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THE INDICATOR

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Indicator

http://www.theindicator.org/

The monthly newsletter of the New York & North Jersey Local Sections of the American Chemical Society. Published jointly by the two sections and distributed to their 6,200 members.

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EDITORIAL DEADLINES

September 2022	August 16, 2022
October 2022	September 16, 2022
November 2022	October 16, 2022
December 2022	November 16, 2022
January 2022	December 16, 2022

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Address advertising correspondence to Advertising Manager. Other correspondence to the Editor.

June Calendar

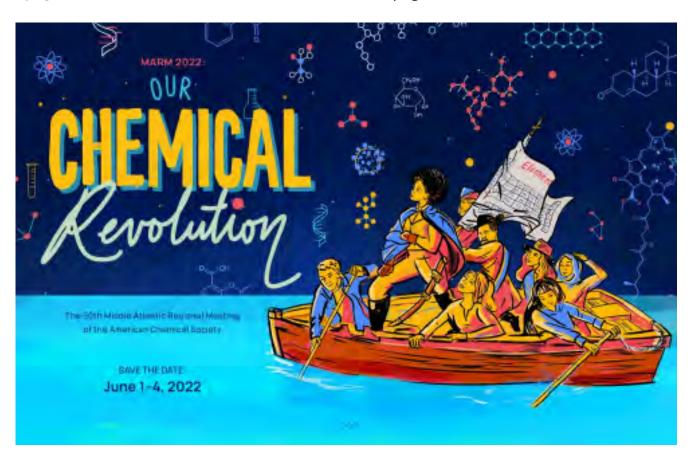
NEW YORK SECTION

Monday, June 6, 2022Board of Directors Meeting *See page 9*

NORTH JERSEY SECTION

Monday, June 13, 2022

North Jersey Executive Committee Meeting *See page 5*



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The Indicator is actively seeking new advertisers from academia, industry, suppliers and service groups. New rates are in effect that we believe you will find attractive and competitive.

View our <u>new rate sheet</u> and place an <u>order online</u> using this reply form.The September issue deadline is August 16th.

http://www.theindicator.org/

NEW YORK SECTION MEETINGS

BOARD MEETING DATES FOR 2022

All 2022 Board Meetings will be held as hybrid meetings from the Iona College campus (directions). Prof. Kathleen Kristian will Chair all meetings. The meetings will start at exactly 6:30 PM. The meetings are open to all – everybody is welcome, but an RSVP for in-person attendance is required 5 days before the meeting, the Wednesday before the Monday meeting. All members who would like to attend any of the meetings should inform the New York Section office by emailing Ms. Bernadette Taylor.

Monday, June 6, 2022 (hybrid) Monday, September 19, 2022 (hybrid) Monday, November 21, 2022 (hybrid)

Please note that there will also be a virtual meeting of the Finance Committee on Thursday, **November 10, 2022**.

More information will be posted in future monthly issues of <u>The Indicator</u> and on the New York ACS website.

NEW YORK SECTION'S OUTSTANDING SERVICE AWARD FOR 2022 – CALL FOR NOMINATIONS

Many members of the New York Section provide their time, leadership talent, and knowledge to the New York Section. The tradition of excellence of the New York Section is attributable directly to the cumulative effect of these dedicated individuals. Each year the New York Section presents the <u>Outstanding Service Award</u> to a most deserving member of the section. The New York Section is now accepting nominations for this award.

A nomination letter with supporting data should be <u>emailed</u> to the 2022 OSA Committee Chair, <u>Dr. JaimeLee I. Rizzo</u>. Nominations will be accepted **until June 30**, **2022**.

The nominations will be reviewed by a committee consisting of the previous five winners of the award. The Outstanding Service Award for 2022 will be presented at the New York Section's Sectionwide Conference in January 2023.



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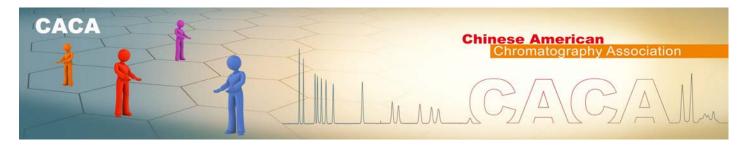
NORTH JERSEY SECTION MEETINGS

2022 NORTH JERSEY EXECUTIVE COMMITTEE MEETINGS

2022 North Jersey ACS Chair Qi Gao and the Executive Council welcome you to our monthly NJACS meetings. All meetings will be held virtually until further notice. The meetings are normally held on **Mondays from 7 pm to 9 pm once per month.** All members are welcome to attend and become more involved in section activities.

For any additional information including a link to virtual meetings and RSVP deadline for inperson meetings, please <u>click here to email our Communications Chair</u>.

June 13 September 19 October 17 November 14 December 12



EDISON DAY IS BACK - CALL FOR VOLUNTEERS

Edison Day is an event held by the Edison Museum in West Orange during the West Orange Street Fair on **June 4**, **2022**. Depending on the number of volunteers, we do 1-3 hands on activities with the kids who come by. So far, at least one activity involves an Edison invention and the kids always come away with something they made or worked on as well as chemistry magazines etc. All the materials will be there. But on a nice day hundreds of people come through the West Orange Street Fair so helping hands throughout the day are needed. Volunteers and their families get free parking, free admission to the museum, and access to the street fair which is usually very large. The event runs from 11AM to 5 PM although help is needed a bit before and after the event for set up and clean up.

VOLUNTEERS NEEDED			
Date:	June 4, 2022		
Time(s):	2 hour shifts	From 10:00 AM	To 5:30 or 6:00 PM
Place:	Thomas Edison Museum	211 Main Street, West Orange NJ 07052	
Provided by NJACS:	Event materials	PPE: gloves & goggles	
Provided by volunteer:	Enthusiasm, a love of chemistry, Thomas Edison, or both!	PPE: lab coat or clothes that can get messed up	Family members and friends to help or help you enjoy the day
Contact: Miriam Gulotta	Email: mgulotta@njacs.org		

Volunteers who sign up before event day will get a parking pass.

PLANNED PR MAKEOVER

The North Jersey Section will be working on their Public Relations and Communications! Our goals are to:

- Make the website more accessible, more up-to-date, and professional and to have a website that can be efficiently and easily updated.
- Unite our PR and Outreach efforts to ensure consistency of message
- Help our Topical Group and Event leaders access our PR and Outreach efforts to build our section

ACS members interested in helping our PR initiative can contact the <u>NJACS Communications</u> <u>Committee Chair</u> to get involved!



YOU CAN BE A LOCAL SECTION COUNCILOR

Represent our local section at National ACS meetings! The North Jersey Section has three councilor positions available for 2023 – 2025. If you've volunteered for NJACS before, or you'd like to get very involved quickly, being a Councilor is a great way to do so. Read more about the ACS Council here.

ACS members interested in running for 2023 – 2025 Councilor for the North Jersey Section can email our <u>Nominating Committee Chair</u>.



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The deadline for submitting material for September's issue of The Indicator is August 16th http://www.theindicator.org/





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MEETING REPORTS

WESTCHESTER CHEMICAL SOCIETY DISTINGUISHED SCIENTIST AND STUDENT AWARD DINNER 2022

After a two-year in-person absence, <u>Westchester Chemical Society</u> hosted its 2022 Distinguished Scientist and Student Award Dinner on Thursday, April 28, 2022. The event was a hybrid combination of an in-person dinner held in the Stephen Friedman Room, Wilcox Hall, at Pace University in Pleasantville, NY, with 28 attendees and an online Zoom event for 8 virtual attendees.

The event began with a reception at 5:00 with appetizers as the awardees and attendees arrived. The Master of Ceremonies for the evening, Mary Virginia Orna, a board member for the Westchester Chemical Society and the Chair-Elect of the New York Section, began the program with thanks to the Westchester Chemical Society, as well as, the Chair of the Pace University Chemistry Department, Karen Caldwell, and the Pace technical support person. There was a moment of silence for Paul Dillon, the longtime Co-Chair of the Westchester Chemical Society, who passed away late in 2021. Mary Virginia also introduced the past winners of the Distinguished Scientist Award who were in attendance. Rolande Hodel, the Chair of the Westchester Chemical Society, welcomed everyone to the event via Zoom from Cameroon.

congratulations

The recipient of the 2022 Distinguished Scientist Award is Dr. Marc A. Walters, a professor at New York University since 1985. As a bio-inorganic chemist, he has pioneered the development of air sensitive hydrogen bonding inorganic complexes as models for the active sites of iron-sulfur proteins. Dr. Walters has published 50+ articles and book chapters and has an exemplary record of service to scientific community, especially as a volunteer with the American Chemical Society. He is a past Chair of the New York Section of the ACS, recipient of an Outstanding Service Award by the Section and an ACS Fellow. Dr. Walters delivered a talk on "Calcium, Silver, Zinc and Phosphate: Perspectives on Bones and Teeth" which included a review of the recent work in his lab into the treatment (and prevention) of dental caries by inorganic reagents such as silver diamide fluoride and related complexes. Following his lecture, Mary Virginia Orna presented Dr. Walters with the Distinguished Scientist Award for the Westchester Chemical Society for 2022 in recognition of his work and career.



Professor Walters being presented the award plaque by Westchester Chemical Society Board Member Mary Virginia Orna, Ph.D.

WESTCHESTER CHEMICAL SOCIETY DISTINGUISHED SCIENTIST AND STUDENT AWARD DINNER 2022 (continued)

The Student Awards for 2022 were then presented by Dr. Peter Corfield (shown at left in picture below). There were 8 awardees for 2022 – 4 were in attendance in-person and 2 attended over Zoom. The Student Awardees are:

Elizabeth Volk, Fordham University, Faculty: Jon Friedrich
Mary Herrera, Iona College, Faculty: Rodney Versace (ZOOM)
Victor Jarquin, Manhattanville College, Faculty: Darlene Gandolfi
Dingyu Fu, New York University, Faculty: John Halpern (in-person)
Adelina Fardella, Pace University, Pleasantville, Faculty: David Rahmi (in-person)
Blair Labbate, Westchester Community College, Faculty; Jody Reifenberg (in-person)
Sophia Zielinsky, Briarcliff High School, Faculty: Shaniece Mosley (in-person)
Sarah Jennings, Ossining High School, Faculty: Angelo Piccirillo, Valerie Homes (ZOOM)

The event concluded with a delicious buffet dinner and interesting conversation between the attendees and the awardees shown below.



2022 UNITED STATES NATIONAL CHEMISTRY OLYMPIAD

The New York Section participated in the 2022 <u>United States National Chemistry Olympiad</u> (USNCO). The local exam was administered online on March 5 and 6 to 227 students from 46 high schools. The New York Section thanks the many people who worked to provide the opportunity for students to participate in the USNCO.

Subject to the USNCO rules the 16 highest scorers took the three part National Exam at Iona College in New Rochelle on May 1. We congratulate all these outstanding students and their teachers, Special congratulations to two students, Joshua Li (The Wheatley School), and Richard Zhuang (William A. Shine Great Neck South High School) who earned high honors and to eight students, Michael Chan (Stuyvesant High School). Christopher Kim (Hunter College High School), Ericka Lai (Manhasset High School), Jessica Liu (Stuyvesant High School), Elvin Lo (Horace Greeley High School), Amit Saha (William A. Shine Great Neck South High School), He Xuan (Jericho Senior High School) and Michael Zhang (Ward Melville High School) who earned honors.

CHEMISTS CELEBRATE EARTH WEEK 2022



On a sunny and brisk Saturday, April 23, 2022, we celebrated our 9th Annual CCEW at the New York's famous Jones Beach! The 2022 CCEW theme is, "The Buzz About Bugs - Insect Chemistry" and the newly renovated Energy and Nature Center was the perfect venue to gather everyone to celebrate nature and bugs! The day's festivities included an introduction of Jones Beach by the Director/Curator and Education Team members highlighting the important role insects have on our ecosystem, a presentation by Pace University's ACS Student Chapter, "Buzzing About Bees", a tour of the Nature Center, a self-guided hike through the beach and preserve area, as well as our "Ocean Blender Bar" (where healthy smoothies and desserts were prepared on-site and served), coffee/tea bar, snacks, lunch, cool earth day gifts, and a fun raffle!



Jones Beach Energy & Nature Center

Pace University ACS Student Chapter

CHEMISTS CELEBRATE EARTH WEEK 2022

Over 100 participants from the following schools and institutions included: ACS Westchester, Adelphi University, Agilent Technologies, America Museum of Natural History, Borough of Manhattan Community College, Brooklyn College, BTHS, Commack High School, Covert Elementary, East Hills Elementary School, Entech, Floral Park High School, Fordham University, Greenwich Hospital, Half Hollow Hills, Hewlett-Woodmere, Kean University, Kellenberg Memorial High School, Mattituck High School, MDI Consultants, Northwell Medical, NYC Environmental Protection, NYPD, PACE University – NYC, PACE University – PLV, Queens College, Queensborough Community College, Roslyn Middle School, Safety Kleen, SCWA, Stony Brook University, Suffolk County Community College, and Wagging Tails of Westchester.



Prof. JaimeLee Rizzo

Health Snacks

An educational and relaxing time was had by all with beautiful views and smells of the ocean with feet in the soft sand! We were fortunate to observe a variety of birds including the endangered piping plover and their nesting areas. Some stretched out on the beach and took in the warm and beautiful rays of the sun, while others collected pretty shells at the seashore ©



Buzzing About Bees

LEO HENDRIK BAEKELAND AWARD SYMPOSIUM

On Thursday, May 12th at Fairleigh Dickinson University in Lenfell Hall at the Mansion, the North Jersey ACS hosted the Leo Hendrick Baekeland Award Symposium during the afternoon and evening hours to celebrate Professor Prashant K. Jain, from the University of Illinois, being honored the 2021 Baekeland Award. Professor Prashant K. Jain is being recognized for his research in harnessing light as a source of energy to control the attributes and functions of advanced materials.

Pictured at right are ACS Director-at-Large Dr. Natalie A. LaFranzo, Prof. Prashant K. Jain and NJACS Chair & Baekeland Symposium Chair, Dr. Qi Gao.



The <u>Leo Hendrik Baekeland Award</u> is given biannually by the North Jersey Section of the ACS to honor a US-based chemist, under the age of 40, for outstanding contributions to pure or applied chemistry. It is named after the U.S. industrial chemist who helped found the modern plastics industry through his invention of Bakelite.



Attendees enjoying the Baekeland Symposium



Professor Jain delivering his keynote lecture, entitled "The Photification of Chemical Manufacturing."

LEO HENDRIK BAEKELAND AWARD SYMPOSIUM (continued)

Other speakers at the award symposium were Professor George Schatz (Northwestern University), Professor Naomi Halas (Rice University), Professor Robert W. Field (MIT), and Professor Paul Weiss (UCLA), pictured from left to right below.



2021 Baekeland Symposium Speakers

The symposium was opened by Dr. Qi Gao, Chair of the NJACS and Baekeland Symposium Chair. The speakers shown above presented talks that covered a range of topics in nanotechnology and advanced material science. Professor Jain's keynote lecture was titled "The Photification of Chemical Manufacturing." Dr. Natalie A. LaFranzo, the ACS Director-at-large, was in attendance and gave congratulatory remarks to the awardee. This was followed by the presentation for the Baekeland Medal and honorarium by Dr. Qi Gao and Dr. Natalie A. LaFranzo. The symposium was followed by a private dinner.

Professor Jain receiving the 2021 Leo Hendrik Baekeland Award from North Jersey ACS Chair Dr. Qi Gao.



The Indicator is posted to the web 1ST of the month at

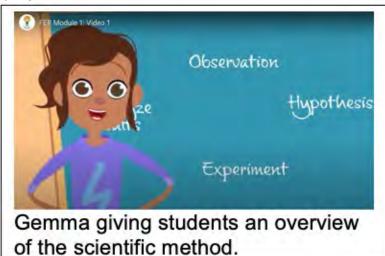
http://www.theindicator.org/

FAIR FOR EMERGING RESEARCHERS ANNUAL SCIENCE FAIR

On April 30th, 2022 the Fair for Emerging Researchers (FER) hosted their annual science fair over the Hopin virtual platform. After completing a four-month mentorship program, 78 middle school students from New Jersey and New York presented 57 projects to panels of judges to compete for scholarships and prizes. This year's program specifically aimed to expand the mentorship program to give students a more thorough understanding of the scientific method. The organization was run by a group of professionals and students who work in industry, attend graduate and professional schools, or attend Drew University, the college where the event originated. With a team of 10 under the advisement of Dr. Sandra Keyser, (NJACS Councilor), the group was able to expand recruitment to multiple states and hopes to continue the expansion in the years to come.



To build upon the success of the prior five years, changes to the program included the creation of a new website to enhance recruitment and the development of an enhanced scientific curriculum with integrated online modules and virtual mentorship sessions. This year approximately 100 students participated in the mentorship program; the children participated in five 1-hour virtual mentorship sessions in which they worked with Drew University undergraduates over Zoom to develop their projects. In addition, the students had access to online modules that contained 22 minutes of animated video, where the main character Gemma (see below) taught the students concepts related to crafting a hypothesis, designing their experiments, and presenting their research. The videos centered around geology examples, providing paleontology and natural ecosystem experiments to teach students how to think about science. Mrs. Amanda Watermeyer, a teacher at Academy of St. Joseph in New York, spoke about how this curriculum "challenged the students to think deeply about their experiments and enhanced their learning experience". The culminating assignment for the mentorship program was the creation of abstracts for the student projects.



During the science fair, students presented to panels of judges, who included undergraduates, graduate students, industry professionals, and academics. The students presented 5-minute powerpoint presentations and then answered questions from judges and other participating students for three minutes. Judges ranked students on the quality of their research as well as their presentation style and ability to answer questions.

FAIR FOR EMERGING RESEARCHERS ANNUAL SCIENCE FAIR (continued)

Based on rankings in these two presentations, seven students were selected for the final round to compete for the grand prize of \$250. Overall students were awarded a total of \$550 in prizes, as well as t-shirts for their participation. Mrs. Stacy Tulloch, a teacher in the Lyndhurst school district, spoke about how this process really pushed her students "out of their comfort zones to improve their self-confidence and scientific communication." Many students at the end of the event spoke about how they were excited to participate next year.

To increase the reach of FER, the FER management team has now expanded to 15 people to expand in 2022-2023 to Maryland, Pennsylvania, and Massachusetts. The 2022-2023 FER will specifically increase diversity among the participants, achieving the organization's vision of "science for all". Overall, the hope is that the event will offer students the ability to learn how to answer questions using science and allow them to interact with mentors and students from around the country.

If you would like to volunteer as a mentor or are a teacher that wants to get your school involved, please email us at info@sciencefer.org.



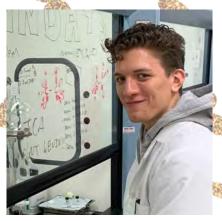
COMMITTEE ON THE HISTORY OF THE NEW YORK LOCAL SECTION

Over the past twenty-three years the New York Section has participated in the designation of seven National Historic Chemical Landmarks and four New York Section Historic Chemical Landmarks. A brief description of these National and local section landmarks may be found on the NY Section website. These landmark programs recognize achievements in the chemical sciences and related areas, in order to enhance public appreciation for the contributions of the chemical sciences to modern life.

Please consider making a nomination for an historic chemical landmark. The Committee on the History of the NY Section will consider all nominations. In addition to a particular achievement, an historic library, building or association may be worthy of this distinction. Please send your nomination, with supporting documentation, to the Committee Chair, <u>Dr. Neil Jespersen</u>.

NEW YORK SECTION AWARDS CERTIFICATES OF EXCELLENCE

The New York Section honors the following college students for their academic excellence in the field of chemistry. <u>More info online.</u>



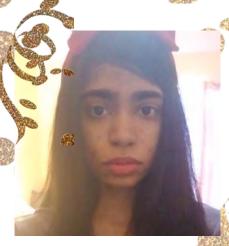
Kevin Freddo Adelphi University



Kyra Singh Adelphi University



Deepika Nambiar
Barnard College



Olga Laracuente Contreras Bronx Community College



Jocelyn Zhang Columbia University



Philip Raftopoulous Columbia University



Escarlin Perez Iona College



Daniel Weber Long Island University

NEW YORK SECTION AWARDS CERTIFICATES OF EXCELLENCE (continued)



Alexandra Petricca Manhattanville College



Abhi Deverakonda

New York University



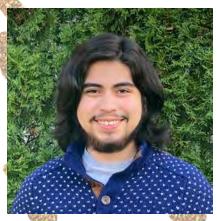
Daria Tolmachova Pace University



Rafael Musayev Queens College



Samual Hee Queens College



Gonazalo R. Vazquez-Jimenez Saint John's University



Mihir Vora
Saint Peter's University



Oshane Annon
Saint Peter's University



Jenna Pralat
Stevens institute of Technology

NEW YORK SECTION AWARDS CERTIFICATES OF EXCELLENCE (continued)







Joelle El Hamouche Stony Brook University

Ethan Jaravata US Merchant Marine Academy

Caecilia Thuermer

Wagner College

Also honored, but not pictured:

Brian Ng, Ramapo College of New Jersey
Christian Dietz, Hofstra University
Daniel Elamrani, Rockland Community College
Ekaterina Tripolsky, New York City College of Technology
Katherine Gilmartin, Manhattan College
Laura Sanchez, Hofstra University
Lauren Vetoulis, College of Mount Saint Vincent
Leana Hacopian, Ramapo College of New Jersey
Nat Ku, NYU Tandon School of Engineering
Rachel Mojica, Manhattan College
Sommer Gomez, New Jersey City University
Tamika Gilmore, New Jersey City University
Victoria Carranza, Pace University



William Wang, New York University

OPPORTUNITIES

GRANT OPPORTUNITIES

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DUE JUNE 10, 2022

Learn more

AWARDS

WOMEN CHEMISTS COMMITTEE RISING STAR AWARD

Recognizes up to 10 individuals approaching mid-career who have demonstrated outstanding promise for contributions in their respective fields.

DUE JUNE 15, 2022

Learn more

LOCAL SECTION INNOVATIVE PROJECT GRANT

Local Sections may request up to \$3500 to support new programs that stimulate member involvement and are sustainable. Projects that support interactions with other ACS local sections, divisions or committees, other professional associations or community groups are especially encouraged.

DUE JUNE 30, 2022

Learn more

PFIZER/ACS TRAVEL AND RESEARCH GRANT

Supports chemistry students from underrepresented groups who are going to attend the Fall ACS National Meeting & Exposition in Chicago. Ten students will receive up to \$2,000 in financial support.

DUE JUNE 15, 2022

Apply now

WOMEN CHEMISTS COMMITTEE GRANT

As part of its 95th Anniversary celebration the WCC invites local sections, student chapters and international chapters to apply for a \$100 grant to support hosting an event that celebrates the work of women chemists.

DUE JULY 1, 2022

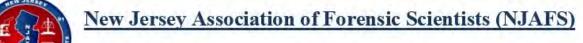
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GRADUATE STUDENT & POSTDOCTORAL SCHOLAR RECOGNITION PROGRAM

ACS invites graduate programs in the chemical sciences and departments with postdoctoral appointments to select graduate students and postdoctoral scholars demonstrated who've exemplary achievements in any of the three categories: Leadership Mentoring, Leadership in the Promotion of Diversity, Equity, Inclusion, Respect, and Leadership in the Promotion of Research Safety.

Nominations due **June 30, 2022**More info

any of the 5 categories.
Leadership in Mentaring
Leadership in Promotion of Diversity, Equity, Inclusion, and Respect
Leadership in Promotion of Research Safety

Deadline: June 30, 2022

ACS

Graduate Student & Postdoctoral Scholars Recognition Program

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The BlackinChem Postdoctoral Fellowship provides \$75,000 of support for three years. This funding can also be used to bridge to a tenure-track position at which point it increases to \$100,000 per year. Information sessions will be held in July 2022 and the deadline for a letter of inquiry is **August 1, 2022**.

Learn more

SEMINAR SPEAKERS WANTED

The New York Section wants to add to add you to our Speakers Bureau database of local speakers who are available for Section-wide seminars and symposia. If you have an area of research or interest that would provide an interesting talk appropriate for our Section. members, and would like to be included in our Speakers Bureau, please send an email to Ms. Bernadette Taylor with the following information that will be posted on the Section's website: your name, affiliation, a seminar title, and 5-6 words briefly summarizing your area of specialty. We look forward to hearing from you about topics that you wish to share with your fellow members!



Fostering a spirit of fraternity among those engaged in separation sciences and promoting educational and professional development since 1966.

Visit CFDV.org for more information!

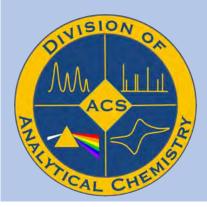


Monthly Seminar Series & Other Events: https://cfdv.org/events

We are back in person on June 6th in Wilmington, DE!

Joe Foley (CFDV Award Winner) will be presenting on a variety of research topics he investigated throughout his career.

Wilmington Brew Works - June 6, 2022 @ 6 pm - Register at our website



DIVISION OF ANALYTICAL CHEMISTRY

The <u>Analytical Division</u> organizes programs for the spring and fall ACS Meetings, <u>Pittcon</u>, the <u>SciX conference</u> and the <u>Eastern Analytical Symposium</u> (EAS). In addition, the Chromatography and Separation Chemistry subdivision addresses the issues of interest to its members. The division has a wide range of outreach programs including student travel grants and regional meeting support. Its award program includes undergraduate, graduate and professional awards. We welcome new members. Please join and/or volunteer to help with one or more activities.





NEWS FROM OUR PARTNERS



Société de Chimie Industrielle

Present a free webinar:

Founded 1918

Major Trends and Innovations in Green and Circular Chemistry

Featuring Carlos A. Cabrera (Genomatica & Encina), Michel Chornet (Enerkem) and Dave Roesser (Encina)

Monday, June 6, 2022

1:00 PM EDT

Register here

WOMEN CHEMISTS COMMITTEE, CALIFORNIA, PUGET SOUND. PORTLAND & ALASKA LOCAL **SECTIONS**

Present 2022 ACS President-Elect Dr. Judy Giordan Chemistry, ACS and YOU: The value of getting involved **Tuesday, June 21, 2022** 8:00 PM EDT

RSVP for Zoom invite











Please join us for a virtual presentation by Dr. Judy Giordan, 2022 President-Elect of the American Chemical Society:

ery, ACS and YOU The security of 9

June 21, 2022, 5:00 to 6:00 pm, PDT Online Zoom event, RSVP H FREE

Despina Strong, Puget Sound Local Section



Judy Glordan is Managing Director of ecosVC, Inc., a co-lounder of the Chemical Angels Network, an entrepreneur and former Fortune 100 executive. Judy serves as board member, co-founder, advisor and investor is seed and early-stage start-ups and is 2022 President-elect of the American Chemical

Her previous executive positions include Corporate VP and Global Director of R&D at International Flavors and Fragrances, Inc.: Vice-President Worldwide Research and Development for the Pepsi-Cola Company, Pepsick, inc.: Vice-President R&D, Henkel Corporation, the North American operating unit of the Henkel Group. She has also served with the National Science Foundation as Program Director for the IGERT Program.

Judy has a BS in Environmental Science and VeTech Ag from Rutgers University, PhD in Chemistry from the University of Maryland and was Alexander von Humboldt post-doctoral fellow at the University of Frankfurt, Germany.

udy will tell us about her priorities for her term as ACS President and how she chose those priorities, he will also discuss what she sees as the most important nationwide role for ACS. We've asked her to entity the top challenges, both internal and external, for ACS, as well as the best internal and external sportunities that the sees. Finally, Judy will address getting involved with ACS— both the value of volvement and disea for involvement.

YOUNGER CHEMISTS COMMITTEE, GREATER HOUSTON SECTION

Present a pair of events: Do I Need a New Job or Career? Wednesday, June 22, 2022 5:00 PM ET

and

How to decide if you need to make a transition Thursday, June 30, 2022 7:30 PM ET RSVP for Zoom invite

ACS-GHS YCC Virtual Seminar -Do I Need a New Job or Career?





How to decide if you need to make a transition

Thursday, June 30 via Zoom



Zoom meeting link will be sent to registered participants by email.

6:30 – 6:40 pm – Welcome & Introductions 6:40 – 7:40 pm – Featured Speakers (20 min each) 7:40 – 8:00 pm – Q&A

JOB BOARD

Starting your career or looking for the next challenge? Review these and other postings at the New York ACS Job Board. Email your job postings to Jobs@NewYorkACS.org for inclusion.

Tenure-track Assistant Professor Positions - Iona College

Apply here

Laboratory Supervisor – Adelphi University

Apply here

Contract Faculty Assistant Professor – St. john's University

Apply here

R&D Analytical Principal Scientist - PepsiCo

Apply here

Deputy Director for Science and Technology - Brookhaven National Laboratory

Apply here

Associate QC Analytical Chemist - Tris Pharma

Apply here

Sr. Research and Development Chemist – Sysco Guest Supply, LLC

Apply here

Biopharmaceutical Field Marketing Manager - Waters

Apply here



ACS VIRTUAL OFFICE HOURS - ENTREPRENEURSHIP

Join ACS Virtual Office Hours on the first Thursday of each month. These FREE virtual career guidance sessions are open to ACS members AND non-members alike. May's event covers the ins and outs of chemistry careers in government.

Date: June 2, 2022 Time: 12:00 PM ET

THIS MONTH IN CHEMICAL HISTORY

Harold Goldwhite, California State University, Los Angeles hgoldwh@calstatela.edu

When I was in graduate school one of the leading topics of discussion was physical organic chemistry, an area that seems to have receded in importance somewhat at present. My interest in that subject was reinforced in my post-doctoral stay at Cornell by the visit of Sol Winstein from UCLA to give a Baker lecture course on physical organic chemistry. Winstein's tragically early death meant that the textbook that usually summarizes and expands a Baker lecture series did not appear. This reminiscence was prompted as I scanned my bookshelves for candidates for my "Great Books in Chemistry: the 20th. Century" series. I came across a book I must have purchased years ago but had completely overlooked: "Physical Aspects of Organic Chemistry" Second Edition, by William A. Waters of the University of Durham, with an introduction by Professor Martin Lowry, published by Van Nostrand in the U.S.A. in 1937. The first edition was in 1935 - an early text on the subject. While this book doesn't quite qualify in my mind as "Great" it is certainly interesting enough to warrant a column. My copy of this book was released from the library of Juniata College, a <u>private liberal arts college</u> in <u>Huntingdon, Pennsylvania</u>. Founded in 1876 as a <u>co-educational</u> school, it was the first college started by members of the <u>Church of the Brethren</u> as a center for vocational learning for those who could not afford formal education.

In glancing over the Preface and Introduction it is clear that the original plan for this text was Lowry's, but it was Waters who completed it. Lowry acknowledges the help of Dr. C. P. Snow in preparing the more physical chapters at the beginning of the book. Some of you may be familiar with C. P. Snow as the author of many mid-20th. century best-selling novels. I recommend two of them, in particular, to my readers. "The Search" poses some challenging questions about originality, plagiarism, and falsification in the conduct of scientific research. "The Masters" is an enthralling examination of academic politics in the context of an Oxbridge college.

The opening paragraphs of the Waters and Lowry text have an immediate appeal to this historian of chemistry. Under the heading of "Berzelius's Dualistic Theory of Chemical Affinity", a theory based on electrical attraction and that gave us the terms electronegative and electropositive, the book leads us through the historical events that led to Berzelius's ideas – still a foundation of theories of the interactions of atoms and molecules. This historically designed approach leads logically to Dumas, van't Hoff and le Bel, Kossel and G.N.Lewis, and Alfred Werner – the revival of dualism as the authors put it.

After this historical and physical introduction the book goes on to unsaturation and free-radicals. This latter subject starts with Gomberg and the triphenylmethyl radical, the first isolated organic free-radical. This type of radical was characterized, among other measurements, by its paramagnetism. Nitrogen centered free radicals are produced by the partial dissociation of tetraaryl hydrazines and oxygen centered free radicals similarly from peroxides.

Molecular rearrangements occupy a long chapter, that includes many examples and suggestions about mechanisms. A discussion of Walden inversion draws no conclusions about mechanism, while the pinacone-pinacoline and Beckman rearrangements fare no better. But recall- this is over 80 years ago. We have come a long way since.

Physical organic chemistry reached maturity from the 1940s on with the publication of a number of seminal texts that do deserve designation as "Great Books of Chemistry of the 20th. century". Some of them may be subjects of future columns.