

# **N. E. A. C. T. Newsletter**

**New England Association of Chemistry Teachers**

**Volume 61 No. 3**

**February 2007**

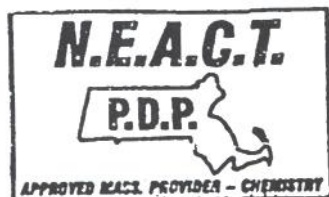
**506th Meeting  
Saturday, March 3, 2007  
Rhode Island College  
Providence, Rhode Island**

## **Green Chemistry**

**Southern Division, Anthony Fascia, Chair**

Massachusetts: 3 PDP

Connecticut: .3 CEU



Rhode Island: .2 PDC



**506th NEACT Meeting  
Saturday, March 3, 2007  
Clarke Science Building, Room 210  
Rhode Island College  
Providence, RI**

8:45 AM Registration/Coffee

9:00 AM Dr. Stanley Barnett  
Professor of Chemical Engineering, URI  
Director, Center for Pollution Prevention  
Associate Director, Innovative Energy Collaborative

"Green Chemistry/Green Engineering-What is it and where is it heading?"

10:15 AM Discussion Break

10:30 AM Dr. Eugene Park  
Associate Research Professor, URI  
Co-director, Center for Pollution Prevention

"Pollution Prevention: Applications of Green Chemistry"

11:45 AM NEACT Business Meeting

12:00 Noon Lunch at Donovan Dining Center, Rhode Island College

**E-mail inquiries: [mr\\_afascia@yahoo.com](mailto:mr_afascia@yahoo.com)  
or Marie Reluga, 860-653-7438**

**Directions to Rhode Island College:** See Web site for further information:

<http://www.ric.edu/>

Follow the signs to the Clarke Science Building on campus.

**From Route 95 Northbound**

Take Exit 21 (Broadway exit); turn left at second traffic light (Atwells Avenue). Follow Atwells Avenue for 1.5 miles to the intersection with Mount Pleasant Avenue. Turn right onto Mount Pleasant Avenue. The College entrance is 1.1 miles ahead on the left.

**From Route 95 Southbound**

Take Exit 21 (Atwells Avenue exit). Turn right onto Atwells Avenue. Continue on Atwells Avenue for 1.5 miles to the intersection with Mount Pleasant Avenue. Turn right onto Mount Pleasant Avenue. The College entrance is 1.1 miles ahead on the left.

## **From the President—**

Dear NEACTers:

At this writing, STILL NO (significant) SNOW!!!!!!! Will we really escape the average snow-fall of 83 inches??????

The Western Division meeting on January 13 was well planned and well attended, thanks to Rayane Moreira guided by Laura Smutnick, past WDC. Lectures were in Cole Hall on the campus of Hampshire College in Amherst, MA.

Shaw Ling Hsu from UMASS, Amherst, spoke on biodegradable polymers. Green chemistry has ventured into producing 100% biodegradable food containers for the 2008 OLYMPICS, joint replacements, heart stents, and mattresses with memory foam.

Tom McCarthy enlightened us on the idea of using of supercritical fluids as a way to manufacture water repellent items such as Gore-Tex, using the lotus leaf analogy.

The afternoon session included two workshops given by Margaret Kerr and Rayane Moreira.

My thanks to all who made the meeting so stimulating.

Hope you all have saved March 3rd. The Southern Division meeting is at Rhode Island College. See details within this newsletter.

May 12th, our Central Division meeting, will be held at Bridgewater State College, the site of Green Chemistry Conference last August. The meeting will revolve around New England Green Chemistry Educators.

The annual meeting will be held on May 12 and recessed to the summer conference. You will get details on elections in the next newsletter. We encourage you to submit names (to Helen O'Keefe and/or Donna Horvath or me) so we can fill the following upcoming vacancies: President Elect, Central Division Chair, Western Division Chair, Recording Secretary, Nominating Committee, Report Editor, Publicity Agent.

WONDERS OF GLASS CONFERENCE is Aug 6-9, 2007, at Saint Joseph College, West Hartford, Ct. MARK YOUR CALENDARS.

Best regards,

Marie Reluga

## 2007 Science History Tour - Scandinavia. Tour Description

Science History Tours' 10<sup>th</sup> anniversary trip is to Scandinavia. It begins at noon on Wednesday June 20<sup>th</sup> at our hotel in the German town of Lubeck, on the Baltic Sea, and ends after breakfast in our hotel in Uppsala, Sweden, on Wednesday July 4<sup>th</sup>.

The tour will begin with three days of visits along Germany's Baltic coast. Then we will take the ferry for a leisurely cruise (with lunch) from Germany to Sweden, heading for the historic University town of Lund for a two-night stay. A visit to Tycho Brahe's island of Ven, with its new museum - a contender for this year's Museum of the Year - off the coast of Sweden, will precede the journey to Copenhagen in Denmark for a three night stay. (Ven was spelled Hven until a Swedish spelling reform in 1906, but the 300 inhabitants of the island kept the old spelling until 1958.) Our route from Sweden will take us over the new Oresund Bridge, one of the longest of its kind in the world, across the Oresund Sound between the two countries. After our stay in Copenhagen, we will go north to see Hamlet's castle of Elsinore before crossing the northern part of the sound from Denmark back into Sweden. Following an overnight stop on beautiful Lake Vattern, in the center of Sweden, our coach will take us to Uppsala, our base for the rest of the trip. Stockholm is only a short train ride away, so we will make visits in both the 'Venice of the North' and the charming old University city of Uppsala. For those interested in extending the trip, a journey to Helsinki or other Baltic cities either by air or by cruise boat would be interesting.

2007 is the 300<sup>th</sup> anniversary of the birth of Linnaeus, so that has inspired the philosophical theme of the 2007 trip - an exploration of 'Natural Kinds' and the ways in which objects can be classified. There will be many celebrations of Linnaeus' anniversary in Sweden. Naturally we will visit his garden in Uppsala and other places that are associated with him but botanists will not have it all their way. Changes in the criteria of classification have been at the root of many of the advances in the sciences, so we will consider ways in which these changes took place.

In northern Germany we will look at several magnificent examples of astronomical clocks. Local astronomer Dr. Reinhold Mewes will help us to understand how the mediaeval mind regarded time. In Copenhagen we will look at both early science and early medicine. One event will be a lecture, illustrating some aspects of temperature measurement, given in the extraordinary place where Ole Romer and Anders Celsius worked. In the fascinating collections of the Copenhagen Medical Museum we can see how identification and classification of diseases developed over the centuries. Also in Copenhagen, modern physics will be an important topic, with a special lecture and guided tour scheduled at the Niels Bohr Institute and Archive. In Stockholm, the Director of the Center for the History of Science will be our host during a visit to the Royal Swedish Academy of Sciences. Here a 'behind-the-scenes' visit will show us objects associated with the chemist Berzelius, and raise the topic of chemical classification, especially since so many elements were discovered in Scandinavia. A wonderful Cabinet of Curiosity, with all its original contents, introduces early museum culture, then a lecture/demonstration on the many and various forms that soap bubbles can take brings us to physical chemistry! Those of you who are interested in the (very reasonably priced) college credit course associated with the tour could start thinking about a project related to some aspect of the tour theme. A reading list will be coming out in due course, but any biography of Linnaeus would be a good start.

As usual, there will be visits of cultural and general historical interest, including one to the Carlsberg Brewery (for our chemical and biochemical edification!) where there are numerous brews to be tested. It was at the Carlsberg Laboratory that Soren Sorenson developed his ideas on pH, so perhaps you should bring pH paper? We will have the usual good meals in interesting restaurants, sampling the local dishes.

The tour-group will meet in Lubeck (also spelled Luebeck) at noon on Wednesday June 20, so please

The tour-group will meet in Lübeck (also spelled Luebeck) at noon on Wednesday, June 20, so please arrange your air travel to Europe accordingly. It is quite common for tour members to arrive in Europe early in order to get over jet lag and possibly pay some visits on their own. Yvonne will be more than happy to give you more information about possible routes and about hotel accommodation for extra nights at the Lübeck or Uppsala hotels.

Lübeck has a small local airport at Blankensee, with services from Dublin by Ryanair, and is about 40 minutes by train away Hamburg, where the international airport is served by many airlines. There is a good train service from all parts of Europe to Luebeck and train travel is simple and efficient. The trip will end in Uppsala after breakfast on Wednesday July 4<sup>th</sup>. The main international airport for Stockholm, Arlanda, lies between Stockholm and Uppsala and access is very easy from Uppsala by both train and a scheduled bus service.

Accommodation will be in comfortable, welcoming hotels where all rooms have private bathrooms. Room-sharing arrangements can be coordinated for those persons who are traveling alone, but would like to share a room to save single room supplements. The single room supplement is at cost. We will travel by luxury coach that will stay with us while we are touring. Inexperienced international travelers will be given any advice that they need. Those traveling alone will find a warm welcome from this congenial and interesting group where it is easy to make friends.

Yvonne has agonized over the pricing of this trip, and has used her best negotiating skills to get good prices at the hotels and restaurants. Food and accommodations in Denmark and Sweden are always expensive but since the recent decline in value of the US dollar has exacerbated the problem, so we must charge a higher price this year. For the 15-day tour (not including air fares) the price will be \$3525 per person in a twin or double room. Those who prefer to reserve a single room would pay the extra cost (single-room supplement) of \$700. Now, if something good happens to the dollar, or if for any reason we find that we are collecting significantly more than we need, we will either adjust the price downwards before collecting the last installment, or make a refund later. (This has happened before.)

If you look around for comparable trips to ours for 2007 you will find them significantly more expensive than this. We think our reputation for 'excellent value' is justified. Our trip is in June, we will be staying in hotels of at least a three-star standard and all visits, lectures, surface transport, breakfasts and at least (on average) one other meal per day will be included. Additional expenditure will be for airfare to and from Europe, the few meals that are not included, personal expenditures such as laundry, drinks other than those provided, and travel insurance.

Sign-up for the trip will start Feb 1<sup>st</sup>, and will continue until all places are filled or until May 1<sup>st</sup> - whichever comes first. For a sign-up package, or further information, please contact Yvonne at the e-mail below.

If you want to see some presentations and information about previous years' trips, please go to Lee's web page at: <http://www.chem.uic.edu/marek/> and click on "History of Science Stuff".

Hoping to see you in Scandinavia!

All best wishes,

Lee Marek Lmarek@aol.com  
Yvonne Twomey ytwomey@mindspring.com

## Call for Nominations - The 2007 Timm Award.

Do you know someone who has made a significant contribution to the teaching of chemistry?  
Let us know.

Contact Laura Smutnick, president-elect, (lsmutnick@tolland.k12.ct.us) to make your nomination for this year's award.

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### Facts about Glass



Window glass and architectural glass is produced by a flotation process where hot molten glass in furnaces reaches about 2950 degrees F. It is poured onto molten tin. As it cools to 1112 degrees F, it forms sheet glass with an extremely even surface (details at the 69th NEACT Summer Conference).



Dmitri Mendeleev spent many hours in a glass factory where his mother worked. He is said to have been greatly influenced by the scientists in this factory.



Glass Art Society's 37th Annual Conference on Transformational Matter is June 7-9, 2007. Register on line at <http://www.glassart.org/>

The David L. Lawrence Convention Center is the world's largest "green" convention center.



Glass is so pervasive in our lives that it is impossible to envision life without it.

## **Flinn Scientific Pays Your Hazardous Materials Shipping Fees!**

To help science teachers afford the chemicals and supplies they need, Flinn Scientific will pay your hazardous materials shipping fees.

The rising costs of hazardous materials shipping fees have been a growing concern of many science teachers. These fees are charged by shipping companies (Federal Express, UPS, etc.) for chemicals classified as hazardous to transport. Order your chemicals from Flinn Scientific and your hazardous materials fees will be paid – saving you money so you can afford the science supplies you really need. Some restrictions may apply.

For more information, please contact Flinn Scientific.

## **Do You Need to Hire a Science Teacher?**

*Free “Job Placement Service”  
available from Flinn Scientific*

The Flinn Scientific Job Placement Center can help you find the “perfect teacher” to fill your job openings.

Place your job opening in the Flinn Scientific Job Placement Center. The sharpest and brightest new science teachers from all over the country will see your job opening. Flinn Scientific has relationships with over 700 universities and colleges that educate 90% of all science teachers. Educators of pre-service teachers at these schools will be sending their students to the Flinn Scientific Job Placement Center to look for new jobs. The Flinn Scientific Job Placement Center has successfully filled hundreds of teaching jobs.

Placing a job opening is so easy! Go to the Flinn Job Placement Center at [www.flinnsci.com](http://www.flinnsci.com) and select “Submit Jobs.” Within minutes your job opening can be posted.

The sooner your job opening is posted, the better your chances of hiring a top-quality science teacher.

**Don’t delay – post your job opening today at:**

**<http://www.flinnsci.com/> Flinn Scientific Job Placement Center**

Flinn Scientific, Inc.  
P.O. Box 219  
Batavia, IL 60510  
1-800-452-1261  
E-mail: [flinn@flinnsci.com](mailto:flinn@flinnsci.com)

**NEACT Membership Application/Renewal 2007-2008**

(Membership year = 7/1-6/30. You are paid through 6/30 of year on address label.)

Check one: New Member \_\_\_\_ Renewal \_\_\_\_

Sponsored member (free for one year if sponsored by a NEACT member)\_\_\_\_\_

(Name of sponsor \_\_\_\_\_)

Name:\_\_\_\_\_ Date:\_\_\_\_\_

Home--Address: \_\_\_\_\_ City/Town: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_(9 digit zip); Use of 9 digit zip code saves \$\$.

Telephone: (\_\_\_\_\_)\_\_\_\_\_ e-mail address: \_\_\_\_\_

( ) Check if new address/tel. no.

(Circle one) You may / may not publish home information in membership directory.

Work--Workplace name: \_\_\_\_\_

Address:\_\_\_\_\_, City:\_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_(9 digit zip), Use of 9 digit zip code can save \$\$.

Telephone: (\_\_\_\_\_)\_\_\_\_\_ ( )Check if new work information

(Circle one) You may / may not publish work information in membership directory.

Notices should be sent to: ( ) Home ( ) Work

I would like the Newsletter sent via \_\_\_\_\_e-mail or \_\_\_\_\_U.S. Postal Service.

Any special notes?  
\_\_\_\_\_  
\_\_\_\_\_

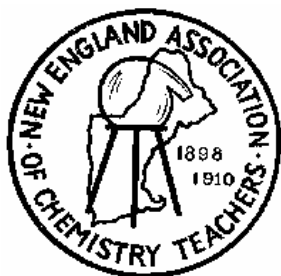
Dues \$25. Check, payable to NEACT, please send to: Jerusha Vogel, NEACT Membership Secretary, 45 Dirksen Drive, Wilton, CT 06897

Membership questions? Jerusha Vogel at: jj@k2sw.com

New England Association of Chemistry Teachers  
Ms Jerusha Vogel  
Membership Secretary  
45 Dirksen Drive  
Wilton, CT 06897

Address correction requested

FIRST CLASS MAIL



### Upcoming Events

May 14, 2007: Bridgewater State College  
Summer Conference: To be announced

Judith A. Douville, Newsletter Editor (for news items only)  
23 Virginia Drive  
Middletown, CT 06457-4826

The Newsletter is published five times during the academic year and is distributed free to NEACT members.