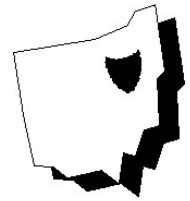




# UNIT OPERATIONS

OFFICIAL NEWSLETTER OF THE AKRON SECTION AICHE



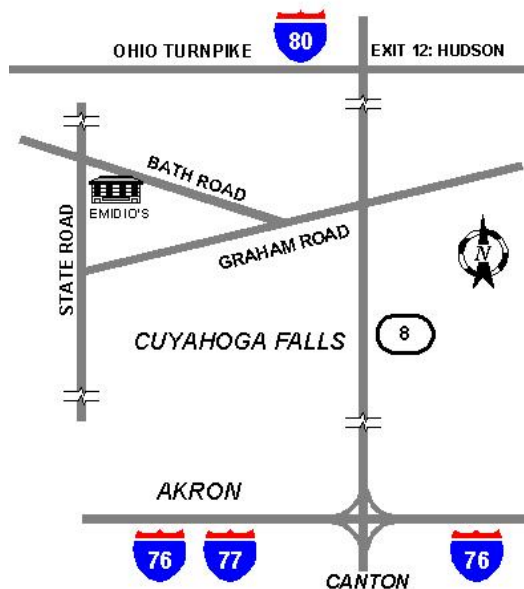
February 2003

## FEBRUARY MEETING / E-WEEK BANQUET

### “Celebration of 100 Years of Powered Flight - An Evening with the Wright Brothers”

**Deadline for reservations is Saturday February 8<sup>th</sup>, 2003**

- DATE** Thursday, February 20, 2003
- LOCATION** Emidio’s Banquet Center  
48 E. Bath Road (at State Road)
- SCHEDULE** 5:30 - Social Hour  
6:30 - Dinner & Program
- TOPIC** “Celebration of 100 Years of Powered Flight – An Evening with the Wright Brothers”
- SPEAKERS** Tom Benson (Wilbur), NASA Glenn Research Center  
Roger Storm (Orville), Chairman, Chemist Dept., Fairview Park High School
- COST** \$25, Students \$20 (**No Ticket Sales at the Door**)
- TICKETS** For ticket information, call or fax Jan Ruthenburg at (330)836-5397 or email at [ab2887204@aol.com](mailto:ab2887204@aol.com). Print out an order form at: [Ticket Order Form](#).



# Local Science Fairs - Volunteers Needed

## Akron Science and Technology Expo

**Date** Saturday March 1<sup>st</sup>, 2003  
**Location** Central-Hower High School  
**Volunteer** Judges are needed! Judges will meet at 7:30 AM over complimentary coffee and donuts for a brief instructional meeting. Judges will also be given a complimentary lunch and are invited to stay for the Awards ceremony.  
**Contact** If you'd like to volunteer, please clip and return the attached form, or contact Dr. Kathleen Sparrow by email at: [ksparrow@akron.k12.oh.us](mailto:ksparrow@akron.k12.oh.us), or by phone at: (330)761-3117

-----Clip Here-----

ASTE Judging registration

Print your name: \_\_\_\_\_

Preferred mailing address: \_\_\_\_\_

Judging category(ies): \_\_\_\_\_

Mail to: Dr. Kathleen Sparrow  
Science Coordinator, Akron Public Schools  
Conrad C. Ott Staff Development Center  
65 Steiner Ave.  
Akron, OH 44301

-----Clip Here-----

## Western Reserve District Science Day

**Date** Saturday March 15<sup>th</sup>, 2003  
**Location** University of Akron, Gardner Student Center Theatre  
**Volunteer** Judges needed! Judges do not need to register, and will meet at 7:30 AM over complimentary coffee and donuts for a brief instructional meeting in the Gardner Student Center Theatre. Judging is usually completed by noon and a complimentary lunch will be served thereafter. Judges are also welcome to stay to attend the keynote speech and the award presentations  
**Contact** Contact Dr. Ali Dhinojwala at 330-972-7536.

## Akron Regional Science Olympiad

**Date** Saturday March 22nd, 2003  
**Location** University of Akron  
**Information** This is a competition that requires a team of students to compete in many various competitions in the areas of science and technology. There are 52 different events with 26 being run for the Middle School students and 26 for the High School students. Many of the events are highly interactive ranging from robots and bottle rockets to laboratory analysis and, of course, a few written tests. There were 46 different schools represented last year from 9 different counties with almost 700 students competing. Teams performing well can advance to the state (in April) and even national (in May) competitions.  
**Contact** Please contact the Jeff Shane by email at [jshane@uakron.edu](mailto:jshane@uakron.edu) or by phone at (330)666-4155 (ext. 5446).  
**Website** Visit the national website at [www.soinc.org](http://www.soinc.org). The event's website can be found at: [www3.uakron.edu/biology/bagatto/olympiad/index.html](http://www3.uakron.edu/biology/bagatto/olympiad/index.html).

# January's Meeting in Review

## Color Matching & Small Scale Manufacturing

A group of about 17 people toured A. Schulman in Sharon Center on January 16<sup>th</sup>. The tour included a brief slide show presentation. A. Schulman is an international supplier of high performance plastic compounds with headquarters in Akron. At the color facility in Wadsworth, the lab can do over 1500 color matches a year. A color match involves matching a recipe to a color that the customer sends in. The color to be matched may be from a magazine ad, article of clothing, etc.

Schulman matches the color using proprietary color matching software and trial runs on bench scale equipment. The software gives them a starting recipe for the color. Then a sample is prepared and its color properties measured. After comparing the test sample to the required sample, the recipe is altered. This sequence repeats until the match is made.

The bench scale equipment we saw was single screw extruder, twin screw extruder, mixer and a small rotational molder. They were extruding blue and black polymers for the tour. The polymers are loaded with color concentrate in the extruder and then pelletized. This product is sometimes called a masterbatch. Then the customer uses a very small amount of the masterbatch for coloring their products.

They did a color match demonstration from a bright yellow paper from someone on the tour. The paper was placed on the computer and analyzed for color properties using a spectrophotometer. Then the program gave back a sample color from their color library. The library sample exactly matched the test paper. The group was impressed with the match.

We also saw the different effects on the perceived color of an object from different lighting mediums. The lab machine produced light similar to natural light, fluorescent light and night light. A "green" tie varied in color from gray to green to brown depending on the light. This phenomenon is called metamerism. Their color matching method accounts for this effect.

After the excellent tour, the group had dinner at the Galaxy restaurant.

For more information click on the picture below to visit A. Schulman's website at: [www.aschulman.com](http://www.aschulman.com)



**A. Schulman**  
COMPOUNDING YOUR SUCCESS™

## And Finally, Did You Know.....

.....that all of the information presented in this newsletter is also available at the Akron AIChE Section's website. That website can be found at: <http://members.core.com/~aiche/>. In addition to a new archive of the "Unit Operations" newsletter, we also keep up-to-date links for all the officers as well as new job opportunities as they become available. Our webmaster, Kaylynn Johnston, goes out of her way to keep the site current, so check it out and be sure to let us know if there's anything going on.

# AICHE LOCAL SECTION EXECUTIVE COMMITTEE

<i>Position</i>	<i>Name</i>	<i>Phone</i>	<i>E-mail</i>
Chair	Dan Jones	(330) 338-8029	<a href="mailto:djones1@neo.rr.com">djones1@neo.rr.com</a>
Vice-Chair	Tom Flynn	(330) 829-7622	<a href="mailto:tom.j.flynn@mcdermott.com">tom.j.flynn@mcdermott.com</a>
Secretary & Newsletter	Tony Frank	(330) 479-7068	<a href="mailto:afrank@mapllc.com">afrank@mapllc.com</a>
Treasurer & E-week Rep.	Ann Corey	(330) 860-2370	<a href="mailto:amcorey@babcock.com">amcorey@babcock.com</a>
Government Interaction	Vacant		
Public Relations	Vacant		
Awards	Joanne Compton	(330) 255-6374	<a href="mailto:comptonj@gojo.com">comptonj@gojo.com</a>
Webmaster & Membership	Kaylynn Johnston	(330) 796-7594	<a href="mailto:ksjohnston@goodyear.com">ksjohnston@goodyear.com</a>
ACCESS Representative	Joe Feil		<a href="mailto:jnfeil@aol.com">jnfeil@aol.com</a>
ACCESS Representative	Walt Ruthenburg		<a href="mailto:wruthenburg@yahoo.com">wruthenburg@yahoo.com</a>

## AIChE Web Sites

Local: <http://members.core.com/~aiche/>

National: <http://www.aiche.org/>

AIChE Cleveland: <http://ctsc.org/aichecle>



### **AKRON SECTION AIChE**

c/o [Tony Frank](#)

Marathon Ashland Petroleum LLC

2408 W. Gambinus Rd. SW

Canton, OH 44706

Address Correction Requested