

Northeastern Section of the American Chemical Society (NESACS)

First Southeastern Mass Area Event

October 3, 2013

Univ. of Mass. Dartmouth

Dr. Jack Driscoll

Public Relations Chair NESACS

PID Analyzers, LLC

Sandwich, MA 02563

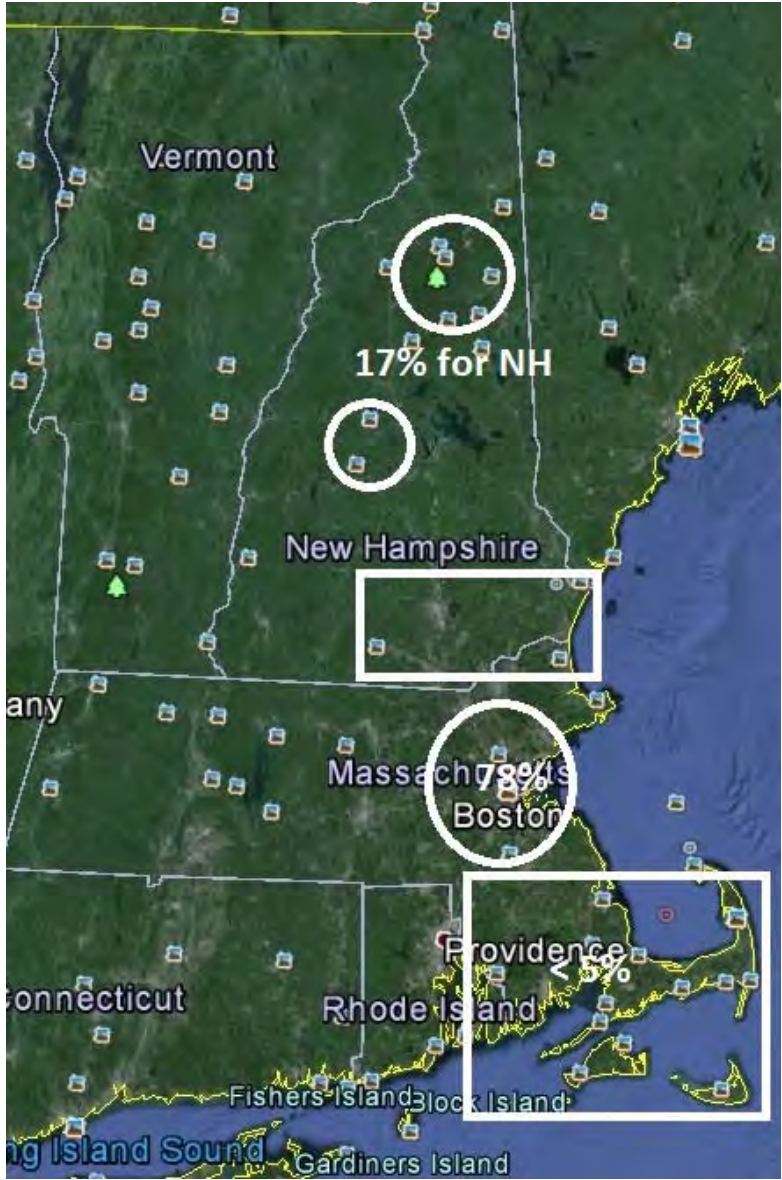


What is NESACS?

- ▶ The Northeastern Section of the American Chemical Society (NESACS) is the largest (7,500 members) of the 187 sections of the American Chemical Society (164,000 members)
- ▶ NESACS was founded in 1898. ~~Eleven~~ **Twelve** of our NESACS members have received a Nobel Prize. **Prof. Martin Karplus of Harvard received a Nobel Prize in chemistry in October 2013 for his work in computational chemistry.**
- ▶ Out territory includes the state of NH, greater Boston (inside 495) and SE MA (Cape & Islands)
- ▶ We have about 20 committees in our section so there is a place of interest for everybody

Purpose of this Meeting

- ▶ Over the past few years, we have been able to generate a good deal of interest on Cape Cod with our Cape Cod Science Cafes (google: "cape cod science cafe").
- ▶ We would like to expand our NESACS programming to include **all** of SE MA so you don't need to make a 2 hour drive into Boston every month
- ▶ We also plan to do the same for NH
- ▶ The northern most town in NH is Pittsborough and farthest point in the south is Provincetown, MA- distance is 322 miles



What CAN we offer?

- ▶ Interesting Scientific Topics
- ▶ **Networking connections** to Industry & University, to Educators, to STEM, to Entrepreneurs
- ▶ Connections to NESACS
- ▶ Connections to the ACS

Selected NESACS PROGRAMS

Event	Partner	Outreach
National Chemistry Week in Boston since 1987	Museum of Science 2 events Boston Children's Museum Hands on experiments related to ACS theme- "ENERGY"	We reach > 3,000 K-12 children every year- ACS programs
Connections to Chemistry in Burlington since 2000	Program for High School chemistry teachers	Science lectures and programs- 100 teachers
Earth day since 2002	Museum of Science events Hands on experiments related to the environment	700-1000 children with >100 volunteers from colleges & high schools
Monthly Meetings (9 or 10)	NESACS -Board meeting, networking , dinner & speaker	In the greater Boston area
STEM Programs- 2013	AAAS Meeting 2013 Boston- Family Science Days, Brewster Museum of Natural History-.SE MA STEM EXPO for Teachers. BMM- India Univ.-US University Conf. at Northeastern, Cape Cod Council Boy Scouts of America- Science Café on energy, Talks at local HS about careers	➤ 2,300
Science Café's	2-3 per year for NESACS members + general public	App. 200 people
Entrepreneurial Programs	SCHB, ACS	2 or 3 programs per year
Government Affairs	various	MA House billHR329

Legislation

The Northeastern Section - Chemists Celebrate Earth Day

by Jayashree Ranga, Salem State University



CCED volunteers at MoS on April 28, 2013. Photo by Dr. Dons Lewis

NESACS organized its annual Chemists Celebrate Earth Day event at the Museum of Science, Boston on Sunday, April 28, 2013. This event was originally scheduled on April 21, 2013. The event had to be postponed due to the Boston Marathon Bombings. In spite of this change in schedule, more than 50 volunteers from various organizations demonstrated hands-on green chemistry activities at the Museum. The Museum had 2,821 visitors that day, and at least 400 individuals participated in our CCED activities in the Museum's Suit-Cabot Lab. Special thanks to David Sittenfeld from MoS for rescheduling the event within a short duration.

The demonstrations and hands-on activities presented during this event included: biodiesel preparation, acidification of oceans, effects of acid rain and salinity on germination of radish seeds, building of dye sensitized solar cell, measuring acidity of rain water using cabbage indicator, determining greenness of sunscreen lotions, investigating environmental impacts of cleaning agents on plants. These activities were developed by the presenting institutions.

The main focus of this event was to promote awareness regarding green chemistry. All the volunteers enthusiastically engaged young visitors in hands-on green chemistry activities and distributed handouts highlighting importance of adapting green methods in day-to-day activities.

Special thanks to volunteers from Beyond Benign, Emmanuel College, Fitchburg State University, Framingham State College, Gordon College, Kehillah Schechter Academy, Museum of Science, Northeastern University, Salem State University, Suffolk University, and David Sittenfeld.

Our Section also participated in the CCED-2013 Illustrated Poem contest. The winners of NESACS were:

- Erin Joyce - Grade K (K - 2nd Category)
School/organization: Girls Club,
Teacher/Mentor: Bridget Cahill
- Hailey Moon - Grade 5 (3rd-5th Category)
School/organization: The Lane School, Bedford,
Teacher: Sarah Dorer
- Anna McCarthy - Grade 6 (6th - 8th Category)
School/organization: Girls Club, Teacher: Cadette
troop - 80337



Hailey Moon, NESACS CCED-2013 Illustrated Poem

NESACS 2013 STEM EVENTS >2300 K-12

Event	Partner	Outreach
STEM Programs- 2013	1 AAAS Meeting 2013 Boston-Family Science Days	650 children –total 3,500
	2 Brewster Museum of Natural History- Science in the Streets	60 children- total 500
	3 Cambridge Science Festival	400 children- total 3,000 Cancelled
	4 SE MA STEM EXPO for Teachers	50 HS Science teachers-total 200
	5 BMM- India Univ.-US University Conf. at Northeastern	300 people organized by Mukund Chorgade
	6 Cape Cod Council Boy Scouts of America- Science Café Oct. 26, 2013	Expect 400-500 K-6 + Careers in Science
	7 Talks at local HS about careers	3 schools 200 students

- Section Activities
- Medicinal Chemistry Group
- MSYCC
- STEM
- Women in Chemistry
- Senior Chemists Task Force
- NESACS Member Interviews
- Ashdown Exam
- National Chemistry Week
- Connections to Chemistry
- NE Student Chemistry Research Conference
- Other Activities

STEM



Please share your company or community STEM news by sending an email to:
stem_news@nesacs.org
[Click here for STEM Website](#)

NESACS UPCOMING EVENTS and VOLUNTEER OPPORTUNITIES

Check Back for New Information

INDUSTRY COLLABORATION - New Initiatives

- [UN Will Back Project AdviseHer to Aid Women in STEM Education](#)
- [Mayor Menino Joins Vertex Pharmaceuticals to Announce New Science Partnership with Boston Public Schools to Enhance Science Education](#)

STEM RESOURCES

"Monitoring Progress Toward Successful K-12 STEM Education": National Research Council (NRC) released a report that builds on previous work in this area, and establishes key indicators for measuring improvements to the K-12 science, technology, engineering and mathematics (STEM) education system.

MA STEM PIPELINE FUND: <http://www.mass.edu/forinstitutions/prek16/pipeline.asp>

REGIONAL STEM NETWORKS: The Regional PreK-16 STEM Networks bring together K-12, public and independent higher education, businesses, and regional and community organizations around science, technology, engineering and mathematics (STEM).



NATIONAL CHEMISTRY WEEK IS COMING TO CAPE COD

JOIN THE CAPE COD SCIENCE CAFÉ AT THE



WCKEDCOOLAUTUMNWBL.COM

SATURDAY OCTOBER 26, 2013

PM-5PM

CAMP GREENOUGH, 227 PINE STREET, YARMOUTHPORT, MA

FOR NATIONAL CHEMISTRY WEEK ON CAPE COD:

INCLUDING HANDS-ON ACTIVITIES (GRADES K-6) RELATED TO THE 2013 NATIONAL CHEMISTRY WEEK THEME:

ENERGY NOW & FOREVER

AND

SCIENTIFIC CAREER PATHWAYS TALKS BY LOCAL AREA SCIENTISTS (APPROPRIATE FOR GRADES 7-12 AS WELL AS ADULTS)

THIS CAPE COD SCIENCE CAFÉ IS A COOPERATIVE EFFORT BETWEEN THE CAPE & ISLANDS COUNCIL BOY SCOUTS OF AMERICA, THE NORTHEASTERN SECTION OF THE AMERICAN CHEMICAL SOCIETY AND THE ENVIRONMENTAL CHEMISTRY DIVISION OF THE AMERICAN CHEMICAL SOCIETY

CONTACT CAPE COD SCIENCE CAFÉ ORGANIZERS:

JENNIFER MACLACHLAN OR JACK DRISCOLL FOR ADDITIONAL INFORMATION



ACSenvr
ACS Division of Environmental Chemistry



ACS
Chemistry for Life®

NESACS Science Café's

Café	Description	Outreach
1 First Cape Cod (CC) Science Café 2011 celebrating IYC @ Hyannis Golf Club	Cape Cod Water Supply – WHOI, Barnstable County Water Lab	40 including many teachers
2 Second (CC) Science Café- Hyannis Golf Club	Alternative Energy- Prof. Dan Nocera from MIT- Artificial Leaf to convert sunlight into H2 and O2	55 people a number involved in solar
3 Third (CC) Cape Cod Science Café @ Cape Cod Beer Hyannis	Chemistry of Beer @ Cape Cod Beer	60 people chemists & home brewers
4 Science Café- Healthy Children Theme @ Sandwich Public Library Dec. 2011	Sandwich, Barnstable & Dennis Yarmouth K-6 graders-hands on experiments	150 parents & children very busy for several hours with kids 6 deep at our tables
5 CC Science Café @ Centerville Historic Museum	Chemistry of Wine	80 people, 25% NESACS; 75% general public- had to cut off because seating was limited
6 CC Science Café @ CSF	MIT Museum runs the Cambridge Science Festival- week long event	Cancelled on Apr. 15
7 CC Science Café @ BS Yarmouth 10/26/13	Cape Cod Council of the Boy Scouts of America- Wicked Cool Autumn festival	Expect 500 at this event

NSYCC hosts event at Harpoon Brewery

By Emily Lewis, NSYCC Social Chair



One of Harpoon's R&D experts, Jamie, explains the complexity and history of the brewing process to the YCC on Feb. 15th at the facility in Boston's Seaport district.

If Feb 14th is for lovers, then this year, Feb 15th was for beer lovers. Following Valentine's Day, the NSYCC hosted an evening of beer chemistry at the Harpoon Brewery in Boston. Free food was provided by NESACS, and Harpoon provided us with complimentary samples of beer for

Browser window showing the article content. The address bar contains http://www.nesacs.org/section_act/nsycc/nsycc_harpoon.pdf. The browser interface includes navigation buttons, a search bar, and a taskbar at the bottom with icons for various applications and the system clock showing 9:11 AM on 10/1/2013.

Entrepreneurial Events 2013

Event	Description	Outreach
American Association for the Advancement of Science	SCHB-Workshop on "How to Satisfy Your Entrepreneurial Cravings"	25 people—two were thinking about starting their own company
	Met a Rep from the Netherlands Economic Development Commission at AAAS & three months later was asked to give a talk	Gave my AAAS talk to 25 students from the University of Einhoven, Netherlands Via Skype
BMM Conference, Providence, RI	BMM- Indian Cultural Conference wanted to add an entrepreneurial section to their conference- Organized by Mukund Chorgade of NESACS	There were 4 panels with 4-5 speakers per panel- estimate 250 people at this section of the conference
ACS Entrepreneurial Forum- East	NESACS + ACS + SCHB program will be on Nov. 14, 2013 at Nova Biomedical Corp., Waltham MA	We expect 20 invited speakers to talk about their technology, investment needed... We will have chemical angels, venture capitalists... we will have an open networking session after the Forum from 5:00 to 7:30 expect 75-80 total
Industry-University Tech Transfer NESACS http://www.nesacs.org	NESACS/UMA	Working with UM Boston Ventures Group- Bill Brah & Uma Amherst

NESACS WINS CHEMLUMINARY AWARD

The award for an Outstanding Collaboration Between a Local Section and a Division during 2012 was presented to NESACS and the Division of Small Chemical Businesses (SCHB) at the ChemLuminary Ceremony on September 10, 2013, at the ACS national meeting in Indianapolis. The award, which is given by the Committee on Local Section Activities (LSAC) and the Committee on Divisional Activities (DAC), recognizes "outstanding collaboration between an ACS local section and a division."

The specific event that was recognized was the small chemical business symposium held on October 11, 2012, at Nova Biomedical Corp. in Waltham prior to the NESACS Monthly Meeting. According to Jennifer MacLachlan (SCHB Public Relations Chair), "A number of startup stories were presented, including programs involving SBA and conventional lending, the ACS Program for Entrepreneurs, opportunities from the Massachusetts Small Business Development Center, and dilutive and non-dilutive equity funding." The symposium was described in detail in the [December 2012 Nucleus](#).

Jack Driscoll (NESACS Public Relations Chair) and Mukund Chorghade (SCHB Immediate Past Chair) joined MacLachlan in accepting the award on behalf of NESACS and SCHB in the presence of Mike Morello (DAC), Sharon Vercellotti (SCHB Councilor), Joseph Sabol (SCHB Program Chair), Stan Seelig (SCHB Chair), Mitchell Bruce (LSAC Chair), and Tom Barton (2013 ACS Chair-Elect).

The Northeastern Section was also a finalist in four other award categories for its activities based on self-nominations in its annual report for 2012, which was generated by Ruth Tanner, NESACS Chair that year: Outstanding Continuing Public Relations Program of a Local Section (Committee on Public Relations and Communications), Outstanding High School Student Program (Society Committee on Education), Local Section Partnership Award (LSAC), and Outstanding Performance by a Local Section in the Very Large Category with more than 3,200 members (LSAC). The winners in those categories were the Georgia, New York, Indiana, and New York Local Sections, respectively.

The NESACS Continuing Public Relations Program nomination included new social media communications, press releases, Science Cafés, and public outreach events. The nomination for the High School Student Program cited the High School Science Series event at the Museum of Science Boston during National Chemistry Week, the annual "Connections to Chemistry" workshop event for high school teachers, and the Chemistry Olympiad activities. The LSAC/DAC award that was received recognized the partnership of NESACS with SCHB. For the Outstanding Performance nomination, the wide array of NESACS programs, activities, and projects were presented as well as the numerous awards and recognitions received by its members, graduate students, and undergraduate student chapters.



l-r: Mike Morello (DAC), Sharon Vercellotti (SCHB Councilor), Jennifer MacLachlan (SCHB PR Chair), Joseph Sabol (SCHB Program Chair), Stan Seelig (SCHB Chair), Mukund Chorghade (SCHB Immediate Past Chair), Mitchell Bruce (LSAC Chair), Jack Driscoll (NESACS PR Chair), Tom Barton (2013 ACS Chair-Elect).

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Volunteers

- ▶ We are a volunteer group and we are always looking for more volunteers. If you hear about something of interest and want to volunteer just ask us
- ▶ We have a very active younger chemists group who are very active and always looking for new members and programming ideas

Survey & Thanks

- ▶ We want to thank UMA Dartmouth for Hosting this meeting
- ▶ Congratulations to UMA Dartmouth for the opening of their new NMR Facility
- ▶ We would like to thank Madeleine Jacobs for agreeing to take time from her busy schedule to come to our inaugural event
- ▶ Each of you received a survey card with your badge
- ▶ Please fill it out (30 sec) and drop it in the box before you leave
- ▶ Thank you for coming and we hope to see you soon at a future NESACS meeting