and to Judy Benham for allowing us to use her Zoom account.

If you are not receiving notices about these virtual meetings, and would like to, please email Lynn Hartshorn (lghartshorn@stthomas.edu) or Ken Latham (lathamke@mac.com) and let us know you would like to be on our list.

April Virtual Meeting

Please mark your calendars for the next "meeting" of the MNACS Senior Chemists Group. This will take place on Wednesday April 21st, from 10:30am to 11:30 am. An article about the development of the Covid-19 vaccines can be found [here](#). Please read it so we can discuss it at our meeting. Yes, I know it is long, but it is interesting! Thanks to John Stofko, a member of our group, for suggesting the article, and to Judy Benham for letting us use her Zoom account.

Please let Ken Latham (lathamke@mac.com) and Lynn Hartshorn (lghartshorn@stthomas.edu) know that you will be there. Bring your coffee! (or tea, or other beverage)

Time: Wednesday, April 21, 10:30 – 11:30AM CDT. Note that this link is a recurring meeting, so you may want to save the link.

Join Zoom Meeting

[https://us02web.zoom.us/j/85235353181?](https://us02web.zoom.us/j/85235353181?pwd=MWZiNkpnZk85T0hyUWQySHhLUVlxUT09)

[pwd=MWZiNkpnZk85T0hyUWQySHhLUVlxUT09](https://us02web.zoom.us/j/85235353181?pwd=MWZiNkpnZk85T0hyUWQySHhLUVlxUT09)

Added Note: There was also an article in the March 6 issue of *C&E News* about the development of the mRNA vaccines. A link to that article, which you may find of interest, can be found [here](#).

The story of mRNA: How a once-dismissed idea became a leading technology in the Covid vaccine race

By DAMIAN GARDE — STAT [@statnews](#) and JONATHAN SALTZMAN — BOSTON GLOBE
NOVEMBER 10, 2020



Part of a "vaccine farm," a hospital built used to store the mRNA Covid-19 vaccines, under construction in Kalamazoo, Mich. Pfizer's experimental vaccine requires ultra-cold storage, at about -70 C, so as they are made, the vaccines are being moved to special freezers. JEFFREY MAYER/REUTERS VIA AP

Request for Articles for the SCC Newsletter

If you are a senior and a member of ACS, you have probably received copies of the "Senior Chemists Newsletter", in your email. This is sent by the National ACS Senior Chemists' Committee, (SCC) about three times per year. (The most recent edition was sent out on March 8th). This Newsletter has articles about a wide variety of topics that we think senior chemists will find interesting. To find the SCC, click on [this link](#), and there you will find an archive of the SCC Newsletters. If you would like to receive them regularly the contact address is seniorchemists@acs.org to request to be placed on the email list. We need articles for this Newsletter—short (~500 words) on any topic that would be of interest to seniors: articles about the history of chemistry, general science, (not research articles) volunteer work that you do and how you adapted to Covid (If you could), retirement activities, (especially unusual ones) what you do for exercise (and again, how you adapted to Covid), future travel plans, reviews of books you liked, and many other topics. If you have an idea, even a vague idea, please send me an email (my email address is above in "Virtual Events"). Thanks, and I look forward to hearing from you.

Lynn Hartshorn



Call for Awards Nominations: MN ACS Awards

2021 Brasted Award Excellence in College Teaching

The Minnesota Section honors excellence in chemistry enterprise through three awards given on a rotating basis - the Award for Excellence in High School Chemistry Teaching, the Minnesota Award for outstanding achievement in a chemistry career, and the Brasted Award for excellence in College Chemistry Teaching. This year the section invites nominations for the Brasted Award for Excellence in College Chemistry Teaching.

The nominee must be actively engaged or retired from teaching chemistry at the college level. The nomination packet should include a biographical sketch, a list of publications, and a statement and evaluation of the nominee's achievement. Significant attributes can include quality of the candidate's teaching effectiveness and his/her ability to challenge and inspire students.

Letters of support are encouraged and may come from the department chair, associates, current or former students, and colleagues.

The Brasted Award consists of a plaque and a cash award of \$500; it will tentatively be presented at the September/October 2021 local section meeting. Past winners include Robert Brasted (U of MN, for whom the award was named after his death), Olaf Runquist (Hamline), John Holum (Augsburg), Emil Slowinski and A. Truman Schwartz (Macalester), Richard Borch, Claire Woodward, Gary Gray (U MN), Arne Lansjoen (Gustavus Adolphus), John P. Walters (St. Olaf), John Hill (U WI River Falls), Wayne Wolsey (MacLaster), Gary Miessler (St. Olaf), Dr. Michelle Driessen to name a few.

Please send the nomination to the chair of the Awards Committee, Ramesh C. Kumar (rckumar0051@mmm.com) on or before **July 15, 2021**.

2021 Janet Tarino Volunteer Award

The Janet Tarino Volunteer Award will be given to an individual for outstanding volunteer service to Minnesota ACS, and/or chemistry related projects and events not directly connected to Minnesota ACS. This person will have demonstrated an exceptional passion for and commitment to community outreach, and dedication to projecting a positive image of chemists. Nominating documents should include curriculum vitae and examples of volunteer service. The award consists of a plaque which will be presented at the September/October 2021 meeting of the section. Nominations should be sent to the Chair of MN ACS Awards Committee, Ramesh C. Kumar at rckumar0051@gmail.com on or before **July 15, 2021**.



March Virtual ACS Council Meeting: Summary of Governance Issues and Actions

A document detailing the topics and issues brought up during the recent ACS council meeting can be found [here](#). This document was graciously provided by Lynn Hartshorn, and any questions should be directed towards her through [email](#).



Chemistry Shorts

Chemistry Shorts is a new series of brief films that spotlight innovative ways that chemists and chemical engineers are working to solve important problems and create new opportunities. Each film is accompanied by a lesson plan that offers suggestions on how to integrate it into the classroom.

The first three films and lesson plans are available at <https://chemistryshorts.org>

- *Direct Air Capture & The Future of Climate Change, with Christopher Jones (Georgia Tech)
- *Under the Skin, with Zhenan Bao (Stanford)
- *Rewriting Life, with David Liu (Harvard)

Chemistry Shorts is also on YouTube and Twitter:

<https://www.youtube.com/c/chemistryshorts>
<https://twitter.com/chemistryshorts>

ACS Career Navigator

Home for career services, leadership development, in-person, online and On Demand professional education courses and market intelligence resources. Go to:

<https://www.acs.org/content/acs/en/campaigns/membership/career-navigator.html>



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