

# NETCHEM NEWS

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## In this issue

National Chemistry Week .....	1
Chemical Technician of 2002 .....	2
From the Chair: .....	3
Chemistry and Art .....	3
AP Chemistry In Decline .....	4
Councilor's Corner .....	5
Announcing SURC – 2002 .....	6
What a Reaction! .....	7
Are You on Our E-mail Distribution List ?....	7

## National Chemistry Week

### "Fourth Grader's Day Celebration of Chemistry" A SALUTE TO OVER 1600 VOLUNTEERS!!!

I have had the privilege of coordinating National Chemistry Week both in 1991 and 2001. And I am more amazed than ever at the quality and commitment of the volunteers that make it happen. For those who are not familiar with the program, picture a room of 1339 Fourth Graders, 44 teachers and a pack of parents. OK they aren't all in the room at the same session, maybe only 330 students, teachers and parents each session, with at most two sessions overlapping. In 1991 when the program was being considered, it was already clear that an amazing and fast paced program



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(Continued from page 1)

would be necessary to entertain and teach fourth graders for 3 hours. But how could we keep them on schedule and safe! We decided that each group of 9-13 students would need it's own escort to make the experience rewarding for everyone. But how would we get folks to volunteer? Who would take time out of their work day to prepare and present demonstrations or escort kids??? It turns out YOU did!!! You said "YES"!! Every time! Every chance! Every year!!!

Even this year, when we are all working double time, responsible for more at home, at work and in every aspect of our lives. I know articles like this play no role in motivating you, at best it is a very impersonal way of thanking you! But I hope to remind you of the real thanks we all get from the kids and the teachers. Take some time to look at the local section website, <http://membership.acs.org/N/NETenn/meetings.html> in the next month or so and check out some of the pictures our volunteers took and remember the smiles, the wonder, and the amazement.....it is like watching a 4 year old get their first glimpse of the lit tree on Christmas morning.

I would also like to like to give a special thanks to the 2001 committee leaders, Crystal Kendrick, Ned Moore, Renee Niziurski-Mann, Debbie Tindall, Bill Tindall and Matthew Wood, and our main financial sponsor, Eastman Chemical Company. All of whom, in combination, made this event possible!



## Chemical Technician of 2002

### Call for Nominations

The Northeast Tennessee Section of the American Chemical Society will present awards of \$250 and a plaque of achievement to an outstanding Chemical Technician\* within the Section's geographical territory. These awards will be made at the Annual Awards Meeting in April 2002.

Nominations, including a seconding letter not to exceed a total of six pages, can address all or some of the following criteria:

Communication skills	Reliability
Professional activities	Teamwork
Level of contribution	Leadership
Degree of independence	Technical skills
Safety & housekeeping	
Publications & presentations	

### Send nominations with a seconding letter by **February 8, 2002** to

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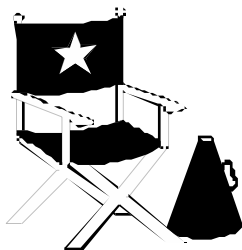
\*A Chemical Technician has completed a two-year chemistry curriculum leading to an Associate Degree, or the equivalent course work in a Baccalaureate Program, or the equivalent knowledge gained by experience. The Chemical Laboratory Technician prima-

(Continued from page 2)

rily conducts experimentation to help solve chemical problems and/or discover new chemical knowledge. The Chemical Process Technician is mostly involved with manufacturing and processing operations of a chemical nature. Nominations of both types of Technicians are encouraged.

### From the Chair:

Step right up. Please! My favorite part this past year as your Northeast Tennessee Section chair has been seeing so many different faces involved in volunteer positions of leadership and service in our local section. As I said before, after going to the National ACS meeting in August, I consider our section to be one of the best in its size class. There still are some people who do much more than their share and I want to thank each of you for your help this year. I hope you know how much you each mean to our section; especially when you make a difference in others' careers and lives. Please come to the January meeting where we can give you some brief recognition for your service.



We still need more volunteers to step up and take on a responsibility, make new friends, and gamble on doing something that matters. Make the most of the opportunities you have and do your best! Whether it is calling people to let them know about the next meeting or writing an article for the local trade newsletter, don't wait for someone to ask you to help. Continue to do your part. You may not be able to attend any or all of the meetings; you may not know anyone, but if you want to help in any capacity, or need help, please call, email, write me a letter, or somehow let me know. Our membership needs you.

Many changes have happened to us all in 2001. This year seemed to bring more changes than any of the previous ones. Many of you have told me that your retirement is busier than your chemistry professions. Many of you are starting new careers or at least changing responsibilities. You have come up with some great ideas for ways to spend our section's resources to help improve local education. You have come up with other great ideas for local grants for demonstrations. More than all the ideas we have, more than all the financial resources at our fingertips, more than all the professional support staff at our national American Chemical Society, more than all the well-educated technical speakers, we need YOU. One of the main reasons for our success in the past has been our diversified volunteer group, which comes together and serves our local membership. Chemistry is already a vital part of each of our lives! Each person in our local section plays a part in helping show those around us (especially our families, friends, coworkers, and all children) what chemistry means to us. Please commit this upcoming week and year to volunteer some time to help those around you learn about chemistry.

Thanks again for such a wonderful year.

Best Regards, your 2001 chair, Craig Lott.

### **Chemistry and Art Continues beyond National Chemistry Week both at Home and in the Classroom**

Did you know Elmer's glue can be used to make a silly putty – like polymer? Did you know a black pen and a napkin are perfect for demonstrating chromatography and art? Did you know tie-dyeing isn't just for reformed hippies? Recipe's are available for home or in-class use for these and other fun experiments in real chemistry. Contact Craig Lott.

## AP Chemistry In Decline: Section Initiative Seeks to Reverse Trend

Of the section's more than 50 high schools only eight now offer advanced placement (AP) chemistry. Several programs were canceled in the past two years due to declining enrollment and lack of administration support. Just as research stimulates and motivates university faculty, these AP programs do the same for the AP teachers and their students which benefits the overall science programs at schools with AP classes.

The section has launched an initiative aimed at reversing this trend. During National Chemistry Week the section awarded substantial cash grants for laboratory equipment to AP chemistry programs in the section's schools. These grants will enable teachers to offer new college level laboratory experiments

to their classes. VWR joined this effort and provided substantial discounts on equipment purchased as part of this program. These discounts made it possible for one school to purchase an analytical balance, which is the first analytical balance in a Section school.

It was found that the AP teachers did not know one another. A dinner was held for them so they could become acquainted with one another and some of the Section officers. The teachers told us at this dinner that the attention they gained from receiving these awards greatly helped in their continuing battle with their administrations to preserve their AP program. The grant application was done by email so that the teachers were encouraged to become comfortable with this means of communication. Many of the teachers now communicate with one another, and Section members, by email.

A school liaison program has been started.



### *People involved in the AP Chemistry Initiative*

*Front row: Mike Pearce, Sue Odell's genie; Vanessa Wotring, Gerri St. Clair's genie; Trudy Dayton, Sarah Sawyer's co-genie; Gerri St. Clair; Sue Odell; Paula Moody; Sarah Sawyers; and Marsha Ottem.*

*Back row: Max Tyrell, VWR genie to the program; Shawn Dougherty; Bill Tindall; Kent Morrill, Donna Thompson's genie; Donna Thompson; Kevin Edgar; and Susan Alderson.*

*Not pictured are Terry Vencil and her genies, Van Daniel and Ralph Bandy; John Sanders, Paula Moody's genie; and Craig Lott, Sarah Sawyer's co-genie.*

*Color version available in the electronic edition at <http://membership.acs.org/n/netenn/>*

This program provides the opportunity for any Section member to help the science program in their local school. The purpose of the liaison program is to help teachers gain access to resources of the local Section. The liaison is a Section member who becomes familiar with the needs of a teacher and then identifies help the Section may provide to meet a need. Examples of help provided include giving a "guest lecture" or demonstration to a chemistry class, locating surplus lab equipment that might be donated, or simply providing information on specific chemistry topics. If someone would come forward to lead this program it could be expanded to more schools.

Next year we hope to offer the opportunity for selected students to do a day of college level experiments at local college or university. We will be looking for volunteers to help with the labs.

No doubt there are other ways the Section might reverse the declining interest in chemistry. If you want to lead an effort contact Craig Lott, Bill Tindall or any Section officer.

by Bill Tindall

### Councilor's Corner

Chicago ACS Meeting  
August 2001  
by Kevin Edgar  
NETS-ACS Councilor



The second and last meeting of Dr. Pavlath's presidency was, predictably, an interesting one. As usual, I represented you at the Council meeting and at the two committees on which I serve as your Councilor. Also, Cellulose Division activities occupied much of my time (but these will not be reported here). Chicago is a unique site for a national meeting; a large and in many ways a beautiful city, with most of the conference hotels located in the attractive area near the Navy Pier. The

only unfortunate aspect is that the mammoth Convention Center, location of most of the technical program as well as many other meetings, is fully three miles to the south, via congested city streets. As one might imagine, this causes certain difficulties for those with, say, a 9:30 technical talk they are very excited about hearing, followed by a meeting at a hotel near the Navy Pier at 10 am. At times it would have been handy to be able to "beam up".

One committee on which I represent you is the Society Committee on Education. It is currently quite active in addressing chemistry/science educational improvement across the spectrum, from grade school to graduate education. There is a new ACS office of Graduate Education, headed by Marjorie Caserio. They are currently engaged in getting lots of input as to how graduate education can be improved, what are best practices, and the like. They are conducting symposia and holding meetings at national and regional ACS meetings across the country. If you have input, let me know and I'll make sure it gets to the right people. There is a great deal of concern at the undergraduate level that the price of journals, books and access to Scifinder and similar products is causing chemistry libraries to drop these products, harming the access of chemistry students to the literature. Both SOCED and the Committee on Professional Training are exploring ways to support chemistry departments and help to alleviate these problems. There was considerable discussion about proposals to support a broad-based curriculum switch in high schools to a more logical progression of science courses, from physics to chemistry to biology. In the end SOCED decided not to support any particular curriculum order over any other. There was too much concern that a physics course early in a student's exposure to science would scare that student away from science. Finally, a proposal for a significant effort on improving the status of women in

chemistry will be made to the board this year. The proposed thrusts include improved education, aid to entry level professionals, and assistance with mid-career transitions. This is spearheaded by the Women's Chemist Committee, which is seeking substantial funding from ACS.

The other committee on which I represent you is the Committee on Chemical Safety, as a subcommittee chair. The committee is heavily involved in publishing safety books and booklets (for example, the popular booklet "Safety in the Academic Chemical Laboratory", which is currently being revised), and in doing safety reviews of the publications of other ACS and non-ACS organizations. The committee is just embarking on new editions of "Safety for Small Chemical Businesses", and "Less is Better" (on lab waste management). The committee has helped write safety guidelines for NCW, that are now included in the NCW manual that goes out to coordinators. The new contact lens guidelines promulgated by the committee several years ago (basically, that under most circumstances contacts are perfectly ok to wear in the lab) have now been accepted by NIOSH and published by them. The committee website, easily accessed from chemistry.org, is a wealth of chemical safety information and links to other sources.

The Council meeting was relatively tame this time, and run with great precision as usual by Dr. Pavlath in spite of the fact he had spent the entire previous night in the ER due to an ailment that fortunately did not prove too serious. There was another attempt to get urgent action on a petition to increase committee size, this time of the Society committees (including SOCED); it was withdrawn as an urgent petition and instead will await "normal" action in Orlando in the spring. Two petitions passed overwhelmingly; one to adjust meeting registration fees so that foreign non-members pay the same fee as domestic

non-members (they had been getting a break), and one to allow those with associate degrees in chemistry to become ACS members. Both were worthy, in my view. Elsa Reichmanis and William Carroll are the candidates for ACS president-elect; both are excellent communicators and very capable people. Get in touch with me if you'd like to discuss the candidates. The electronic survey that all of you should have had the opportunity to participate in was reviewed at the meeting and will be summarized in future ACS publications (probably in C&EN, for example). There appeared to be some clear feedback about the Society products that are of value to the members (C&EN for example scored very well) and those that are less valuable. This seems to be a very effective tool and the results will be used to drive Society initiatives and decision-making. The Society is working hard to permit electronic balloting in future national elections. Procedures are being worked out and the necessary by-law changes are being drafted. The weak stock market has had an impact on the Society; it will lose about \$8M this year, mostly due to investment losses. However it is working from a very strong base and so is still fiscally quite sound.

## **Announcing SURC – 2002**

Welcome to the 34<sup>th</sup> annual Southeast Regional ACS Undergraduate Research Conference at East Tennessee State University in Johnson City, TN. The conference will be held from Thursday, April 4<sup>th</sup>, through Saturday, April 6<sup>th</sup>, 2002. We are excited to have Dr. Jocelyn Elders, the former U.S. Surgeon General under President Clinton, speaking at ETSU during our conference, and we hope that this will help stimulate interest and participation in SURC 2002. We look forward to bringing your undergraduate research students to East Tennessee State University to talk about their work and present their findings.

## What a Reaction!

### *1300 Fourth Grade Students + Chemistry!!*

For the eleventh consecutive year, the Northeast Tennessee / Southwest Virginia Section of the American Chemical Society welcomed over 1300 fourth graders from 22 area schools to a Celebration of Chemistry for Fourth Graders. This event, which is part of the local celebration of National Chemistry Week, was held on Wednesday and Thursday, November 7th and 8th at the Eastman Employee Center on Wilcox Drive in Kingsport.

During the three hour sessions students got a chance to see and participate in demonstrations on Fire, Colorful Dyes, Fluorescence, Electricity, Oscillating Reactions, and pH. In addition, a number of local vendors, including the Hands On Museum in Johnson City and the American Museum of Science and Energy in Oak Ridge, set up booths offering students a vivid introduction to science.

Alex Gardner, a freshman at the University of the Virginia at Wise, still vividly remembers his visit to the second annual "Celebration of Chemistry for Fourth Graders" in November 1992. He was ten, when his teacher, Mr. Hal Gardner, organized a school trip to the event for Alex and his fellow fourth graders at Hiltons Elementary School in Scott County. "I mainly remember how amazed I was by the many aspects of chemistry that were revealed to me," says Alex. "There were many different stations with very many interesting experiments."

Alex plans to major in Chemistry, as he



pursues his long-term goal of becoming a Pediatrician. When asked if "Chemistry for Fourth Graders" had affected his career plans, he replied, "Although I was only ten years old, I feel this event did have an influence on my career choice. It was basically my first

introduction to the world of Chemistry. I was able to see that Chemistry is not only a vital part of our lives, but it can also be fun." Alex, whose parents, Tony and Jennie Gardner, live in Gate City, Virginia, has no recommendations for improving the event. He thinks it was "a very good introduction into the aspects of Chemistry."

His fourth grade teacher, Mr. Hal Gardner, a distant relative, still teaches at Hiltons Elementary. Mr. Gardner has taken students to "Chemistry for Fourth Graders" since the first one in 1990. He has some very positive comments about the event. "Chemistry for Fourth Graders is one of the best programs anyone could have. It gives the students interesting and hands-on activities. Many of my students come back to school with a newly acquired interest in science and chemistry that follows them all the way through school."

Prepared as Press Release for NCW by Ned Moore.



**Surf the Northesast Tennessee  
Section of the ACS website!!**

<http://membership.acs.org/N/NETENN/>

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