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Kathleen Kristian, Ph.D.
2022 New York ACS Chair

See page 6



ACS Local Section
New York



ACS Local Section
North Jersey

JANUARY 2022

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THIS MONTH IN CHEMICAL HISTORY

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

In my continuing pursuit of the 20th. Century's great books in chemistry I have re-encountered a work of chemical history that I consider a "Great Book". It is "Discovery of the Elements" by Mary Elvira Weeks and my 7th. Edition, published by the Journal of Chemical Education in 1968, is co-authored by Henry M. Leicester, who claims this edition to be completely revised with new material added. This generously illustrated volume runs to nearly 900 pages and is, as its title suggests, a detailed and accurate account of the ways in which the elements known at the time of publication, 104 in number, were discovered.



Mary Elvira Weeks

The mother of this enterprise, Mary Elvira Weeks, (1892 – 1975) was the first woman to be awarded a Ph.D. in chemistry by The University of Kansas, and the first woman faculty member in that department after spending 7 years as a high-school teacher. Her doctoral thesis was on the effects of pH in precipitation of calcium and magnesium salts. She spent 22 years at Kansas, mostly as a teacher, and from 1932 to 1933 she published more than 20 articles in the Journal of Chemical Education that became the nucleus of the first edition of "Discovery of the Elements" published in 1933. The book was well reviewed and five more editions followed. In 1946 Weeks collaborated with Charles E. Browne in writing "A History of the American Chemical Society – Seventy-five Eventful Years" which appeared in 1952, five years after Browne's death. In 1967 Weeks was awarded the Dexter Prize by the Division of the History of Chemistry of the American Chemical Society.

The 7th. Edition of "Discovery..." was prepared by another distinguished historian of chemistry, Henry M. Leicester. After earning a Ph.D. at Stanford in organic chemistry in 1930 he spent time in Europe and was a faculty member at a number of institutions before settling at the University of the Pacific where he was Professor of Biochemistry for 20 years. He developed expertise in the history of chemistry in Russia and published biographies of Russian chemists in many authoritative sources. He founded the series "Chymia", an annual publication containing articles about the history of chemistry, and co-edited a historical source book in chemistry. He also was awarded the Dexter prize – in 1962.

The 7th. Edition of "Weeks and Leicester" is regarded as a classic in chemical history. Its in-depth approach can be gauged by examples: the chapter on three important gases, hydrogen, nitrogen, and oxygen, covers 63 pages. Three alkali metals, potassium, sodium, and lithium, occupy 45 pages. Every page has footnotes, usually several. There is a 16 -page chronology from the 16th. to the 20th. Century, and both name and subject indexes. The writing is fluent and draws the reader in.

A final note. It has been over 50 years since this history of the discovery of the elements was published and surely an update and an 8th Edition is overdue. Other good books on the history of the elements have been published in that time, but none of them comes near the depth and authoritative approach of Weeks and Leicester. So this is another Challenge to my Readers.

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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.

CONTENTS

January Calendar	4
Advertisers' Index	4
New York Chair's Message	6
North Jersey Section Meetings	9
NJACS NMR Topical Group	9
NJACS ChemTAG	10
New York Section Meetings	11
The Chemistry of Love	12
Honoring Lifelong Service	13
<i>In memoriam</i> : Prof. Nadrian C. Seeman	14
Outstanding College Teacher Awardees	15
Call for Nominations	18
Opportunities	19
News from our Partners	21
Job Board	21

EDITORIAL DEADLINES

February 2022	January 16, 2022
March 2022	February 16, 2022
April 2022	March 16, 2022
May 2022	April 16, 2022
June 2022	May 16, 2022

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<https://www.acs.org/editmyprofile>.

Address advertising correspondence to [Advertising Manager](#). Other correspondence to the [Editor](#).

January Calendar

NEW YORK SECTION

Saturday, January 29, 2022

New York ACS Section-wide Conference
See page 5

Saturday, February 12, 2022

The Chemistry of Love
See page 12

Monday, February 28, 2022

Board of Directors Meeting
See page 11

SAVE THE DATE

Friday, April 8, 2022

William H. Nichols Distinguished Symposium
and Award Dinner

NORTH JERSEY SECTION

Thursday, January 20, 2022

NMR Topical Group
See page 10

Monday, January 24, 2022

North Jersey Executive Committee Meeting
See page 9

Wednesday, January 26, 2022

ChemTAG Meeting
See page 10

Monday, February 14, 2022

North Jersey Executive Committee Meeting
See page 9

Ad Index

Micron.....	4
Seton Hall University.....	8
Eastern Scientific.....	12
Robertson - Microlit.....	15
Chinese American Chromatography Association.....	19
Division of Analytical Chemistry.....	21
New Jersey Association of Forensic Scientists.....	21

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2022 VIRTUAL SECTION-WIDE CONFERENCE

Registration is free

SATURDAY, JANUARY 29, 2022

10:30AM – 1:00PM via Zoom

PROGRAM

- 10:30 AM GREETINGS FROM THE ACS NEW YORK SECTION 2022 CHAIR.** **Dr. Kathleen Kristian**
Iona College
- 10:40 AM AWARD PRESENTATIONS.**
- Service Plaque and Pin to the 2021 ACS New York Section Chair **Dr. Rita Upmacis**
Pace University
- ACS New York Section Outstanding Service Award for 2021 **Dr. Alison Hyslop**
St. John's University
- Outstanding Four-Year University with Graduate School Chemistry Faculty Teaching Award **Dr. Aaron Moment**
Columbia University
- Outstanding Four-Year Undergraduate College and University Chemistry Faculty Teaching Award **Dr. Ipsita Banerjee**
Fordham University
- Outstanding Two-Year College Chemistry Teaching Award **Dr. Kevin Kolack**
Queensborough Community College
- Nichols High School Teacher Award **Jamila R. Harris**
Thurgood Marshal Academy for Learning and Social Change
- Salute to Excellence Award **Linda Atkins**
- 11:00 AM PRESENTATION OF CANDIDATES FOR THE 2022 ELECTIONS** **Dr. Mary Virginia Orna**
College of New Rochelle
2022 Chair Elect ACS NY Section
- 11:15 AM KEYNOTE SPEAKER:** **Dr. Matt Gunsch**
Senior Scientist, Analytical Research & Development
Merck Research Laboratories
- Analytical Challenges during Biocatalytic Synthesis of Active Pharmaceutical Ingredients*
- 12:15 PM PROJECT SEED** Presentation by New York Section Project SEED Students.
- 12:30 PM ACS, NEW YORK SECTION COMMITTEE PLANNING SESSIONS FOR 2022.**
- Educational Activities:** Chair: Dr. Alison G. Hyslop
Chemagination, Chemists Celebrate Earth Day, Continuing Education, High School Chemistry Olympiad, National Chemistry Week, Nichols Foundation Teacher Award, Project Seed, Student Membership
- Member Affairs:** Chair: Dr. Joseph M. Serafin
ACS Fellows, Awards, Employment and Professional Relations, History of the New York Section, Indicator, Membership, Outstanding Service Award
- Program Review:** Chair: Dr. Anne T. O'Brien
Subsection and Topical Discussion Group Chairs
- Public Affairs:** Chair: Dr. Robert P. Nolan
Academe and Industrial Relations, Environmental Chemistry, Fund Raising, Government Affairs, Information Technology, Public Relations, Speakers Bureau
- 1:00 PM REPORTS FROM THE CHAIRS OF THE COMMITTEE PLANNING SESSIONS.**
- 1:15 PM CONCLUSION OF THE MEETING**

2022 NEW YORK SECTION CHAIR'S MESSAGE

Dear Members,

When I spoke with then-Chair-Elect Rita Upmacis in early 2020 about the opportunity to run for 2021 Chair-Elect of the NYACS, neither of us could have imagined how drastically the world would change by the time of the election. Now, a full two years later, the NYACS members and leadership have shown how resilient, creative, and dedicated they are when it comes to enhancing and sharing their enthusiasm for chemistry. We have managed the transition to online and hybrid board meetings and events; adopted new and improved ways to communicate with members and the public; offered the signature annual events that members enjoy in new forms; gathered in community online for new activities such as book club discussions, online trivia competitions, and video demonstrations; created digital libraries of teaching materials; and redoubled our efforts to support the strategic aim of ACS related to diversity, equity, inclusion, and respect. We accomplished all of this while managing the switch to remote work, finding effective ways to teach chemistry online, supervising distance learning for our own family members, isolating ourselves to keep others safe, and living with a very high level of uncertainty day-to-day! I want to congratulate all of our hard-working board members, topical group and committee chairs, event leaders, volunteers, and active members for their impressive feats in 2020 and 2021.

As Chair in 2022, I hope to support the mission of NYACS through several areas of focus. I will continue to work with other section leaders to engage younger chemists and recruit new members to the NY section. In particular, we will work to jumpstart those topical groups or subsections that lost active leadership and members during the pandemic. I will continue to support the efforts of the NYACS to create a welcoming and inclusive environment for all chemists, especially through the activities of the newly reactivated NYACS Minority Affairs Committee and the National Historic Chemical Landmark working group. All of these efforts will benefit from our newly gained knowledge about the challenges of and strategies for running effective online, hybrid, and in-person programs in the current landscape. I am delighted to continue to work with 2021 Chair Rita Upmacis and incoming 2022 Chair-Elect Mary Virginia Orna, as well as the rest of the Executive Committee, to maintain the reputation of NYACS as a source of vibrant, high-quality, activities related to chemical sciences.

The **2022 Board Meetings** will be offered in a hybrid format (with the exception of the all-virtual winter meeting in February), and the meetings will move to Monday evenings at 6:30 PM. We hope that the invitation to join in Board Meetings either in-person or online will facilitate participation of a wider cross-section of members, including those who currently cannot gather in-person in groups. If you are interested in ways to become involved in the Board of the NYACS, please reach out to me or another member of the Executive Committee to learn more.

continued on page 7

2022 NEW YORK SECTION CHAIR'S MESSAGE

continued from page 6

Please stay connected via our newly-revamped online newsletter, [The Indicator](#), and our social media channels, [Facebook](#), [LinkedIn](#) & [Twitter](#), to learn about upcoming activities and ways to get involved. We are excited about our slate of events for 2022, and we hope that you will participate in as many as possible. Please mark your calendars for:

Virtual Sectionwide Meeting on January 29th, featuring a keynote address “Analytical Challenges during Biocatalytic Synthesis of Active Pharmaceutical Ingredients” presented by Dr. Matthew Gunsch (Senior Scientist, Analytical Research and Development, Merck). We are also excited to honor the NYACS Outstanding Service awardee, Prof. Alison Hyslop (St. John’s University). Please register for the sectionwide meeting (www.newyorkacs.online) and join us to plan activities for 2022!

William H. Nichols Distinguished Award Symposium and Dinner on April 8th, honoring Prof. Alison Butler of UC Santa Barbara, currently planned as an in-person event. The symposium will feature several notable chemists from the field of bioinorganic chemistry, with the theme “From Microbes to Mussels: Bioinorganic Chemistry in the Marine Environment”. Details about registration will be disseminated in early 2022.

And keep the following annual events in mind (specific dates TBA in *The Indicator*) as we move forward to 2022:

Undergraduate Research Symposium in Spring 2022 to learn about the varied research activities happening in the NY section

National Chemistry Week outreach events to showcase the fun and value of chemistry for students, children, and the general public

Younger Chemists Committee meetings and events to engage recent graduates and early-career professionals

Topical Group, Subsection, and Committee-led events in your areas of interest

Looking back on the past year of virtual events offered by NYACS makes me feel enthusiastic and optimistic about what we will accomplish together, both in-person and online, in 2022. Please consider how NYACS can better serve you, your students, your colleagues, or the public, and join us to accomplish our mission, “*to be a forum for the exchange of ideas, knowledge and experiences among those interested in the chemical sciences in ways that promote individual and professional excellence in the chemical community.*”

Best wishes for a healthy, happy, and fulfilling 2022!

Kathleen E. Kristian
2022 New York ACS Chair
kkristian@iona.edu



Department of Chemistry and Biochemistry

Spring 2022 Course Offerings

Jan 19—May 18, 2022

[Modern Separation Techniques - 13658 - CHEM 6205 - NB](#)

Principles and practice of chemical and physical separation methods, gas and liquid chromatography, electrophoresis, membrane separation methods, extraction, distillation. Theory, instrumentation and applications of each technique.

Dr. Yuri Kazakevich Thursdays 6:00 pm - 8:20 pm

[Synthetic Organic Chemistry - 17924 - CHEM 6303 - NA](#)

Reactions commonly used in the synthesis of organic compounds; discussion of their selectivity and stereochemistry and the extent to which they can be utilized in the preparation of complex materials.

Dr. Cecilia Marzabadi Mondays 6:00 pm - 8:20 pm

[Principals of Colloid and Interface Chemistry - 17407 - CHEM 6405 - NA](#)

The course will introduce the fundamentals of colloid and interface chemistry. The main topics include: thermodynamics of flat and curved surfaces, surface energy and surface tension, capillarity, monolayers, surfactants, nucleation, adsorption and wetting phenomena, molecular and surface forces, and stability of colloidal systems. An overview of characterization methods and applications of colloids and surfaces in industry and research will be provided.

Dr. Alexander Fadeev Tuesdays 7:00—9:20 pm

[Advanced Inorganic Chemistry I - 18743 - CHEM 6601 - NA](#)

A survey of transition metal chemistry focusing on the structural and dynamic properties of transition metal complexes. The presentation begins with a discussion of ions and their environment followed by a description of the bonding theories for transition metal complexes. Electronic spectra, magnetism and reactivity of these molecules will be explained in terms of these bonding theories. Related topics of main group compounds, organometallic complexes and bioinorganic chemistry also will be covered.

Dr. Sergiu Gorun Wednesdays 6:00—8:20 pm

Courses offered on a full or part-time basis for MS, PhD or non-matriculated students

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Or go to: <https://www.shu.edu/graduate-affairs/non-matriculated.cfm>

NORTH JERSEY SECTION MEETINGS

<https://www.njacs.org/>

2021 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.

The format for each meeting will be announced in preceding month's issue of The Indicator.

For any additional information including a link to virtual meetings and RSVP deadline for in-person meetings, please [click here to email our Communications Chair](#).

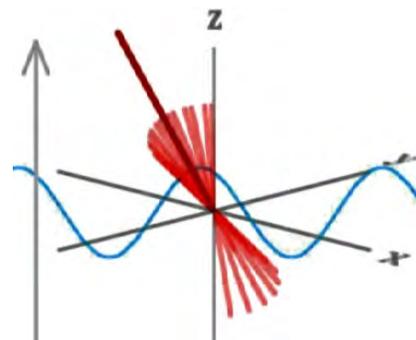
January 24
February 14
March 14
April 18
May 16

June 13
September 19
October 17
November 14
December 12

NORTH JERSEY NMR TOPICAL GROUP

The NJACS NMR Topical Group is happy to introduce the new leadership team for 2022!

- [Jonathan Williams](#) will be serving as Chair. He received his PhD in 2017 working in the lab of Mei Hong at MIT, followed by postdoctoral work in the lab of Jean Baum at Rutgers University. He is currently a Senior Scientist at Bristol Myers Squibb, where he serves as NMR subject matter expert for pharmaceutical product development across modalities and formulations.
- [Tom Osborn Popp](#) will be serving as co-Chair. He received his PhD in 2019 working in the lab of Jeff Reimer at UC Berkeley, followed by postdoctoral work in the lab of Alexander Barnes at ETH Zürich. He is currently an Arnold O. Beckman postdoctoral fellow in the lab of Andy Nieuwkoop at Rutgers University, developing new NMR methods to study deep sea hydrothermal vent bacteria.



Our first meeting of 2022 will be on Thursday, January 20, 2022, starting at 7pm. The guest speaker will be our own Dr. Tom Osborn Popp (see page 10).

We are excited with the upcoming year, and look forward to having you join us for our monthly seminar series and Annual Symposium in October!

For more info on the NMR Topical Group, visit our webpage: <https://www.njacs.org/topical-groups/nmr-spectroscopy>

NJACS NMR TOPICAL GROUP

Development of NMR Instrumentation to Study Complex Materials



Speaker: Tom Osborn Popp, Ph.D.
Department of Chemistry &
Chemical Biology
Rutgers University

Abstract: Many functional inorganic and biological materials are also highly complex in structure and composition on length scales of nanometers or greater. Solid state NMR is particularly well-suited to study these materials, due to its ability to observe local structure and site-specific dynamics. In this talk, I will share how solid-state NMR can be used to reveal new details about complex materials ranging from crystalline, porous metal-organic frameworks (MOFs) to arthropod silk and bacterial biomass. I will also describe new developments in solid state NMR instrumentation, including a new paradigm for magic-angle spinning (MAS) experiments: spherical MAS rotors.

Date: Thursday, January 20, 2022

Time: 7:00 PM via [MS Teams](#)

[Flyer](#)

The Indicator is posted to the web 1ST of the month at
<http://www.theindicator.org/>

ChemTAG

What We Learned : At Home Labs and Activities that Engage Students

ChemTAG invites all chemistry teachers to share their successes in remote learning in person. These may include laboratory exercises, scavenger hunts, excellent online resources and any activities at all that engage students at home.

Light refreshments and professional development certificates will be provided at this in person event. *Visitors to Livingston High School should expect to provide proof of vaccination and answer a brief health form.*

Date: Wednesday, January 26, 2022

Time: 4:15 PM to 5:45

Place: Livingston High School

30 Robert Harp Drive

Livingston, NJ 07039

[RSVP](#)
[Flyer](#)



ACKNOWLEDGE OUR VOLUNTEERS!

NJACS owes its success to its many dedicated volunteers. Its topical groups and committees offer great workshops, symposia, and programs for our members. Consider nominating an NJACS volunteer or contributor for one of our great awards. Learn more about the various awards sponsored by the North Jersey Section [here](#). Also, if you are interested in serving on the Awards Committee, please contact [Diane Krone](#) at dkrone@njacs.org.

NEW YORK SECTION MEETINGS

BOARD MEETING DATES FOR 2022

The dates for the Board Meetings of the ACS New York Section for 2022 have been selected and approved. Please note, the meeting date has changed to Monday and all meetings may be joined virtually except for the Nichols Symposium.

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.

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 board meetings dates are, as follows:

- Saturday, January 29, 2022** (virtual only)
New York ACS Section-wide Conference
- Monday, February 28, 2022** (virtual only)
- Monday, March 28, 2017** (hybrid)
- Friday, April 8, 2022** (in person only)
William H. Nichols Symposium and
Medal Award Dinner at the Sonesta
Hotel, White Plains, NY.
- Monday, June 13, 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 *The Indicator* and on the New York ACS website.

2022 NYACS SECTIONWIDE CONFERENCE

Analytical Challenges during Biocatalytic Synthesis of Active Pharmaceutical Ingredients



Speaker: Dr. Matt Gunsch
Merck Research Laboratories

Date: Saturday, January 29, 2022

Place: Via Zoom

Time: 10:30 AM – 1:30 PM

[Registration](#) is free

Abstract: The use of biocatalytic synthesis has been increasing over the past decades due to benefits over traditional chemical synthesis such as greener reactions, improved safety, and avoiding the isolation of intermediates. However, this had led to a variety of analytical challenges not faced during traditional chemical synthesis resulting from the introduction of enzymes/protein to the process as well as complex reaction mixtures containing non-isolated intermediate compounds without chromophores. These challenges have paved the way to analytical innovation to develop novel and robust methodology to monitor and characterize these reaction streams which can be transferred out of the laboratory and directly into manufacturing spaces around the world.

THE CHEMISTRY OF LOVE

The New York ACS is celebrating Valentine's Day virtually this year with a program supported by an Innovative Project Grant from the Local Section Activities Committee. Keynote speaker Prof. Eric Chang will discuss the the chemical and biochemical aspects of love including the impact of endorphins and how fragrances and flavors play a role. [Registration](#) is \$5 per person for this in-person event, *seats are limited* so [register](#) early.

Speaker: Dr. Eric Chang
Pace University

Date: Saturday, February 12, 2022
Place: Bianco Room, Pace University
Time: 11:00 AM – 2:00 PM in person
[Registration](#) is \$5 and required



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WESTCHESTER CHEMICAL SOCIETY DISTINGUISHED SCIENTIST AWARD FINAL CALL FOR NOMINATIONS

LAST CALL FOR NOMINATIONS. The Westchester Chemical Society is accepting nominations for the "[WCS Distinguished Scientist Award 2022](#)". Scientists who live or work in Westchester or the Bronx qualify. The awardee is expected to attend the Awards Dinner (April/May time-frame) and to present aspects of his or her work. Self-nominations are acceptable. Nominations are not carried over from previous years. New and possibly updated nominations should be submitted. *(Please note: If anyone submitted a nomination to the late Dr. Paul Dillon, please resubmit the nomination and documentation to Dr. Peter Corfield.)* Please send a cover letter stating why your nominee should receive the award along with the nominee's resume **by January 15, 2022** to

[Dr. Peter Corfield](#)



ACS Local Section
New York
The Chemistry of Love

The Chemistry of Love

Pace University
February 12, 2022 11:00 am - 2:00 pm
Bianco Room



There is a holiday dedicated to it, millions of poems about it, industries built around it, and no other word to perfectly describe it: LOVE. This four-letter word is the most fundamental human need.

What are the chemical aspects of "love"?
Learn and discuss endorphins and how to increase this important hormone, foods that release endorphins and the biochemical process involved, flavors and scents associated with "LOVE" and the chemical components of such, and the beautiful and complex human heart.

Keynote Speaker
Dr. Eric Chang

For more information, contact:
Dr. JaimeLee Rizzo
Coordinator, "Chemistry of Love"
jrizzo@pace.edu



Supported in part by an Innovative Project Grant
from the Local Section Activities Committee

HONORING LIFELONG SERVICE

50-60-70 Year Members

The American Chemical Society's New York Section Board would like to acknowledge and congratulate all our local members that have reached 50, 60 and 70 years of service! While it has been a tradition to hold an awards luncheon for members reaching these milestones, we decided it would be best to forgo the pomp and circumstance due to the continued presence of Covid. National ACS offers their robust congratulations and sincere gratitude to the following members for their many years of service and dedication to the chemical sciences. The NYACS Board is planning to return to an in-person awards luncheon for future members reaching these milestones in 2022.



60 Year Member
Barbara Petrack, Ph.D.

70 Year Members

Dr. Seymour Aronson
Dr. Elliott Cohen
Dr. Murray Cohen
Mr. Louis A. Cutter
Mr. Harold Bancroft Kaufman, Jr.
Dr. Eugene J. Kupchik
Mr. Leonard Mackles
Mr. Leonard J. Maltese
Mr. James D. O'Shaughnessy
Mr. Angelo D. Pacifico
Mr. Stanley R. Radel
Dr. Harold A. Schwarz (below)



60 Year Members

Dr. Alan Michael Aaronson
Dr. Uldis Blukis
Dr. Sarah J. Danishefsky
Mr. Carmine V. DeLuca, Jr.
Dr. Kenneth B. Eisenthal
Dr. Thomas H. Finlay
Dr. William Martin Fisher
Dr. Sheldon Herbstman
Mr. Allen Hoffman
Dr. Dominick M. La Montanaro
Mr. Joseph Landesberg
Dr. David C. Locke
Dr. A. Frances Pearlmutter
Dr. Alan Peltzman
Dr. Barbara Petrack (above)
Mr. Richard F. Pietrzak
Dr. John Roboz
Mr. Michael G. Romanelli
Mr. Fred R. Spohrer
Mr. Benjamin Strumeyer
Mr. Alexander J. Sumowicz
Dr. Burton E. Tropp
Dr. Joseph Ursino, Jr.
Dr. James G. Wetmur

50 Year Members

Dr. Daniel L. Akins (below)
Mr. George John Attard
Dr. Gad Avigad
Mr. Reed Roeder Corderman
Dr. Kun Sup Hyun
Dr. John Russell Johnson
Dr. Susan Klarreich
Mr. Robert A. LaBrecque
Dr. Joseph W. Lauher
Dr. Iwao Ojima
Dr. Norman Padnos
Mr. John P. White



MEETING REPORTS

NATIONAL CHEMISTRY WEEK

On Sunday, October 24, 2021, the New York Local Section celebrated National Chemistry Week with a live virtual event and an illustrated poem contest. Fifteen chemistry demos were presented by groups from eleven local colleges/universities and businesses during the five-hour event. The NY ACS also hosted several rounds of a chemistry knowledge contest using the Kahoot.it app during the live event. We look forward to celebrating the theme '*Fabulous Fibers: The Chemistry of Fabrics*' during National Chemistry Week 2022.





Successful 2021 National Chemistry Week Celebration



EXCITING WELL ORGANIZED DEMOS AND NATIONAL CHEMISTRY WEEK TRIVIA





- 11+ DEMO GROUPS WITH OVER 15 DEMONSTRATIONS
- 45+ VOLUNTEERS WHO ORGANIZED AND PRESENTED DEMOS
 - 3 ROUNDS OF KAHOOT TRIVIA
 - 4+ HOURS OF CELEBRATION

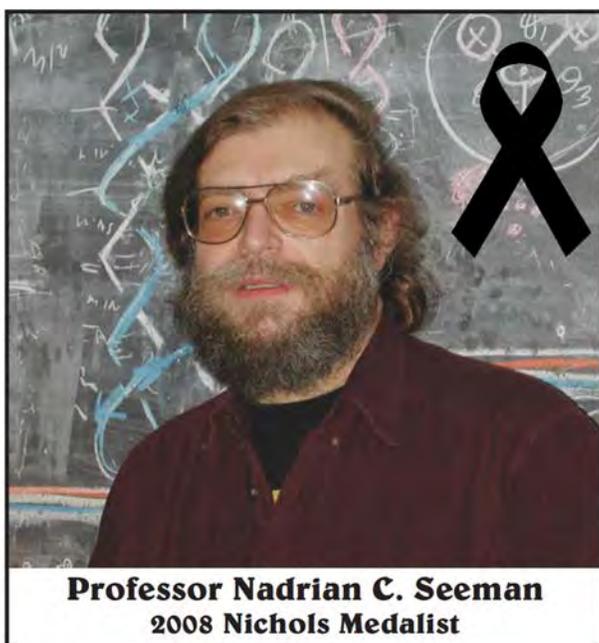


LOOKING FORWARD TO CELEBRATING NATIONAL CHEMISTRY WEEK AGAIN IN 2022.

For more information, contact Ping Furlan at FurlanP@USMMA.edu
 Joe Wiener at joseph.wiener@pepsico.com, Paul Sideris at psideris@ccc.cuny.edu.

In Celebration of National Chemistry Week 2021

In Memoriam : Professor Nadrian 'Ned' C. Seeman, 2008 Nichols Medalist



The Indicator joins the New York Section and its Nanotechnology Discussion Group in celebrating the life of our friend and colleague Nadrian C. Seeman, the Margaret and Herman Sokol Professor of Chemistry at New York University. Prof. Seeman will long be remembered for establishing the field of structural DNA nanotechnology in which DNA strands self-assemble into precisely defined three-dimensional crystalline DNA nanostructures. This achievement earned him the 2008 William H. Nichols Medal (whose citation read: *For Founding and Establishing the Field of Structural DNA Nanotechnology*) along with a host of other honors including the [2010 Kavli Prize in Nanoscience](#) and the [2016 Benjamin Franklin Medal in Chemistry](#).

[NYU Memorial Page](#)

OUTSTANDING COLLEGE TEACHING AWARDS

The New York Section is proud to announce the winners of the 2021 College Teaching Awards. These awards are presented annually to recognize highly effective teaching and inspirational leadership by chemistry faculty within the New York section. There are three categories based on the faculty member's institutional type. Calls for Nominations will be announced at the New York Section [webpage](#) for the 2023 awards.

Outstanding Two-Year College Chemistry Teaching Award

Dr. Kevin Kolack, *Queensborough Community College – CUNY*

Dr. Kevin Kolack earned a BS in chemistry from The University of Virginia under the advisement of the legendary Frank Carey, and a Ph.D. in inorganic chemistry at Indiana University in the research group of Distinguished Professor George Christou. He joined the full-time faculty of Queensborough Community College – City University of New York (CUNY) after 13 years as an adjunct professor at The Cooper Union as well as time at St. Joseph's College, Yeshiva University, and Hunter College. The English-language editor of more than 400 peer-reviewed publications, Professor K has more than 30 years of college teaching experience and a highly eclectic background including a reasonably successful acting career, 10 years as a firefighter/EMT, licenses for New York City taxi, ambulance, fire truck and helicopter, professional puppeteer experience, training as a fire eater, he competed at the Olympic level in smallbore rifle, and he really enjoys indoor skydiving in a vertical wind tunnel.



Kevin was the 2015-2019 Chair of the QCC Committee on e-Learning, and was the only person in the QCC chemistry department to teach online prior to March 2020. During the pandemic, he posted pre-recorded lecture and lab videos and other materials for his colleagues' use in two-thirds of the chemistry courses offered by QCC. Dr. Kolack is the lead author of the 3rd-5th editions of "Introductory General Chemistry Experiments" and also wrote and starred in "The Professor K Show," a topical, environmental educational TV program. Dr. Kolack and his wife and son live in Queens, where Kevin was once hit by a crane while driving on Queens Boulevard. Kevin thanks his students, colleagues, and the NYACS for the honor of this award.



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OUTSTANDING COLLEGE TEACHING AWARDS (continued)**Outstanding Four-Year Undergraduate College and University Chemistry Teaching Award**

Dr. Ipsita A. Banerjee, *Fordham University*

Prof. Ipsita A. Banerjee, Ph.D., is chairperson and faculty member in the Chemistry Department at Fordham University, Rose Hill campus. Dr. Banerjee's research involves development of novel supramolecular biomaterials for potential applications in tissue regeneration and drug delivery. She is particularly interested in investigating the interactions of peptide based biomaterials at cell-material interfaces. In addition, Dr. Banerjee has also been exploring bio-computational methods to investigate self-assembly and biomolecular interactions. Dr. Banerjee is very ardent about research and mentoring students. She has mentored over 75 undergraduate students in her research lab. Many of her students have gone on to top graduate schools and medical schools in the country and abroad. Over time she has developed strong long lasting friendships with many of her students, even as they move on in their lives and careers. In 2019, Dr. Banerjee was also awarded the 'Outstanding Research Mentorship award in Chemistry' from the Council on Undergraduate Research (CUR). In the past Dr. Banerjee also served as co-chair of the student activities committee of the NYACS URS for three years. She is also recipient of two NSF-MRI grants, for which she was PI. Dr. Banerjee often incorporates research into her teaching, to keep students well-informed about the modern discoveries in the field of biochemistry and biotechnology. She has published over 92 research articles in peer reviewed scientific journals, many of those are with students from her lab. Her students are often first authors of those articles. She has also written four book chapters and also served as an editor for the Book 'Biosensor Nanomaterials'. Teaching scientific communication skills (both oral and written) is important to Dr. Banerjee. She believes that while data acquisition teaches students technical skills, students learn more by being able to immerse themselves in science, deciphering the data and analyzing it, and by being able to communicate the results to a broader audience in a lucid manner. In addition, scientific writing and literature review greatly enhances student learning and helps students in grasping scientific concepts. She has over 200 research presentations (over 150) with students from her lab. Many of her students have won awards at various scientific conferences including "Superior Presentation Medal" at the Sigma χ i International Conference as well as at ACS National meetings and at Eastern College Science Conferences. At Fordham she teaches Biochemistry I and II and Bionanotechnology in Medicine, both highly interdisciplinary subjects that she is very passionate about. Dr. Banerjee is inspired and motivated by the enthusiasm of bright and hardworking students at Fordham, that she's had the pleasure to teach in her classes and mentor in her research. Students' success and scientific career-path is of great importance to Dr. Banerjee.



Submissions for the February issue of The Indicator are due on January 16th.

<http://www.theindicator.org/>

OUTSTANDING COLLEGE TEACHING AWARDS (continued)

Outstanding Four-Year Graduate College and University Chemistry Teaching Award

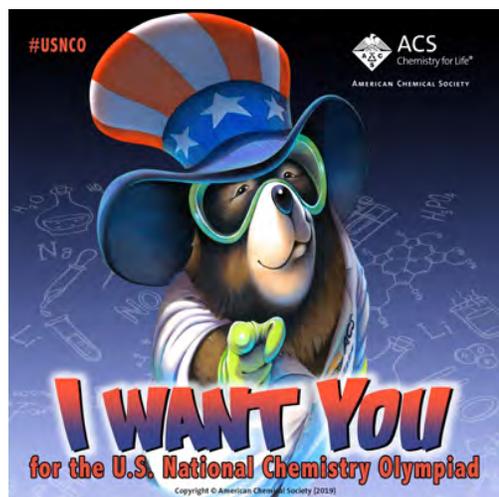
Dr. Aaron Moment, Columbia University

Prof. Aaron Moment began his study of Chemistry and Chemical Engineering in high school and it was at this point that he decided to continue his studies and learn more about it. At this early stage he particularly enjoyed playing Chemistry Jeopardy, reading science books, aspects of physical chemistry, and the colorful laboratory titrations. From there he continued his Chemistry studies at the University of Chicago, then transferred and completed a B.S. degree in Chemical Engineering from Rensselaer Polytechnic Institute in 1994. During his undergraduate time, he worked one summer at Brookhaven National Labs on marine thiols, and also was a student in Prof. Schultz's lab where he ran Birch reductions in ammonia and used elemental sodium, and ran a lot of columns. He then went on to earn a PhD in Chemical Engineering from Massachusetts Institute of Technology in 2000, focusing on polymer synthesis and characterization under the supervision of Paula Hammond.



After his academic education, Aaron went to work in the pharmaceutical industry for one year at DuPont pharmaceuticals and for seventeen years at Merck. During this time, he participated in the process development and commercialization of several products and classes of compounds that are now on the market, including factor Xa inhibitors, which led eventually led to Elquis (BMS), and also Januvia (Merck), a DPP-IV inhibitor for Type II diabetes. Teams he worked on won Presidential Green Chemistry awards for both chemocatalysis and biocatalysis routes that reduce process mass intensity. Prof. Moment recently returned to academia as a Professor of Practice within the department of Chemical Engineering at Columbia University. There, he has developed and taught new courses including Solid State Chemistry in Pharmaceutical Development, as well as a lab class based in Bioprocessing. In addition to teaching, he pursues research in Green Chemistry, Sustainability/ Circular Economy, and topics that relate to creating novel materials and methods for the production and analysis of fine chemicals and pharmaceuticals.

DIVERSIFYING PARTICIPATION IN US NATIONAL CHEMISTRY OLYMPIAD



The New York Section is pleased to announce that we have received Recruitment Grant from the National Office to increase student participation in the USNCO (Chemistry Olympiad). This grant will cover the registration fee for schools which have not participated in the Chemistry Olympiad since 2012 with preference given to schools which nominate a majority of students who are female, African-American, Hispanic, Native American, or Pacific Islanders. [Apply to have the US National Chemistry Olympiad registration fee waived online.](#) For more information contact

[Stephen Z. Goldberg](#)
Chair, NY-ACS Olympiad Committee

CALL FOR NOMINATIONS

ACS FELLOWS

The [American Chemical Society Fellows Program](#) was created by the ACS Board of Directors in December 2008 to recognize members of ACS for outstanding achievements in and contributions to science, the profession, and the Society. The North Jersey Section (NJACS) has many outstanding members who have contributed to both the science and the Society and deserve to be recognized. NJACS can nominate up to nine ACS members each year. Help us identify these exceptional members by sending your nomination to [Diane Krone](#) by January 24th. The email is to include your name (the nominator) along with your phone number and email address as well as the name, phone number and email address of the person you are nominating.

Due January 24, 2022



SEMINAR SPEAKERS WANTED

The New York Section wants to add 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!

REMINDER: CALL FOR NOMINATIONS FOR THE 2022 AWARD FOR CREATIVITY IN MOLECULAR DESIGN & SYNTHESIS

The ACS North Jersey Section is soliciting nominations for the *2022 Award for Creativity in Molecular Design & Synthesis*. The award recognizes initiative, creativity, leadership, and perseverance in pure and/or applied chemistry. Nominees must have had broad impact in the areas of chemical synthesis, method development, bioorganic/medicinal chemistry, pharmaceutical sciences, and/or molecular recognition.

Nominations should include a letter describing the nominee's achievements, a brief biography and curriculum vitae, and a list of the nominee's important published works. Supporting letters are strongly encouraged.

Please submit materials by **January 31** to XINGY@wpunj.edu. The award is presented by the section every two years, and the prize consists of a crystal plaque and a \$5,000 honorarium.

REGISTRATION OPENS JANUARY 10



The ACS National Spring Meeting will take place **March 20-24, 2022**, in **San Diego, California**.

[Registration opens January 10, 2022](#)

OPPORTUNITIES

FOR MIDDLE & HIGH SCHOOL TEACHERS

The 2022 Jacobs Teen Innovation Challenge is giving away \$2750 in prizes to middle and high school changemakers! Educators are called to help build a better world by helping teenagers develop an innovator's mindset and design thinking skills to create solutions to local and global problems. **Kick-off webinar January 11, 2022**

[Sign up here](#)

2022 Jacobs Teen Innovation Challenge

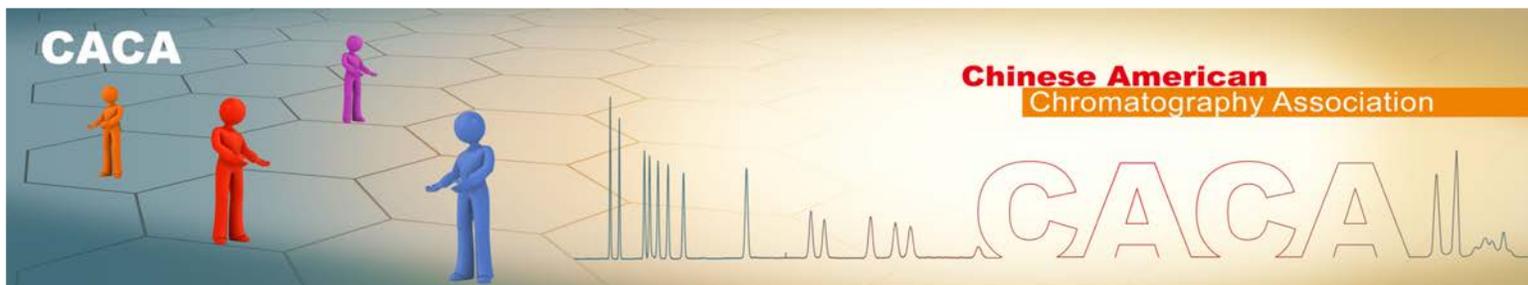
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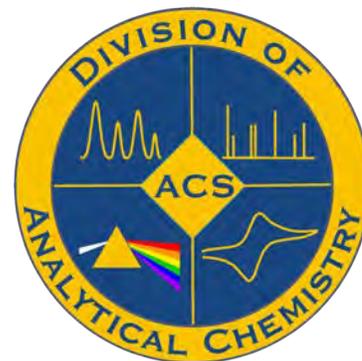
Deadline is March 1st, 2022

The ACS Scholars Program awards renewable scholarships to **undergraduate students from historically underrepresented groups** in the chemical sciences, majoring in chemistry-related disciplines, and intending to pursue chemistry-related careers. Selected recipients are awarded up to \$5,000 per academic year. To date, over 3,500 students have received funding from the ACS Scholars Program.

[Applications being accepted](#)
Deadline is March 1, 2022

Presenting your undergraduate research at the Spring ACS National Meeting & Exposition or at PITTCON? Apply for an [I.M. Kolthoff Enrichment Award](#) which provides \$750 in travel funds to support your professional development as an analytical chemist. Act quickly, as the deadline is **January 10, 2022**

[Apply here](#)



FOR GRADUATE STUDENTS & EXPERIENCED PROFESSIONALS

2022-2023 ACS Congressional Fellowships

Applications OPEN!



Are you a scientist or engineer interested in using your expertise to protect the environment, improve public health, mitigate climate change impacts, or create lasting change?

Want to learn how science informs policy in the federal government?



Two ACS Fellows work in Congress each year to shape federal science policy in Washington, DC.

Applications for ACS' Congressional Fellowships are now open through January 15, 2022!

More info + Apply:
<https://www.acs.org/content/acs/en/policy/policyfellowships/becomefellow.html>



Only one in five members of Congress have a background in STEM. The ACS Congressional and Science Policy Fellowship Programs provide a unique opportunity for ACS members to gain practical experiences and insights into public policy. Working on Capitol Hill or at the ACS, you will engage with policy makers to provide expertise on the issues impacting the chemical community. Applications due **January 15, 2022**

[Apply here](#)

FOR POSTDOCTORAL SCHOLARS

The world needs science, and science needs women because women in science have the power to change the world.

The simple belief above in green is the basis for the [L'Oréal USA For Women In Science fellows program](#) that is designed to advance the research of exceptional female scientists. Apply now for this \$60,000 award to support your research in the science, technology, engineering and math (STEM) fields and serve as a role model to the next generation of girls in STEM.



FOR WOMEN IN SCIENCE
IN PARTNERSHIP WITH

[Apply here by January 29, 2022](#)



Call for ChemLuminary Award Nominations



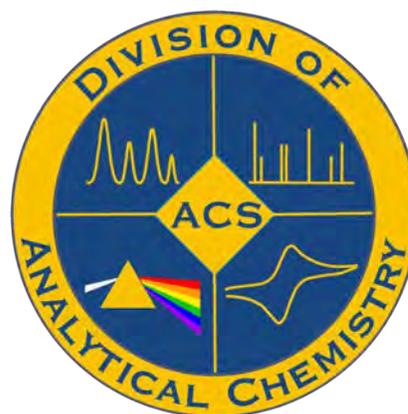
Did the program you organized in 2021, or plan to in 2022,

- support the American Association of Chemistry Teachers (AACT)?
- educate people about the transformative role of chemistry in achieving sustainability?
- highlight the [2020 ACS Change Drivers](#)?
- address ethics?

If so, then you should contact your Local Section Chair to be nominated for a [ChemLuminary Award](#) in the annual report due **February 15th**.

NEWS FROM OUR PARTNERS

The [Analytical Division](#) is the third largest division of the American Chemical Society. It organizes programming at the spring and fall ACS meetings, [Pittcon](#), the [SciX conference](#) and the [Eastern Analytical Symposium \(EAS\)](#). The ANYL Division website provides a variety of information and member services, including the [Analytical Sciences Digital Library](#). 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. This member oriented and directed group works for you! We welcome new members. Please join and/or volunteer to help on one or more activities.





New Jersey Association of Forensic Scientists 2022 Spring Seminar
“Canines in Forensics”
May 6th, 2022 8:00AM – 3:30PM at the Lambertville Inn, Lambertville, NJ

Speaker Topics to Include:

- The birth of K-9 Units in NJ
- Training and focus for K-9
- Science of K-9 Olfactory
- Drug dogs, Arson dogs
- Case studies

See Our Website:
NJAFS.org for More Information

Registration Includes: President’s Reception (05/05/22), Continental Breakfast, Break, Luncheon, and Certificate

JOB BOARD

Starting your career or looking for the next challenge? Review postings at the New York ACS [Job Board](#). Email your job postings to jobs@NewYorkACS.org for inclusion.

Assistant Professor – Central Connecticut State University

[Apply here](#)

Program Manager – ACS Student & Postdoctoral Scholars Office

[Apply here](#)

Laboratory Technician – The Cooper Union

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Senior Chemist I, Nail Development – L’Oreal Research and Innovation

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R&D Director Oral Care – Johnson & Johnson

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