NESAACS Election 2022

NUSAACS Receives Outstanding Student Chapter Award

NERM 2023 Announcement

Education Night

Featured Speaker: Malika Jeffries-EL, Department of Chemistry and Division of Materials Science, Boston University
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EDUCATION NIGHT

The 1,013th Meeting of the Northeastern Section of the American Chemical Society

Moving The Needle: How Key Interventions Can Increase Diversity, Equity, and Inclusion in STEM

Thursday, June 2, 2022

Link to Register:
https://american-chemical-society.zoom.com/meeting/register/tZUtf--gpjoiGd3pYmla1ZZjobtN_2A3lwYQ

Meeting Agenda:
6:30 PM
Meet and Greet before the ceremony
7:00 PM
- Carolyn Mulrooney, NESACS Chair
- Education Night Featured Address by Malika Jeffries-EL, Department of Chemistry and Division of Materials Science, Boston University
- Awards Presentations: High School and College Students and Faculty

Abstract:
Although African Americans make up approximately 13% of the U.S. population, they are severely underrepresented within the advanced degrees that are awarded in STEM disciplines. Currently, they hold ~2% of tenure/tenure track positions at research institutions in the U.S. Despite these overwhelming statistics, Dr. Jeffries-EL pursued and completed a doctorate degree in chemistry, obtained an academic job, and then achieved promotion with tenure in due course. She was born in Brooklyn, NY, where she lived in public housing and attended public school. Although her situation was less than ideal, she always had a passion for science that her parents encouraged her to pursue. In this talk, she will discuss what excites her about science, diversity, equity, and inclusion issues, and explore potential solutions all woven within the context of her personal experiences.
Monthly Meeting: **Education Night** (continued)

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**EDUCATION NIGHT | AWARDS**

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**Chemists Celebrate Earth Week (CCEW) Awards**

- **Dr. Jayashree Ranga**, Salem State University; Chair, Chemists Celebrate Earth Week

  **CCEW: Celebrate “The Buzz about Bugs” Insect Chemistry; Poetry Awards and Poster Awards** given on the theme to high school and junior school students; a national competition

**College and University Awards**

- **Dr. Ruth Tanner**, University of Massachusetts Lowell; Acting Chair, Education Committee, NESACS

  **Grants in Aid:** Travel grants to attend the 263rd ACS National Meeting in San Diego and to present a paper at the Undergraduate Research Poster Session in the Division of Chemical Education

- **Norris Richards Undergraduate Summer Research Scholarships:** Research Awards for the summer of 2022 for a minimum commitment of 10 weeks of full-time research work

- **Phyllis A. Brauner Memorial Book Award** for the best talk by an undergraduate at the Northeast Student Chemistry Research Conference (NSCRC)

**High School Awards**

- **Dr. Steve Lantos**, Brookline High School; Chair, High School Education Committee, NESACS

  **Avery A. Ashdown High School Chemistry Examination Contest**

  The High School Committee continues to oversee the two competitive chemistry examinations offered to section secondary students: **The Avery Ashdown Exam** (52nd year) and the **United States National Chemistry Olympiad** (USNCO, 38th year).

  Typically, over 16,000 students nationwide take some form of the local section exam each year in early April. From this entry-level group, the ACS has allotted a fixed number of students to qualify for the next round of competition, the USNCO. Thanks to Ron Ragsdale of the University of Utah who has been involved with the USNCO from its beginning in the mid-1980s, the ACS uses a federated system whereby the number of qualifying students in a section is based on its ACS membership. Given the considerable number of members of NESACS, we are allotted one of the larger groups of qualifiers (23 participants as of 2022).

**Simmons University Prize**

This cash award is given annually to the top scorer of the **Avery A. Ashdown Exam**. The award is presented by a member of the Simmons University Chemistry Dept.

**Aula Laudis Society**

The **Aula Laudis Society** recognizes outstanding High School Chemistry Teachers from within the Section. The award is a NESACS Hall of Fame for high school teachers who have made distinguished contributions to secondary chemical education. The evaluation of nominees is based on their students’ performance in chemistry competitions, past recognition that honors their teaching, involvement in students’ extra-curricular activities in chemistry, and enthusiastic feedback from past students and colleagues. Typically two inductees are awarded every year.

**Theodore William Richards Award**

The Theodore William Richards Award for **Excellence in Teaching Secondary School Chemistry** honors a teacher in the Northeastern Section who, through innovation and dedication, has inspired potential chemists, has communicated chemistry to non-chemists, or has influenced other teachers of chemistry. The selected teacher is officially honored at the Section’s May meeting (“Education Night”) and receives both a $1,500 prize and a Certificate of Recognition.
Monthly Meeting: Education Night (continued)

EDUCATION NIGHT | FEATURED ADDRESS

Featured Address:
Malika Jeffries-EL, Department of Chemistry and Division of Materials Science, Boston University

Biography:
Malika Jeffries-EL is the Associate Dean of the Graduate School of Arts and Sciences, and Associate Professor in the Department of Chemistry and Division of Materials Science at Boston University. She is also Associate Editor for the Journal of Materials Chemistry C and the new RSC title Materials Advances. Her research focuses on the development of organic semiconductors, which are materials that combine the processing properties of polymers with the electronic properties of semiconductors. She is a fellow of the American Chemical Society and the Royal Society of Chemistry, and has won numerous awards, including the Percy Julian Award from the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE), the ACS Women Chemists Committee Rising Star Award, the Iota Sigma Pi Agnes Fay Morgan Award, and the Stanley C. Israel Award for Advancing Diversity in the Chemical Sciences from ACS. She has authored more than 40 publications, which have received over 4,000 citations, and has given more than 170 lectures, domestically and abroad.

Professor Jeffries-EL is also a staunch advocate for diversity, and is a dedicated volunteer within the ACS. She is a science communicator, who seeks to encourage students from underrepresented groups to pursue STEM degrees, and recently appeared on the NOVA PBS television series, "Beyond the Elements." She also serves the community through her work with Alpha Kappa Alpha Sorority, Incorporated (AKA).

VISIT NESACS ONLINE for Events, Committees, Newsletter Archive, Awards, News and More!

www.NESACS.org

Northeastern Section
American Chemical Society
ABSTRACT

There are 20,000 human proteins, however only a small percentage have been targeted by traditional drug discovery programs. Towards understanding the tractability of the “dark proteome” GSK has implemented the use of platform technologies including ASMS, ELT and Reactive Fragments to create an experimental tractability platform. The presentation will discuss how we are using this approach to identify tractable, high quality, biological targets.

Featured Presentation

Chemical Biology Platforms to Drug the Undruggable

By Brandon Turunen

Organized by the Medicinal Chemistry Section of the Northeastern Section, American Chemical Society

Thursday – May 19, 2022, 4:00 pm

Register for the February Webinar meeting at:
https://american-chemical-society.zoom.com/webinar/register/ WN_UhK9-dkdSzuB24NxazjWcg

Visit: www.nesacs.org/medchem.html

Featured Speaker:

Brandon Turunen, GSK

Biography:

Dr. Brandon Turunen completed PhD studies with Gunda I. Georg at the University of Kansas before completing NIH post-doctoral studies at Stanford University in the laboratory of Barry M. Trost. In 2007, he joined GSK (RTP, NC) and has held roles in oncology and chemical biology programs as a medicinal chemist, medchem leader, and program leader. In 2013, he transferred to London, UK to join the CEO’s Future Strategy Group to develop a corporate strategy for improving access to GSK medicines. He then relocated to Collegeville, PA to lead the Synthetic Immunology Discovery Performance Unit which focused on the development of a new heterobivalent therapeutic platform applied toward immuno-oncology. In 2018 his role expanded, and he is currently the US Head of Chemical Biology leading a multidisciplinary department focused on translating immunology, oncology, and human genetic insights into medicines.
Master of Chemistry in Materials Chemistry

PART-TIME & FULL-TIME ONLINE PROGRAM

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Visit: https://go.iit.edu/mchm
NESACS 2022 Election
Candidate Statements

Chair-Elect
Chair-Elect Candidate

Patrick M. Gordon

Education:
B.Sc. University of Guyana (1977); M.Sc, University of New South Wales, Australia (1982); Ph.D., University of Manitoba, Canada (1987)

Professional Experience:
Massachusetts College of Pharmacy and Health Sciences, Assistant Professor, Chemistry (2020 to present); Post Doctoral Associate, Kansas State University, (1987-1988); Organix Inc., Woburn, MA (1988-1991); Senior Scientist, Polaroid Corporation (1991-2001); Arqule Inc. (2001-2002); Polymer Laboratories, (2003-2004); Adjunct Professor Simmons College, Emmanuel College, MCHPS University, (2005 to Present); Cape Cod Community College (2015-2019); Wentworth Institute of Technology (2019-2020); Fulbright Scholar 2022, UWI, Mona, Department of Chemistry


NESACS Service:
Chair-Elect (2010), Chair (2011), NERM Chair of the Symposium on Cannabinoids, (1989); Centennial Committee Co-Chair (1998); Member, Board of Publications 1999 to 2008; Secretary, Board of Publications, 2000; Chair, Board of Publications, (2002, 2004) Auditor (2016-2020); Councilor/Alternate Councilor (2018-2023)

Statement:
I have been involved with the NESACS local section since 1990 and have been a national ACS member since 1979 having joined when I was pursuing my master’s degree in Australia!

As ACS repositions itself to attract maximum in-person participation at national meetings, local sections have a role to play in ensuring that STEM opportunities must be available for the children who wish to pursue a career in science. The pandemic has and will undoubtedly continue to present challenges for students who would not have covered the typical high school material during these past two years. However, local ACS sections can play a role in that regard, for example, using the COACHs program. I have been a volunteer at the John D O’Bryant school and have had discussions with the head of the science department of Boston Latin about assisting with activities that may benefit the high school chemistry students. Moreover, I will be seeking to have a Strategic Planning workshop since our section has not had one for over a decade.

I continue to provide volunteer career services to ACS members and to the local NES-YCC members (conducted workshops in November 2021 (virtual) and March 2022, San Diego) and working with the local ACS student chapter at Mona to assist with their activities.

As a member of the Committee of Minority affairs (CMA), I have been a member of the programming sub-committee and was privileged to be asked to chair a session on “How to Foster Diversity, Equity and Inclusion in the Chemical Sciences: Lessons Learned and Taught from the Stories of Recipients of the Stanley C. Israel Award”, SERMACS meeting November 2021. In addition, I have been appointed CMA representative to the ACS office of Diversity, Equity, Inclusion and Respect (DEIR). The new structure includes a panel of DEIR Experts who will serve in an advisory role to the Board of Directors and Office of DEIR and a new DEIR Roundtable that directly pulls in representation from various governance committees. I am also serving on the Northeast Regional Awards Committee.

It has been a privilege to serve our members all these years and it would be an honor and a pleasure to continue serve on the board of NESACS in the capacity as chair elect and as a Councilor and I thank you for your continued support.
Treasurer
Treasurer Candidate
Steve Canham


Professional Experience: 2013-present, Associate Director, Novartis, Cambridge, MA.


Statement: It is an honor to be an active member of NESACS over the past several years. Serving NESACS as Treasurer I hope to focus my energy to continue to build upon the strong work in maintaining and strong financial accountability and transparency for the organization. In doing so will enable the organization to continue to thrive and enable all of the various activities the society has developed and sponsored.

Trustee
Trustee Candidate 1
Dorothy J. Phillips

Education: Vanderbilt University, B.A., 1967; University of Cincinnati, Ph.D., 1974.


NEXSACS Service: Northeastern Section: Councilor, 1995-13; Chair, 1993; Chair-Elect and Program Chair, 1992; Project SEED Chair, 1994-95; Nominating Committee, Chair, 1994; Centennial Celebration, Co-Chair, 1998; Awards Committee, Chair, 2009-22; Trustee 2014-22, Chair, 2016, 2021-22.

Relevant Memberships: Member ACS since 1973 (50-year member!); American Association of Chemistry Teachers; Analytical Chemistry, Biological Chemistry, and Business Development and Management Divisions; NOBCChE; Sigma Xi; Alpha Kappa Alpha Sorority Inc.

Honors: The National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) Lifetime Achievement Award, 2020; Vanderbilt University 2019 Class of Trailblazers with commissioned portrait in Kirkland Hall; American Chemical Society Fellow, Class of 2010; ACS Northeastern Section Henry A. Hill Award, 2006; ACS Nashville Section, Salute to Excellence Award, 2004; Vanderbilt University Dr. Dorothy J. Wingfield Phillips Endowed Chair and Chancellor’s Faculty Fellows, 2015; Waters Leadership Award for Outstanding Contributions to Waters and Waters’ Community, 2008; Vanderbilt University, Dr. Dorothy Wingfield Phillips Award for Leadership, 2007; Distinguished Alumni, University of Cincinnati, College of Arts and Sciences, 1994 and Center for Women Studies, 1993.

Position Statement: I would appreciate your vote for re-election to the Northeastern Section Board of Trustees; I have enjoyed contributing to the Section as a Trustee since 2014, chair 2016 and 2021-22. During this period, I became informed about NESACS’ investment portfolio and its management. This knowledge enabled me to collaborate with the
other Trustees in 2021 to spearhead NESACS contributing $400,000 to ACS to establish the endowment for the James Flack Norris Award in Physical Organic Chemistry (established in 1963). My expertise to serve as a Trustee has also been strengthened by being a member of the ACS Board of Directors for nine years and previously as a Director at Waters Corporation; both positions have fiduciary and fiscal management responsibilities. If re-elected, I promise to continue to collaborate actively with the other Trustees, the Treasurer, and the Financial Advisor to ensure sustainability of NESACS portfolio to support the sections awards, serves and programs. Thank you for your vote.

Trustee Candidate 2
Ashis K Saha

Education: M.Sc. Chemistry IIT Kanpur, India, Ph.D. Chemistry Univ. Michigan, Ann Arbor, Post-doctoral fellow: University of California, Berkeley

Professional Experience:


Trustee Statement: The Trustees of NESACS are responsible for the management and growth of the Trust Funds of the Section. They make recommendations to the Board as to the uses of the Funds, in keeping with the wishes of the donors of the funds. Asset management involves the preservation and growth of funds by appropriate investments. The funding for the Sections’ programs, meetings, awards and activities comes from membership dues, contributions, sponsorships and support from the parent ACS. In addition, the income from the Trust Funds provides funding for specific awards and activities in keeping with their designated objectives. During my current role as NESACS Treasurer, I worked with the board of trustees and our investment account fund managers on market direction and influences that affects the growth of our funds. If elected, I would use my experience to help manage the NESACS investments to ensure the continuity of strong finances to support section goals long term as well as short term.

Director-at-Large Candidate 1
E. Joseph Billo


Statement: I was active in the Northeastern Section beginning in 1973 and served as chair of the section in 1990 and again in 2009. If elected as a Director-At-Large, I believe that I could serve as a source of “institutional memory” for the Board of Directors.

Director-at-Large Candidate 2
David J. Harris

Education: B.S., Chemistry, Boston College, 1976; Ph.D. Organic


**NESACS and ACS Service:**
Director at Large 2011 to present; Member German Exchange Organizing Committee 2012; Medicinal Chemistry Group affiliation 2012 to 2016.

**Memberships:** American Chemical Society (Organic and Medicinal Chemistry Divisions), American Association for the Advancement of Science.

**Statement:** It is both an honor and a privilege to be nominated for the position of Director-at-Large for the Northeast Section. My chemistry experiences are diverse. I have led successful teams in both discovery and development areas. I am a co-inventor in three technologically distinct areas that include one product now on the market and two candidates that reached the clinic. They are an oral enzyme inhibitor marketed for Gaucher disease type 1 (eliglustat/Cerdelga), a polymeric phosphate binder for renal disease, and a cationic lipid gene transfer agent for cystic fibrosis. My team and I also led the development of Cerdelga through to commercial launch. In my current role at Sanofi I lead the Synthesis Development, Early Formulation Development, Bio-Pharmacy, and Analytical Science organizations within Early Development US, as well as lead the Sanofi Waltham Site. Major functions of NESACS include representing the interests of its members and providing opportunities for members to interact, network, and disseminate information. Many of the most important advances come at the intersection of scientific disciplines, throughout my professional career I have actively promoted strong collaborations between biologists, pharmacists, and chemists of all sub-disciplines. The ACS and NESACS need to continue to evolve and collaborate with those on chemistry's frontiers for the benefit or our members and society in general. Through the Boston College and Brandeis University alumni network, I often share my broad experiences in the biopharmaceutical industry with young scientists as they examine potential careers. I believe my extensive experiences in chemistry, my belief in the power of collaboration, my interest in assisting young chemists, and my leadership position at a major pharmaceutical company will provide me with an excellent background to be an effective Director-at-Large. With the help of your vote, I will strive to promote NESACS visibility and increase industrial participation at NESACS events (for example by hosting events at our Waltham site as done almost annually since 2012) and to support the health and growth of NESACS.

**Director-at-Large Candidate 3**
**Mark Tebbe**

**Education:** B.S. (Chemistry) University of Notre Dame; Ph.D. (Organic Chemistry) Stanford University


**ACS Service:** Member, 1986-present

**NESACS Service:** Member, 2010-present; Fund-raising Committee Chair, 2013-2016; Councilor, 2015-2017; Norris Award Committee Member 2016-2018; Norris Award Chair 2017 and 2018; Director-at-Large 2020-2022

**Statement:** I have been involved with NESACS for many years and been willing to volunteer and spend time to better the organization and the community. I have been...
involved in roles of ever-increasing responsibility and impact with this organization. I am a diligent and reliable member of NESACS. I would be especially honored to be elected to this position again and entrusted with serving the larger community. The Director-at-large position will allow me to influence the greater organization. It will also allow me to continue to serve the chemistry community, share experiences, and continue to learn more about the ACS and NESACS in the process.

James Flack Norris Award Committee

Norris Candidate 1

R. Christian (Chris) Moreton

Education: Nottingham University, UK, B.Pharm, 1971, Strathclyde University, UK, MSc, 1987, University of Wales – Cardiff, UK, PhD, 1992.


Relevant Memberships:

Honors: United States Pharmacopeia Jacob P Bigelow Award for Outstanding Contributions to the Standards by a USP Expert Volunteer, 2019

Statement: I am honored to be standing as a candidate for the ACS Northeastern Section Nominating Committee and Norris Award Committee. If elected to either position, I intend to use my experience to help maintain the high standards NESACS aspires to. In addition, I intend to help maintain the culture of inclusion and diversity.

Norris Candidate 2

Mark Tebbe

Education: B.S. (Chemistry) University of Notre Dame; Ph.D. (Organic Chemistry) Stanford University.


ACS Service: Member, 1986-present

NESACS Service: Member, 2010-present; Fund-raising Committee Chair, 2013-2016; Councilor, 2015-2017; Norris Award Committee Member 2016-2018; Norris Award Chair 2017 and 2018; Director-at-Large 2020-2022

Norris Candidate 3

Wayne E. Jones

Statement: Wayne E. Jones Jr. is Provost and Vice President for Academic Affairs and Professor of Chemistry at the University of New Hampshire. He earned his BS from St. Michael’s College in 1987 and his PhD in inorganic chemistry from the University of North Carolina at Chapel Hill in 1991. Following post-doctoral work at the University of Texas at Austin he joined the chemistry faculty at the State University of New York at Binghamton serving in numerous leadership roles for 24 years. He moved to the University of New Hampshire in 2017 to serve as the Dean of Engineering and Physical Sciences, becoming Provost and Vice President for Academic Affairs in 2018. An award-winning researcher and teacher in inorganic and materials chemistry, he has been recognized as a fellow of the American Chemical Society (2010) and a Member of the National Academy of Inventors (2020). He has published over 175 research articles, review chapters
and patents in the areas of photoinduced electron and energy transfer in macromolecular systems. An active volunteer leader in the American Chemical Society for over 25 years and member of NESACS since 2017, Wayne has served at the local, regional, and national level in ACS leadership roles. He is currently Director at Large on the ACS Board and chairs the Professional and Member Relations committee. He serves on several national task forces and committees and including the Northeast Region Board. He has chaired several national committees including LSAC, MAC, and CONC, chaired two Northeast Regional Meetings, and served as program chair for national meetings of the Division of Chemical Education three times. In 2015, he received the E. Anne Nalley Award for Service to the ACS in the Northeast Region.

Norris Candidate 4
Lori Ferrins

Education: B. Med. Chem. (1st class Hons) 2010, LaTrobe University, Australia; Ph.D. Chemistry 2015, Monash Institute of Pharmaceutical Sciences, Australia; Postdoctoral Researcher, Northeastern University 2015-2016.

Professional Experience: Research Associate Professor, 2021-Present; Research Assistant Professor, Northeastern University, 2017-2021; Associate Research Scientist, Northeastern University, 2016-2017.

ACS Service: Chair of Younger Medicinal Chemists Committee (part of MEDI; 2020-Present)


Relevant Memberships: Past-Chair of the International Younger Chemists Network (IYCN) 2021-Present; Chair of the IYCN 2019-2021; Vice-chair of the IYCN, 2018-2019; Chair of the Public Outreach subcommittee of the IYCN, 2017; Royal Australian Chemical Institute, Medicinal Chemistry and Chemical Biology Student Representative 2013-2014.

Statement: I am honored to be considered for a position on the Norris Award Committee. As a faculty member at a private university in the Boston area, I am acutely aware of how critical excellence in teaching is for the future of our field. Recognition of those who have driven advances in chemistry education is essential to continuing evolution and I would support the committee in any way that I can to ensure that we continue to award the highest caliber candidates.

Nomination Committee
Nomination Committee Candidate 1
Brian D’Amico

Education: B.S. Chemistry, Northeastern University (2015)

Professional Experience: Senior Laboratory Technician, Department of Chemistry & Chemical Biology, Northeastern University (2019-Present); Laboratory Technician, Department of Chemistry & Chemical Biology, Northeastern University (2014-2019); Chemistry Supervisor & Teaching Assistant, Department of Chemistry & Chemical Biology, Northeastern University (2013-2014); CMC Co-op, Idenix Pharmaceuticals (2013); Post Selection Chemistry Co-op, GlaxoSmithKline (2012)

Relevant Memberships: American Chemical Society (2010-Present); Boy Scouts of America (Youth Member: 1997-2009, Adult Leader 2009-Present)

ACS & NESACS Service: NESACS Alternate Councilor (2022-2024); Executive Board Member, Northeastern Section Younger Chemists Committee (2015-Present); Chair, Northeastern Section Membership Committee (2016-Present); Member, Northeastern Section Bylaws Committee (2017-Present); Member, Northeastern Section Nominating Committee (2020); Member, Northeastern Section Government Affairs Committee (2016-Present); Northeast Student Chemistry Research Conference Organizing Committee (2015, 2016, 2017, 2018, 2019); Logistics Chair, 2021 Northeast Regional Meeting (Meeting Cancelled); Member, NESACS Board of Publications (2020-Present); Photographer for The Nucleus (2018-Present)

Nomination Committee Candidate 2
Lisa Marcaurelle

Education: B.A. Chemistry 1997, College of the Holy Cross; Ph.D. Chemistry 2001, University of California, Berkeley; Postdoctoral
Fellow, Massachusetts Institute of Technology 2001-2002

Professional Experience:
Senior Scientific Director, DNA-Encoded Library Technologies, GlaxoSmithKline, 2018-present; VP, Chemistry, Enko Chem 2018; Senior Director, Chemistry, Warp Drive Bio 2016-2018; VP, Discovery Chemistry, H3 Biomedicine 2011-2016; Director, Chemistry, Broad Institute 2007-2011; Lead Senior Scientist, Infinity Pharmaceuticals 2002-2007

ACS Service: Councilor, NESACS, 2017-2021; ACS Women Chemist Committee, Member, 2020-present; 2020 Chair, Division of Organic Chemistry (DOC); National Organic Chemistry Symposium (NOS), 2019 Chair; DOC Executive Committee, Councilor, 2022-present; Member-at-Large, 2015-2017; Chair DOC Communications Committee, 2015-2017; DOC SURF Committee, Member 2015-2018; DOC Awards Committee, Member 2015; Co-chair of DOC Early and Mid-Career Investigator Symposium Committee, 2020-present; Board Member of ACS Committee on the Petroleum Research Fund 2015-2020; ACS Central Science, Editorial Advisory Board Member, 2015-present; Journal of Organic Chemistry, Editorial Advisory Board Member, 2020-present; Member of ACS 1996-present (ORGN and MEDI Divisions)

Other Professional Service:
Gordon Research Conference on High-Throughput Chemistry & Chemical Biology, Chair 2013, Vice Chair 2011

Awards: 2021 ACS Fellow; ACS WCC Rising Star Award 2013; DOC Young Investigator Symposium 2011; ACS DOC Graduate Fellowship 2000; Roche Bioscience Graduate Research Fellowship 1999; American Institute of Chemists Foundation Award 1997; Merck/AAAS Undergraduate Summer Research Fellowship 1996; Phi Beta Kappa 1996

Research Interests: Drug discovery, chemical technologies, chemical biology, high-throughput screening, medicinal chemistry, natural products.

Statement: I have worked as a scientist in the Cambridge area for the past 20 years, after returning to Boston in 2001 from California. I am originally from Massachusetts, attending college in Worcester, MA at the College of the Holy Cross. I recall as an undergraduate travelling into Boston for local ACS events. I served on the Northeastern Section of the ACS (NESACS) as a Councilor from 2017-2021. In 2022 I became a Councilor for the ACS Division of Organic Chemistry, but I remain heavily involved in NESACS. I am a member of the NESACS Medicinal Chemistry Group which organizes virtual medicinal chemistry symposia as well as the annual NESACS Advances in the Chemical Sciences Symposium. I am also on the organizing committee for Chemical Biology in the Hub and I am a co-chair for an upcoming DEL Symposium to be held at the Broad Institute. I am excited to be considered for the NESACS Nominating Committee as I am eager to recruit new NESACS board members and participants from academic and industry in the Boston area. We are fortunate to work in a location with so many diverse scientists. I would love to see more people get involved in our virtual and in person NESACS events.

Nomination Committee Candidate 3
Doris I. Lewis

Education: Tufts University Ph.D. in Chemistry, Duke University, B.S. in Chemistry

Professional Experience: Suffolk University Professor Emerita; Professor, 1986-2013; Suffolk University Forensic Science Coordinator 2002-07; Chemistry Department Chair, 1995-2004; Associate Professor, 1981-86; Assistant Professor, 1975-81; Newton College Assistant Professor, 1970-75.

ACS Service: ACS Committee on Public Relations and Communications 2012-22; ACS Council Policy Committee 2016; Committee on Chemistry and Public Affairs, 2001-11; ACS Legislative Summit on Capitol Hill, 2002-2010

NESACS Services: Chair, NESACS Government Relations Committee 2002-present; Chair, Phyllis A. Brauner Memorial Lecture Committee, 2001-present; Theodore William Richards Medal Award Committee 2019-2021, Chair, 2020; Councilor, 1994-2011; Section Chair 2000; Faculty Advisor, award-winning Suffolk University student chapter 1976-2013; NESACS James Flack Norris Award Committee 2011-2014, Chair 2014; NESACS Nominating Committee Chair 2001, member 2010, 2012; Board of Publications 1995-98, Chair, 1996-98; National Chemistry Week Committee 2000-present; Summerthing Chair (Red Sox event) 1994-2021, member 2022.

Honors: ACS Fellow 2014; E. Anne Nalley Northeast Region Award for...
Volunteer Service to the American Chemical Society 2012; NESACS Henry A. Hill Award 2003

**Statement:** I am honored to be considered as a member of the NESACS Nominating Committee. If elected I pledge to use my years of experience in NESACS including on previous nominating committees to help seek the best candidates from our large and diverse community, and I encourage all NESACS members to join in this important task.

**Nomination Committee Candidate 4**

**R. Christian (Chris) Moreton**

**Education:** Nottingham University, UK, B.Pharm, 1971, Strathclyde University, UK, MSc, 1987, University of Wales – Cardiff, UK, PhD, 1992.


**Honors:** United States Pharmacopeia Jacob P Bigelow Award for Outstanding Contributions to the Standards by a USP Expert Volunteer, 2019

**Statement:** I am honored to be standing as a candidate for the ACS Northeastern Section Nominating Committee and Norris Award Committee. If elected to either position, I intend to use my experience to help maintain the high standards NESACS aspires to. In addition, I intend to help maintain the culture of inclusion and diversity.

**Councilor/ Alternate Councilor**

**Councilor/Alternate Councilor Candidate 1**

**Zemen S. Berhe**

**Education:** B.S. Chemistry, University of Stuttgart (Germany, 2016); Ph.D. Chemistry and Chemical Biology, University of Massachusetts Dartmouth (2017 - present)

**Professional Experience:** University of Massachusetts (Dartmouth) Department of Chemistry, Graduate Teaching Assistant for Physical Chemistry lab I and II (2017-2020); University of Stuttgart (Germany) Department of Sanitary Engineering, Water Quality and Solid Waste Management, Research Scientist (2015-2017)

**Awards:** Younger Chemist Leadership Development Award, National YCC, American Chemical Society (2021); American Institute of Chemists Student Award, The American Institute of Chemists (2019); Dean's Graduate Support Grant Award, University of Massachusetts Dartmouth (2019); Graduate Teaching Assistantship Award, University of Massachusetts Dartmouth (2019); German Chemical Student Award, German Chemical Society (2012)

**Statement:** I am thrilled to be considered for the position of Councilor for NESACS. In 2017 I moved to the greater Boston area from Stuttgart, Germany for my PhD studies at UMass and I have been an active NSYCC/ NESACS/ACS member ever since. I embrace being part of NSYCC as the current Chair in which I had the opportunity to plan research, career, and social events including the annual Northeast Student Chemistry Research Conference.
(NSCRC) and the annual Career Symposium for younger chemists in the greater Boston area.

I am looking forward to getting more involved in NESACS after being involved in NSYCC since the beginning of my PhD tenure. I am interested in discussing the goals, interests, and concerns of NESACS with the national ACS representatives, especially regarding science policy and youth engagement. Furthermore, as a black chemist I also am very interested in promoting Diversity, Inclusion and Equity within NESACS through collaboration with the national ACS as well through international ACS chapters. Thank you for your time and support.

**Councilor/Alternate Councilor Candidate 2**

**Lipin Ji**

**Education:** 2013, B.E. Pharmaceutical Engineering, East China University of Science and Technology, China; 2015, M.S. Medicinal Chemistry, Northeastern University; 2021, Ph.D. Medicinal Chemistry, Northeastern University.

**Professional Experience:** 2021-present, Senior Chemist, MAKScientific, Burlington, MA.

**ACS Service:** 2020-present, career chair of NSYCC; 2018-present, ACS Member.

**Honors:** International Cannabinoid Research Society Student Travel Award, 2019; Northeastern University PhD Network Travel Award, 2019; Best Poster Presentation Award, Northeastern University, 2018; The Excellent Graduation Thesis, ECUST, 2013.

**Statement:** I am honored to be considered for the position of Councilor in NESACS. Serving for NSYCC as Career chair last year and as chair-elect this year, I got to plan and host several virtual workshops, seminars, and conferences amidst COVID pandemic. Last year, our NSCRC (Northeast Student Chemistry Research Conference) was awarded outstanding or creative YCC event in 23rd Annual ChemLuminary Awards. I am proud of our energetic team which provided young chemists in Northeast region with much needed support and platform to communicate during the two difficult years. Starting later 2022, I will serve as the new NSYCC chair. I will keep growing our vibrant YCC community and explore ways to enhance its connection with NESACS and other YCCs.

If elected as a councilor of NESACS, I will continue to advocate for NESACS members, especially in diversity in science, community involvement, and youth engagement. I look forward to exchanging ideas on these issues with other chapters in ACS. Thank you so much for your consideration and support!

**Councilor/Alternate Councilor Candidate 3**

**Elizabeth Nye**

No Statement Received

**Councilor/Alternate Councilor Candidate 4**

**Mary Jane Shultz**

**Education:** B.S. (Honors) 1970, U. Wis.; Ph.D., 1975, MIT.

**Professional Experience:** Visiting Professor, Chinese Academy of Sciences, 2013-to date; Chair, Department of Chemistry, Tufts University, 2000-2006; Professor (Assistant, Associate, Full), Tufts University, 1979-to date; Visiting Professor, M.I.T., 1985-87; Assistant Professor, University of Massachusetts, Boston, 1978-79; Research Associate/Lecturer, Boston College, 1977-78; Research Fellow, Harvard University, 1976-77; Radcliffe Fellow, 1976-77; Postdoctoral Associate, U. Calif., Berkeley, 1975-76.

**ACS Service:** Women’s Chemists Committee, 2012-to date; Alternate Councilor, Physical Chemistry Division, 2010-2013; Executive Committee, Physical Chemistry Division, 2010-2013; Multidisciplinary Program Planning Committee (211-212).


**Memberships:** American Chemical Society, Division memberships: Physical Chemistry, Colloid and Surface, Chemical Education, Environmental Chemistry; American Association for the Advancement of Science; American Physical Society; Sigma Xi, Iota Sigma Pi (ΙΣΠι).

**Honors/Awards:** AAAS Fellow; ACS Fellow, Radcliffe Fellow

**Statement:** It seems that diversity and inclusion are in the news daily. Many studies show that corporate profits increase, workplaces are more fulfilling, and students thrive when more voices are included. It is my firm belief that all voices
are needed if the World is to meet the chemical challenges that face it; ranging from human health to global warming. At the local level, I have actively campaigned for inclusion while chairing (three times) the James Flack Norris Award for Outstanding Achievement in the Teaching of Chemistry, promoting gender, racial and national diversity among the winners. As chair of the Richard Award committee, I actively encouraged more nominations, netting a record 17 including 7 women. The result: for the second time in the history of the Richards Award, it was won by a woman. All aboard for chemistry!

At the national level, I am a member of the Women Chemists Committee (WCC). As a member of WCC, I helped launch the Rising Star Award for midcareer women and am now managing the awards, recognition, and retention Project Group. Our goal is to showcase the success of women in the chemical enterprise, diversify the awards selection committees, and encourage nominations of women for wards with little representation among the winners.

As a councilor, I am also a member of the NESACS board. Our section is one of the largest in the society having an active and accomplished membership. I am honored to be selected to run for councilor; if elected I will continue to represent our interests at both the local and National level.

As a chemist, I am intensely interested in interactions at soft and nanoparticle interfaces; interactions that shape our bodies, our environment, and indeed the Universe. I have invented instruments and techniques in pursuit of generating a molecular-level picture of these interfaces, and recently patented a photocatalyst with unprecedented efficiency. “Seeing” at the molecular level enabled manipulation at the macroscopic level.

**Councilor/Alternate Councilor Candidate 5**

**Malika Jeffries-EL**

Malika Jeffries-EL is a Professor at Boston University with appointments in Chemistry and Materials Science and Engineering. She also serves as the Associate Dean for the Graduate School in Arts and Sciences.

**Education:** B.A. Chem, Wellesley College; Ph. D., The George Washington University; Postdoctoral Fellow, Carnegie Mellon University with R.D. McCullough

**Professional Experience:**
Professor, Department of Chemistry and Division of Materials Science and Engineering (MSE), Boston University, 2022 – Associate Professor, Department of Chemistry and MSE, Boston University, 2016 – 2022; Martin Luther King Jr. Visiting Professor MIT 2015; Associate Professor of Chemistry, Iowa State University, 2012 – 2016; Assistant Professor of Chemistry, Iowa State University, 2005 – 2012


**NESACS Services:** ACS Fellows canvassing committee 2019 – ; Councilor 2020 – ; Richard Medal Committee

**Relevant Memberships:** Fellow Royal Society of Chemistry, 2022; Member, National Organization of Black Chemist and Chemical Engineers (NOBCChE), 1999; Associate Editor, Journal of Materials Chemistry C, 2013-present.

**Honors:** Percy Julian Award, NOBCChE 2021; ACS Fellow 2018; Stanley C. Israel Regional Award for Advancing Diversity in the Chemical Sciences 2015; Iota Sigma Pi Agnes Fay Morgan Award 2014; ACS Women Chemist Committee Rising Star award 2012; the Lloyd Ferguson Award from NOBCChE 2009; NSF CAREER award 2009; 3M untenured faculty award 2008.

**Research interests:** organic synthesis and organic electronics.

**Statement:** Through the years, I have had a solid track record of service to the ACS at the National and local level that has prepared me to be of service to the Northeastern Section in many ways. As your councilor, I will work...
to protect the interest of NESACS and also increase the prominence and visibility of its members. I am currently on CONC and I have previously served on canvassing and selection committees for ACS national awards. Thus think that I can be helpful in helping members with committee placements and nominations. I have also been a staunch supporter of diversity and if elected, I will work hard to encourage participation of women and minorities in our chapters programs and develop new ones targeting younger members.

**Councilor/Alternate Councilor Candidate 6**

**Sofia Santos**

**Education:** Master’s in Pharmaceutical Sciences, 2011, University of Lisbon- Faculty of Pharmacy, Lisbon, Portugal; Ph. D. in Pharmaceutical Sciences with specialty in Medicinal Chemistry, 2016, University of Lisbon-Faculty of Pharmacy, Lisbon, Portugal/ Massachusetts General Hospital, Boston- Massachusetts; JD candidate 2023, Suffolk Law School/Suffolk University, Boston, Massachusetts.

**Professional Experience:** Patent Agent at IP Law firm Cooley LLP, Boston 2021. Technical Specialist at the IP Law firm Finnegan, Henderson, Farabow, Garrett & Dunner LLP, Boston 2018. Research Fellow at Harvard Medical School and Massachusetts General Hospital, Boston, Massachusetts. PhD researcher at Center for Systems Biology, 2016, Massachusetts General Hospital, Boston, Massachusetts.

**ACS & NESACS Service:** 2016-2017 Career Chair in the local Younger Chemists Committee (YCC); 2017-2019 Alternate Councilor of NESACS; Member of Organic and Medicinal Chemistry Divisions of the ACS; 2018-2022 Councilor of NESACS; 2018-2021 Program Chair of the ACS Chemistry and the Law Division. Active member of the executive board in the local Younger Chemists Committee (YCC) and NESACS since 2015. Active member of the executive board in the Division of Chemistry and the Law since 2018.

**Relevant Memberships:** American Chemical Society (ACS), New England Section of the American Chemical Society (NESACS), Younger Chemists Committee (YCC), Portuguese Chemical Society (SPQ), Massachusetts General Hospital Postdoc Association (MGPA), Association for Women in Science (AWIS), Massachusetts Chapter of Association for Women in Science (MassAWIS), Portuguese Board of Pharmacists.

**Honors:** Fundação para a Ciência e Tecnologia, Research Predoctoral Fellowship, 2012- 2016; Merck Women in Chemistry Symposium, Best Poster Award, 2015.

**Statement:** It would be an honor to serve as a NESACS Councilor. If elected, I would bring my expertise as a Patent Agent, scientist and pharmacist to this role and apply my hands-on experiences as a YCC board member and Program Chair for the Chemistry and the Law Division to support our local section efforts. My areas of focus are: 1) to increase engagement and participation among NESACS members, especially younger chemists, in our local community, through support of diverse scientific talks, better communication of volunteer opportunities, and special events; 2) to provide career-oriented programming and networking opportunities for the NESACS community; and 3) to support novel technical and social programming for NESACS members to offer alternative ways for traditional NESACS members to become involved. I would truly appreciate your support in this election, and look forward to continue serving NESACS.

**Councilor/Alternate Councilor Candidate 7**

**Patrick Gordon**

See above details and statement for Chair-Elect position.

**Councilor/Alternate Councilor Candidate 8**

**Mariam N. Ismail**

**Education:** B.S. Chemistry, University of Massachusetts (2006); Ph.D. Chemical Engineering, Northeastern University (2011).

**Professional Experience:** Assistant Professor of Chemistry, University of Massachusetts Boston (2021-present); Assistant Professor of Chemistry & Physics, Simmons University (2016-2021); Lecturer, Simmons College (2015-2016); Director of Materials Research and Development, Viridis 3D (2014-2015); Senior Research & Development Engineer, 1366 Technologies (2011-2014).

**ACS & NESACS service:** NESACS German Exchange Committee (2018-present);
NESACS Alternate Councilor (2018-present); NESACS Exchange to Germany Program Facilitator (Cologne, 2020; Bremen, 2019); NSCRC Conference Judge (2019 and 2013); Lead collaborator from Simmons University with WCC (2016-2021); NSYCC Career Chair (2009-2010).

** Relevant Memberships:**
American Chemical Society (ACS), American Association for the Advancement of Science (AAAS), American Institute of Chemical Engineers (AICHE), Materials Research Society (MRS).

** Awards:** Professor of the Year Award (2019); MPAC-hosted event at The White House celebrating Muslim Woman Emerging Leaders in the field of STEM (2014); American Institute of Chemists Outstanding Graduate Student Award (2011); Recipient of the YCC/NESACS-JCF/GDCh Exchange to Germany Program (2009).

** Statement:** It has been an honor to serve as a NESACS alternate councilor over the past few of years. Traveling to the National ACS meeting for Council has been an eye-opening experience. It has allowed me to learn much more about the organization and how local sections truly can have an impact on the organization. It has empowered me to continue serving on a local and national level.

As an assistant professor at Boston's only public research university and the most diverse research university in the northeast, it is my goal to help recruit and foster the development of well-rounded scientists of diverse backgrounds. If elected councilor, I will continue this work towards empowering young scientists in becoming more active within local chapters and pursuing careers in STEM. As councilor, I will also work on fostering collaborations with local and national minority-serving STEM organizations and develop programs that will help engage our population at large.

If elected as Councilor, I will continue working on outreach efforts to involve more chemists, particularly those from underrepresented groups. I will work towards understanding the needs of our local section, and accurately represent them at the National Meetings. I appreciate your vote for Councilor. Thank you for your support.

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**Councilor/Alternate Councilor Candidate 9**

Craig Sergeant

**Education:** B.A. (German Language and Literature) Oakland University; B. Sc. (Chemistry) Oakland University, 2003; M.S. (Organic Chemistry) Oakland University, 2004; M.B.A Salem State University, 2013.


** ACS/NESACS Service:** Member of the Board of Publications (2020-present); Editor of the Nucleus (2021-present); Member on the Northeast Regional Meeting (NERM) 2023.

** Relevant Memberships:** Member of the ACS since 1998; Member of the Division of Organic Chemistry since 1998; Member of the Division of the History of Chemistry since 1998; presented at the 2022 Spring ACS National Meeting.

** Honors:** University Student Research Scholar (2003); Oakland University Graduate Assistantship, (2003-2004); Student Exchange Program Award from the Modern Language and Literature Department of Oakland University for Study at Carl von Ossietzky Universität Oldenburg, Germany, (2000-2001)

** Statement:** I am honored to be nominated for election as a NESACS councilor. Having only been actively involved for the past three years, this is a great honor to me and I humbly ask that I be allowed to serve as councilor.

Starting in 2020, I joined the NESACS Board of Publications with the intent of being a proofreader for The Nucleus. Towards the end of 2020, I was then asked to take on the role of Editor and accepted, starting with the January 2021 issue. Due to this role, I have learned quite a lot about NESACS and its excellent and hardworking volunteers. It has been gratifying to see that I was correct in becoming more involved with NESACS to see such tremendous dedication in its membership.

Also, in 2021, we learned that our webmaster was retiring and
it was necessary for me to take on this role also. Working with Katherine Lee, chair of BOP, a website contractor was identified and we both worked hard to have a new website set up and running by the end of 2021 that would be much easier to update and gives a much better representation of the organization to the digital world. I am continuing in my role as webmaster for NESACS.org.

More recently, I have agreed to assist the NERM committee with public relations for NERM 2023 and look forward to an excellent Northeast Regional meeting.

Councilor/Alternate Councilor Candidate 10

Scott Edmondson

Education: AB in Chemistry, Cornell University, Ithaca, NY; Ph.D. in Organic Chemistry, The Ohio State University (Prof. Leo A. Paquette), Columbus, Ohio (1996); NIH Postdoctoral Fellow, Columbia University (Prof. Samuel J. Danishefsky), New York, NY (1996-1998)

Professional Experience: Director, Medicinal Chemistry, Merck and Company, Inc. (Rahway and Kenilworth, NJ). Director and Head of Boston Oncology Chemistry, AstraZeneca (Waltham, MA), Head of Chemistry and Structural Biology, Nimbus Therapeutics (Cambridge, MA).


Membership/Honors: ACS Organic Chemistry Division, ACS Medicinal Chemistry Division American Society for Cancer Research (AACR), NESACS Medicinal Chemistry Committee, New York Academy of Sciences (NYAS), Med Chem GRC Diabetes Session Chair ((ACS journal), Co-organizer for AstraZeneca sponsored ‘Drug Discovery Short Course’ (2018), Reviewer (multiple ACS and non-ACS journals), Invited speaker at >25 national/international conferences, >50 publications in peer reviewed journals, 8 book chapters, Editor for Burger’s Medicinal Chemistry (8th Ed., Vol. 4, 2021), Editor for Oncology Section of ACS Medicinal Chemistry Reviews (2021-present), >60 patents/patent applications.

Statement: It would be my honor to serve as councilor to our local section. I believe that my career in two large international pharma companies as well as a smaller Cambridge MA biotech company give me a perspective that is reflective of many of our colleagues throughout NESACS. In addition to my expertise, I’ll bring energy, organization, leadership, fresh ideas, high quality science education, and an overall philosophy of diversity and inclusion to the NESACS committee.

Previous Impact and Future Vision: My service to NESACS spans several years as part of the Med Chem Planning Committee who has organized several in person symposia along with our flagship event the Advances in Chemical Sciences symposium. I have made significant contributions to these symposia by identifying several industry keynote speakers who are at the front of their respective fields to participate. As part of our responsibilities to organize these symposia, we reached out to local Biotech and Pharma companies to raise funds as donations and also to CROs/Vendors with a local presence to help support our events through advertisement booths. Since 2020, COVID resulted in discontinuation of our ‘in person' symposia, so we spearheaded a monthly webinar series that has included many leading researchers in New England and beyond. I'm proud of the diversity and quality of subject matter we include in our webinar series. We cover such broad topics that range from academic researchers (DFCI, Northeastern), to traditional hot drug topics (KRAS G12C, selective PARP inhibitors, to timely topics (COVID treatment from Pfizer, COVID vaccine delivery from Moderna), to non-traditional drug discovery programs such as PROTACs and RNA as a drug target. We intentionally include topics that the broader medicinal chemistry community will appreciate such as a diversity of Process Chemistry approaches from Merck, lessons learned around med chem from Nick Meanwell, and analysis of ‘Beyond Rule-of-5’ space from AbbVie. I'm proud to say that our webinar series routinely attracts...
between 70-150 local listeners who actively contribute to these sessions through an excellent Q&A session. In a position as councilor of this local section, I will continue to strive to incorporate this kind of diversity into our Symposia/Webinar education series and even seek to further expand the topics covered. I believe that Chemistry as a field is critical to improvement of human health and life. As chemists, our webinar/symposia provide a means by which we can share our successes with the larger community and demonstrate just how powerful chemistry can be in terms of shaping our health and environment. We can further expand our educational outreach to include presenters/educators not only with a diversity of scientific content, but also with geographic and gender diversity to help further build bridges by demonstrating diversity and inclusion. I believe that our discipline and our common interests in chemistry can serve to bring people together for the common cause of an overall improvement in our quality of life, and that NESACS can foster this philosophy even more effectively in the coming years.

**Councilor/Alternate Councilor Candidate 11**

**Sonja Strah-Pleynet**

**Education:** Ph.D. Organic Chemistry (1996); M.S. Organic Chemistry (1993); B.S. Chemistry (1990), University of Ljubljana, Slovenia; Postdoctoral Fellow, University of Florida (1997-1998); University of California San Diego (1998-1999).

**Professional Experience:** Ipsen Bioscience, Patent Search Analyst (2021-present); Fish & Richardson P.C., Technology Specialist-Patent Practice (2018-20); RSM, Teacher (2013-2018); National Science Foundation, Reviewer (2012); Theromedical, Inc. (2012); Arena Pharmaceuticals, acquired by Pfizer (1999-2009); Senior Scientist, Medicinal Chemistry (2006-2009); Research Scientist (1999-2006).

**ACS Service:** ACS Council (2004-Present); Committee on Patents and Related Matters, Associate (2022); Committee on Chemistry and Public Affairs, Associate (2013); Presidential Task Force “Vision 2025”, Member (2012-2013); ACS National Award Selection Committee, Member (2011-2013); Committee on Economic and Professional Affairs (CEPA), Member (2007-2012), CEPA Liaison to Committee on Minority Affairs (2008-2012); CEPA Liaison to Committee on International Activities (2011-2012); ACS Industry Member Programs, Small/Medium Business Advisory Panel, Member (2009-2012); CEPA Task Force on Globalization (2008-2009); ACS Legislative Action Network, Member (2006-present); ACS Legislative Summit on Capitol Hill (2006).

**NESACS Service:** Board of Directors (2013-present); Chair-Elect, Program Chair (2022); Councilor (2020-2022); Nominating Committee (2020); Alternate Councilor (2013-19); Chair, NESACS Host Local Section Committee for the ACS National Meeting in Boston (2015); Government Affairs Committee, Member (2010-present), STEM Outreach - Science Café and Science Fairs (2011-present); San Diego Section: Executive Board Member (2000-2012), Councilor (2004-2012), Alternate Councilor (2000-2003); Government Affairs Committee, Chair (2007-2010); Western Regional Meeting: Invited speaker - Women Chemist Symposium (2006); San Diego Host Local Section Volunteer (2007); Division of Small Chemical Businesses: Membership Chair (2022); Program Committee, Symposium Organizer (2021-present). ACS Divisions: Organic Chemistry; Medicinal Chemistry; Chemistry and the Law; Small Chemical Businesses.

**Awards:** ChemLuminary Award - ACS President’s Award for Local Section Government Affairs (2010); American Chemical Society Certificate of Achievement, ACS San Diego Section (2008); Arena Pharmaceuticals - Outstanding Scholarships of Ministry of Science and Technology, Slovenia (1997); First Prize Winner at 26th KRKA First Prize Winner at 26th KRKA Pharmaceuticals Research Awards (1996); Graduate Research Scholarship of Ministry of Science and Technology, Slovenia (1991-1996).

**Statement:** I am honored to be nominated for the position of Councilor for NESACS. I bring over twenty years of ACS volunteer and leadership experience on local and national level, combined with substantial pharmaceutical industry experience. For the past ten years, I have had a privilege of serving NESACS as a Councilor, Alternate Councilor, and a leader for various activities. I chaired the Host Local Section Committee for the ACS Fall 2015 National Meeting in Boston. In this role, I had the opportunity to recruit and engage almost fifty NESACS members from academia and industry. Together
we helped to make the national meeting a great success, while hosting over 13,000 chemistry professionals from around the world. As a passionate advocate for STEM education, I participated in numerous community outreach programs and shared my chemistry experience with students, teachers, and younger chemists through classroom visits, science fairs, and career development symposia, helping our members navigate career changes and explore new ways to thrive in the global chemistry enterprise. As a Councilor, I will use this experience to continue to foster communication and collaboration between ACS members in industry and academia, our younger and senior chemists, our local section and national ACS, representing the interests of our diverse membership. I will continue to develop programs that will help engage and benefit broader NESACS community - promoting ACS core values of diversity, inclusion, and respect. I invite you to join us. Thank you for your support!

Councilor/Alternate Councilor Candidate 12

Thomas R. Gilbert

Education: Clarkson College of Technology, B.S., 1968; Massachusetts Institute of Technology, Ph.D., 1971.

Professional Experience: Member of the Northeastern University faculty, 1981 - 2021, Acting Chair, Department of Chemistry and Chemical Biology, 2015–16. Honors: ACS Fellow, 2011; Henry A. Hill Memorial Award, 2010; Outstanding Teacher of First Year Students Award, College of Engineering, Northeastern University, 2010, 2013, 2015; Excellence in Teaching Award, Northeastern University, 1999.

ACS Service: Membership Affairs Committee (MAC), member, 2017 -2022; Board of Directors, Director, District I, 2013-15; Council Policy Committee, 2007-12, Vice-Chair, 2008-10; Long-Range Planning Subcommittee, Chair, 2008-12; Committee on Nominations and Elections, 2001-06, Vice-Chair, 2004-06; Committee on Meetings and Expositions, 1995-2000, Chair, 2000.


Statement: If elected to Council I will focus my energy in two areas: Increase the value of ACS membership: When I ran for Council in 2019 I promised to work with the other members of MAC to launch dues categories and benefits packages to make ACS membership more valuable to a broad cross section of chemistry professionals. THIS YEAR IT HAPPENED! For the first time members could choose between two dues categories and benefits packages. If I am re-elected to Council, I pledge to work with MAC and ACS Staff to create additional benefits packages that are designed to meet members’ changing professional needs at different stages in their careers.

Academic–industrial partnerships in education: Recent graduates need a broader base of knowledge and skills and cross-disciplinary experiences if they are to find employment in today’s increasingly multidisciplinary chemical enterprise. One way to provide this preparation is through partnerships between academic and industrial chemists that include paid industrial internships and cooperative education experiences such as those offered at Northeastern. These partnerships benefit not only students, they also provide employers, especially smaller businesses and start-ups, with skilled, motivated temporary workers. ACS, with its strong industrial base and ties to large corporations and small chemistry businesses, is uniquely positioned to serve as a catalyst in launching a national experiential education program in chemistry.

Councilor/Alternate Councilor Candidate 13

Jens Breffke

Education: Ph.D., Chemistry, The Pennsylvania State University (2014); Diplom, Chemistry, Humboldt-University of Berlin (2009)

Professional Experience: Biotech Account Manager, Nikon Instruments, Inc. (2021 – present); Life Sciences Manager, Boston Electronics Corporation (2020 – 2021); Application Specialist, Boston Electronics Corporation (2017 – 2020); Postdoctoral Fellow, National Institute of Standards and Technology (2014-2017)
**ACS & NESACS Service:**
Member, Board of Trustees, ACS Membership Insurance (2021 – present); Industrial Chemists Working Group Leader, Membership Activities Committee (2021 – present); Member, CPC Working Group on Future Council Representation (2018 – present); Chair, ACS International Activities Committee (2018 – 2020); Member, German Exchange Program (2014-2015); Member, ACS Younger Chemists Committee (2010–2015)


**Statement:** I moved to the Boston area in 2017 but have been associated with NESACS for much longer: As chair of the German JungChemikerForum (JCF) I attended the 2007 ACS National Meeting as part of the German Exchange (GEX) program and I have been an advocate for this program ever since. It inspired me to pursue my PhD in the U.S. shortly thereafter and I became engaged with ACS. During my term serving on the national Younger Chemists Committee (YCC) I founded its nationwide equivalent program Younger Chemists Crossing Borders (YCCB) program. For over 10 years I have been very involved on a local & national level with ACS and an advocate for its members, both domestically and internationally. It would be my honor and pleasure to represent the members of our local section at the ACS Council as NESACS Councilor.

**Councilor/Alternate Councilor Candidate 14**

Kap-Sun Yeung

**Education:** B.Sc. (1st Class Honors), The Chinese University of Hong Kong, 1990; Ph.D. University of Cambridge, UK, 1994; Postdoctoral Fellow, Scripps Research Institute, La Jolla, CA, 1995-1996.

**Professional Career:** Small Molecule Drug Discovery, Bristol Myers Squibb, Cambridge, MA: current position: Scientific Associate Director

**ACS Service:** Committee on International Activities (Member 2022-2024, 2019-2021; Associate Member 2016-2018), IAC Stopover Grant Update Task Force (Member 2020), IAC Strategic Plan 3.2 Task Force (Member 2020), The first Asia Pacific International Chapters Conference, Scientific Program Committee (Member 2016-2017); ACS Northeast Regional Meeting (NERM 2013), New Haven, CT (Program Co-Chair, Organizing Committee 2011-2013); New Haven Local Section, Councilor, Board Member (2016-2018), Alternate Councilor, Board Member (2015), Bylaws Update Chair (2016-2018). Organizer/co-organizer for twenty MEDI Division sessions at ACS National Meetings, including two MEDI-sponsored sessions at EFMC (Germany) and AFMC (South Korea) symposiums (2009 to present).

**NESACS Service:** Alternate Councilor (2020-2022); NESACS Medicinal Chemistry Committee (Member); Organizing Committee Chair, NESACS Medicinal Chemistry Symposium at BMS Cambridge (2019, 2020).

**Statement:** If elected councilor, I will look for opportunities where I can help the most to promote the growth of NESACS and to connect the members to organizations within and outside of ACS. Through my participation in ACS both at Local and National levels, I believe that in ACS, every opinion counts regardless of one’s personal and professional background, and every volunteer effort is valued no matter it is small or big. I always look for diversity, and encourage you to volunteer for ACS activities. I would be honored to be your councilor to represent your voice in ACS.

**Councilor/Alternate Councilor Candidate 15**

Ray Lam

**Education:** M.Sc. Chemistry with Industrial Experience, University of Bristol, UK (2004); Ph.D. Inorganic and Materials Chemistry, University of Bristol, UK (2008)

**Professional Experience:** Associate Professor, Massachusetts Maritime Academy (2013–Present); Chapter Director, Massachusetts State College Association (2020–Present); Adjunct Faculty, Emanual College, MCPHS University (2012–2013), Providence College (2011–2012); Postdoctoral Research Associate, University of Pittsburgh (2008–2010)
NESACS Service: Chair, National Chemistry Week (2016–Present); Alternate Councilor (2021–Present); Director-at-large (2022–Present)
Awards: ACS Local Section 2020 Outreach Volunteers of the Year

Statement: It is a great honor to be nominated for the Councilor position and I am very excited to have the opportunity to serve our section. I have been an alternate councilor since the 2021 and have recently been accepted to join the Committee on Community Activities (CCA) as an associate at the national level. Within the committee I have been assigned to work with the National Chemistry Week 2023 theme team and the Program Development & Promotion sub-committee. I have also volunteered to work on developing a methodology for diversifying themes and theme teams. During my tenure as Chair for National Chemistry Week, I have experienced first-hand the power and importance of outreach programs. If elected as councilor, I would like to continue my work coordinating and designing outreach programs at the national level. I believe my diverse background and experience as an outreach coordinator would bring new ideas to committees. Thank you for your consideration and your support.

Councilor/Alternate Councilor Candidate 16
Dr. Daljit S. Matharu

Education: Mchem, Medicinal Chemistry, Nottingham Trent University, UK (1997 - 2001); Ph.D., Organic Chemistry, University of Warwick, UK (2003 - 2007); Postdoctoral Fellow, Princeton University (2007 - 2008); Postdoctoral Fellow, The Pennsylvania State University (2008 - 2010); Postdoctoral Fellow, University of Kansas (2010 - 2014)

Professional Experience:

Professional Memberships:

Honors: Teaching Assistant Award obtained at University of Warwick by passing a Further Adult Education Teaching Course (2004); EPSRC Doctoral Training Account Award, University of Warwick (2004 - 2007).

NESACS Service: Alternate Councilor (2018 to present).

Personal Statement: I am honored to be considered for the Councilor position in the upcoming 2022 elections and am very excited to have the opportunity to serve our section in this capacity. I have had the privilege of serving as an alternate councilor since 2018. I enjoy attending the award presentations that are held locally. Interacting with members at these forums serves as a constant source of inspiration. As a councilor, I believe my “people skills” would allow me more involvement and I genuinely look forward to being a key contributor in maintaining the strength of our local chapter.

A recent contribution to local events that I am very proud of was my representation of Sanofi in the 2021 Boston Symposium on Organic & Bioorganic Chemistry (BSOBC) organizing committee, where I was instrumental in securing student and postdoc presenters (both oral and poster) from Northeastern University. In the same vein, I will serve as the Sanofi representative for the upcoming 2022 BSOBC symposium, which will hopefully be held in-person this year.

Another opportunity that I am very much looking forward to, is co-chairing a MEDI session on covalent inhibitors, with Dr. Andrew Scholte at the 2022 Fall ACS meeting in Chicago. We have an eminent line-up of speakers that will emphatically showcase the revival of interest in this field in recent years. As a councilor, I can positively use this experience, coupled with my extensive network to help bring cutting edge science to our local section audiences. Our meetings provide a unique platform for the exchange of ideas between industrial and academic participants and if elected, I will champion greater diversity and inclusion within our chemistry community.

I hope that your affable vote will allow me to serve as councilor with the same commitment, enthusiasm and passion that I pursue all endeavours.
The Northeastern University Student Affiliate of the American Chemical Society has worked hard to foster a tight-knit community of undergraduate students. While the unique co-operative education program at Northeastern allows students to develop professional skills, the chapter helps young chemists find their passions within chemistry. Meeting once a week, the chapter balances speaker meetings from professionals in a variety of chemistry-related fields, and more relaxed bonding activities, which bring students studying chemistry closer together. Past speakers have spoken on a wide variety of topics, from scientific glassblowing to pharmaceuticals to green chemistry. The chapter also has a focus on professional development. The student group routinely hosts a co-op mixer and an undergraduate research panel, allowing members to connect one-on-one and explore the variety of professional and academic research opportunities available to them at Northeastern and throughout the Boston community. These events also serve as a way for underclassmen to discuss with more experienced members everything from resume building to journal publications.

The backbone of the student chapter is its welcoming and inclusive community. All first-year students are paired with upperclass members to facilitate a smooth transition to college. This mentorship program provides first-year students the opportunity to ask whatever questions they may have about being a chemistry major, or college in general, to someone who probably had the same questions a year or two before. The chapter also works to foster a strong connection between all members, beyond just the first-year class. As such, the organization sponsors group events such as the annual Kimball Farms and New England Aquarium trips to strengthen bonds between chemists. The chapter leverages this sense of connection and chemistry knowledge to give back to the Boston community by volunteering at the Museum of Science and Boston Children’s Museum during National Chemistry Week and with community partners throughout the year.

One of the largest challenges the chapter faced last year, in the 2020-2021 academic year was creating a space where students could make connections despite the COVID-19 crisis. In many ways the organization was forced to reinvent itself, reprogramming many signature events, like Mafia Night, into virtual activities and creating many new ones. For example, the group held a “PowerPoint Night” activity, at which members were able to present humorous and lighthearted presentations, usually with some connection to chemistry. This event was such a success that it has been...
incorporated into the calendar this year despite returning to in-person programming.

Another major focus of the organization has been facilitating conversation around diversity and inclusion. Last year, the chapter created the NUSAACS Committee for Diversity and Inclusion (NCDI) which currently has representatives from the committee meet with the Chemistry and Chemical Biology Department and the College of Science at Northeastern to be student voices for facilitating change. The NCDI has risen to the challenge, hosting a mixer with various identity-based STEM groups and providing resources to join these groups. The committee has also worked to engage on social issues in real-time and discussed the ACS best practices for diversity and inclusion. Getting members involved in conversations regarding diversity in STEM has been a challenge but has been well-received by the chapter. Working with the NCDI, the chapter has worked to bring in a more diverse speaker population. Often these speakers will discuss how their background has affected their career path, which has been incredibly engaging for the undergraduate members focusing on their own careers.

The Northeastern chapter strives to set our members up for success beyond the classroom through exposure to a variety of chemistry fields, community volunteering, and bonding events. The Executive Board is incredibly proud of the work being done by all members and would especially like to recognize the 2020-2021 Executive Board for their dedication and creativity. Additionally, we want to thank our Faculty Advisor, Dr. Joseph DePasquale, as well as the rest of the Northeastern Chemistry and Chemical Biology department.
The 2023 Northeast Regional Meeting of the American Chemical Society (NERM 2023) will be held from Wednesday to Saturday, June 14-17, 2023. The meeting will be hosted by the Northeastern Section of the ACS with most of the technical sessions and special events to be held at Northeastern University in Boston.

The theme of the meeting, Chemistry: Crossing Intersections, will be reflected in the technical program featuring research that crosses and transcends the traditional boundaries of chemistry and chemical engineering. For example, there will be symposia on sustainable syntheses and processes, chemistry in the life sciences, the digital world of chemistry, chemistry advancing industry, chemical education research, and communities within chemistry. NERM 2023 will feature poster sessions highlighting student research, workshops designed by and for high school chemistry teachers, a graduate school fair, an Exposition featuring a Career Navigator LIVE job fair, professional development workshops, an Awards Banquet, and much, MUCH more!

Call for NERM 2023 Symposia. Proposals for symposia aligned with the meeting theme are due August 1, 2022. We encourage all interested chemists and chemical engineers to submit symposium proposals on cross-disciplinary topics such as those described above. We are especially interested in receiving proposals that include a diverse group of presenters and session chairs.

To submit a symposium proposal, please go to our website at: https://2023.nermconference.org.

If you have any questions about NERM 2023 please contact the organizers at nerm2023@nermconference.org.

On behalf of the NERM 2023 Organizing Committee and NESACS, we look forward to your participation in this event.
Richards Award Night

Harvard University – Loeb House

*Left to Right:* Kathere Lee, Michael Singer, Brian D’Amico, J. Donald Smith, Daljit Matharu
Richards Award Night (continued)

Sonja Strah-Pleynet and Mary Jane Shultz

Left to Right: Lisa Marcaurelle, Mary Jane Shultz, Jaqueline Barton, Peter Dervan, Carol Mulrooney, Sonja Strah-Pleynet
Richards Award Night (continued)

Mary Jane Shultz giving an excellent overview of the Richards Award and who Theodore Richards was.

*Left to Right: Mary Jane Shultz, chair of the Richards Medal Award committee; Jaqueline Barton, 2021 recipient; and Ashis Saha, NESACS Treasurer*
Jaqueline Barton, 2021 recipient of the Richards Medal Award speaking on her experiences and research as a chemist.

Left to Right: Dan Hall, Marilena Fitzsimons Hall, Ted Zwang, Megan Nunez, Jaqueline Barton, Peter Dervan, Sarah Delaney, Ariel Furst, Tim Mui. All got their PhD’s with Jaqueline - “A terrific bunch!”
Sonja Strah-Pleynet, 2023 NESACS Chair-Elect; Jaqueline Barton, 2021 recipient; Carol Mulrooney, 2022 NESACS Chair; Mary Jane Shultz, chair of the Richards Medal Award committee

*Left to Right: Marilene F. Hall, Jackie Barton, Mary Shultz, Cheryl Schnitzer*
The Contributions of Kenichi Fukui to the Development of the Woodward-Hoffmann Rules

By Jeffrey I. Seeman

Frontier molecular orbitals (FMOs) were not the dreams of the pistol-toting cowboys of American westerns – they came from the brain of the insightful Japanese theoretician Kenichi Fukui. In 1952, together with his graduate student Teijiro Yonezawa and his colleague Haruo Shingu, Fukui proposed that the “frontier electrons play a decisive role in electrophilic aromatic substitution or by certain oxidizing reagents. (Fukui, 1952 #3366) Over the next decade, Fukui published extensively on FMO theory. In 1964, Fukui used FMO theory to explain the mechanism of the Diels-Alder reaction, a year before Woodward and Hoffmann would independently provide a FMO theory explanation for electrocyclic rearrangements. Thus, Fukui set a precedent for Woodward and Hoffmann. Fukui’s story is told in three just-published papers in Jeffrey I. Seeman’s series on the history of the Woodward-Hoffmann rules. Please click here: https://doi.org/10.1002/tcr.202100297 (Open Access); https://doi.org/10.1002/tcr.202100300 (Open Access); and https://doi.org/10.1002/tcr.202100302 (Full Access).
Many local employers post positions on the NESACS job board. Find yours at www.facebook.com/nesacs
New ACS Membership Packages

ACS has announced its new membership packages, effective January 1, 2022.

**The Premium Package**
This package provides full access to all ACS activities; if you are a current ACS Member, it offers identical benefits to what you enjoy today with realigned pricing.

- **Regular Members** – $160
- **Society Affiliates** – $160

**The Standard Package**
This package is ideal if you want to remain active in the Society, but do not attend many events or need wider access to ACS Publications. It is only available to existing members or prospective members who have a degree, certification, or significant work history in the chemical or related STEM sciences, or have certification as a teacher of a chemical science.

- **Regular Members** – $80

**The Basic Package**
Anyone with an interest in chemistry or the allied sciences is invited to join the ACS. This package is a great way to be introduced to the ACS and the community, and to be connected to our diverse network of professionals.

- **Graduate Students** – $55
- **Undergraduate Students** – $25

For details, see https://www.acs.org/content/acs/en/membership/membership-packages.html.

Calendar

Check the NESACS home page for late Calendar additions:
http://www.NESACS.org

Note also the Chemistry Department web pages for travel directions and updates. These include:

- **Boston College**
  https://www.bc.edu/content/bc-web/schools/mcas/departments/chemistry/news-and-notes.html#events

- **Boston University**
  https://www.bu.edu/chemistry/seminars/colloquium

- **Brandeis University**
  https://www.brandeis.edu/chemistry/events.html

- **Harvard University**
  https://chemistry.harvard.edu/calendar/upcoming

**MIT**
https://chemistry.mit.edu/events

**Tufts University**
https://chem.tufts.edu/news-events/events

**UMass Boston**
https://www.umb.edu/academics/csm/chemistry/events

**UMass Lowell**
https://www.uml.edu/sciences/chemistry/colloquia.aspx

**University of New Hampshire**
https://ceps.unh.edu/chemistry/seminars/spring-2022-seminars

**MAY 2022**

May 04
Prof. Thomas B. Rauchfuss (Univ. Illinois)
MIT, Rm 6-120, 4:15 pm

May 05
Prof. Zhenan Bao (Stanford)
Molecular Design Concepts for Skin-inspired Organic Electronics
MIT, Rm 6-120, 4:00 pm

May 09
Prof. Deborah Chung (Univ. Buffalo)
Dielectric and electret behavior of electronic conductors and new avenue of electrical energy generation
MIT, Rm 6-120, 4:00 pm

May 10
Prof. Munira Khalil (Univ. Washington)
MIT, Rm 6-120, 3:00 pm

May 26
Prof. Nuno Maulide (Univ. Vienna)
MIT, Rm 6-120, 4:00 pm

**Notices for The Nucleus Calendar should be sent to:**
Samurdhi Wijesundera,
Email: samu.amameth@gmail.com