



Chemistry Outlook

An Activity of
The Committee on Chemistry in the Two-Year Colleges
Division of Chemical Education
American Chemical Society



Bill Haley, 2003 Chair

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Notes From The Chair

Bill Haley
San Antonio College
San Antonio, TX 78212-4201

Those who were able to attend the 162nd Conference (Southern) in New Orleans on March 21 and 22 had a great time. Tom Gruber, the conference chair, is to be commended for the excellent speakers and workshops. Tom also set up a poster session for the presentation of undergraduate research reports. The presenters were students at Turtle Mountain Community College and their reports dealt with measurements of ascorbic acid content in traditional Native American foods, extraction and isolation and analysis of plant pigments in plants used by American Indians in North Dakota, and a comparison of different acid base indicators including plant pigment extracts. Their teacher, Charmaine Disrud, accompanied the students to the conference. Charmaine has been a member of 2YC₃ for a number of years.

Our conference schedule will have the next two conferences in the Southern region. The 163rd Conference at Auburn University July 27-31, 2003 will be jointly held with CHEM Ed 2003 and we will have a one-half day symposium dealing with the interface between the High School and the Community College. The 164th Conference will be chaired by Wheeler Conover and will be held at Elizabethtown Community College in Elizabethtown Kentucky. I would urge members in the Southern Region to recruit more members and also to attend one or both of these conferences. Travel money is tight all over the country but carpooling to a regional conference can reduce costs and give you the chance to pick up some great ideas to use in teaching your courses. The 169th will be held in association with the Southeast Regional meeting of the American Chemical Society in the Fall of 2004.

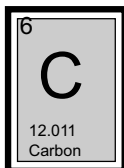
The 165th conference will be held in the Eastern Region at Middlesex Community College in Lowell, Massachusetts, November 14 and 15, 2003. Planning is going on right now involving the neighboring Universities in preparing the program. Again I would urge our Eastern Region members to put this conference on your calendar.

Finally I would like to welcome 28 new members to 2YC₃ from colleges serving Native American students around the United States. We are looking forward to having you participate with us in future conferences. This is a great organization and will only get better with more members. The American Chemical Society Office of Diversity supported this project.

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Conference Calendar

2003-2004 Academic Year

163rd Conference (Southern) ChemEd 2003

<http://www.chemed.auburn.edu>
July 27-31, 2003 Auburn University
Auburn, AL
Contact Carol White
Email: white@aati.edu

164th Conference (Southern)

October 17-18, 2003 Elizabethtown Community College
Elizabethtown, KY
Contact Wheeler Conover
Email: wheeler.conover@kctcs.net

165th Conference (Eastern)

November 14-15, 2003 Middlesex Community College
Lowell, MA
Contact Dotty Stumpf
Email: stumpfd@middlesex.cc.ma.us

Future Conferences planned to coincide with:

March 26-27, 2004 ACS, Anaheim, CA
July 18-22, 2004 BCCE, Iowa State U., IA

In the first issue of the Chemistry Outlook for 2003 there was a call for applications for the Chair-elect 2005 position and the Membership Chair position for 2004. Please consider offering your services to the organization in one of these capacities.

In addition, also in the first issue there was a proposal by Ed Thall of Florida Community College Jacksonville to make our website an even stronger web resource for college faculty. Please contact Ed if you think this is a worthy project. Your input is vital in determining if this organization will move in this direction. Ed can be reached by email at: ethall@fccj.org



Thanks to Tom Gruber, program chair, and his wife the 162nd Conference in New Orleans was a success



Our 2YC₃ chair, Bill Haley, presented John Amend and Dale Hammond with plaques during the banquet



Jay Bardole spoke about classroom assessment at the conference.

2003 COCTYC AND SUPPORT STAFF
Division of Chemical Education, Inc
American Chemical Society
2003 Roster of Committee Members

Chair

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275 Swamp Road, Newtown, PA 18940
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Immediate Past Chair

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16101 Greenwood Ave North, Shoreline, WA 98133
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Past Chairs (Members of COCTYC)

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Home: (701) 255-0280 Email: Frank.Koch@bsc.nodak.edu

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26000 SE Stark St., Gresham, OR 97030
Office: (503) 491-7361 Fax: (503) 491-7482
Home: (503) 665-6353 Email: bolestar@mhcc.edu

2YC₃ World Wide Web Page

URL: <http://2yc3.vinu.edu/>, Jay Bardole, WebMaster

2YC₃/Division of Chemical Education Joint Membership Form

This is a special offer for 2YC₃ members who are not already members of the Division of Chemical Education. The dues for 2YC₃ are \$15.00 and the dues for the Division of Chemical Education are \$20.00. If you are not now a member of the Division of Chemical Education, you can join the Division and renew your membership with 2YC₃ for only \$30.00, a savings of \$5.00. Renew my 2YC₃ membership ____ I wish to join DivCHED as: ____ a Member (ACS Members only) ____ an Affiliate (non ACS Members)*

*affiliates have all membership privileges except voting and holding elective office

Your Name: _____

Home Address: _____
Street City, State Zip Code

Work Address: _____
Street City, State Zip Code

College Phone: _____ Email: _____

Send 2YC₃ Newsletter and CHED Newsletter to Home _____ Work _____

Send ACS Member Form Yes _____ No _____

2YC₃ Membership Information: Are you a
_____ Two-Year College Teacher? _____ Four-Year College Teacher?

_____ High School Teacher? _____ Other

Please send your check, payable to 2YC₃, for \$15 (2YC₃ only) or \$30 (joint membership) to: Dolores C. Aquino, San Jacinto College Central, 8060 Spencer Highway, Pasadena, TX 77501-2007

**163nd Conference
July 27-31, 2003
ChemEd 2003
Auburn University
Auburn, Alabama**

The final program has not yet been decided but will include the following. For the latest information, go to <http://www.chemed.auburn.edu>.

The 2YC₃ contact person is Carol White, email: white@aati.edu

- * **Frieson Lecture**
- * **Hands-on Workshops**
- * **Chemical Demonstrations**
- * **Symposia (*for a description of the Symposia go to the web*)**
- * **Flinn AP/IB**
- * **New Teacher**
- * **Middle School**
- * **Generations (Old & New teachers)**
- * **Technology in Chemistry**
- * **The High School and Two Year College Interface**
- * **College Chemistry Expectations**
- * **Chemistry Outreach through traveling van projects**

- * **Contributed Papers**
- * **Vendor Exhibits**
- * **Educational Tours**
- * **ChemEd Antique Roadshow**
- * **Mole Breakfast**
- * **Family Activities**
- * **Social Activities**
- * **Trading Post/CD**
- * **Poster Session**
- * **Irwin Talesnick Signature Demonstration Series**

- * **Workshops will be held throughout the conference, BUT the concentration of them will be held on the first day of the conference (Sunday, July 27) and the last full day (Wednesday, July 30).**
- * **The last day of the conference ends at noon to give participants more time to travel home.**
- * **The New Irwin Talesnick Signature Demonstration Series is held in honor of Irwin Talesnick's enormous contributions to the ChemEd conferences.**

The High School and Two-Year-College Interface

This session is sponsored by the Two-Year College Chemistry Consortium (2YC₃), a component of the American Chemical Society's Division of Chemical Education.

A vast number of high school students choose to take one or two years of their college chemistry requirements at community/junior colleges throughout the nation. It is important to develop lines of communication between high school and two-year college chemistry teachers to improve their success. Both groups of teachers are interested in improving students' appreciation for chemistry and their understanding of chemical concepts and applications. In addition, both groups want them to be successful as they transfer to four-year institutions. Topics will include: science standards and the impact on student success in transfer, outreach programs, college chemistry at the high schools, how we can help each other achieve common goals, and any other issues/topics where improved communication between our two groups would benefit each other.

Several 2YC₃ members are presenting at the conference in addition to the above session. **Please check the web for a list of presenters and their topic.**

Conference Registration

PART 1:

- * Go to the conference registration form and complete the required information. All registration must be done online.
- * Registration fees can be paid by credit card on-line, or by check or money order.
- * After submitting your registration form, you will automatically receive an **email receipt** and confirmation number for your records. Keep the confirmation number handy as you will need it for Parts 2 and 3 of registration.

If paying by check or money order, please send a copy of the **email receipt** with your payment to:

**ChemEd 2003
108 Tichenor Hall
Auburn University, AL 36849**

The following is a list of Conference - Registration prices

Attending two or more days

	Principal Registrant	Participating Spouse*	Retired/Unemployed	Student
Early Bird (Now-April 25)	\$135	\$100	\$60	\$50
Regular (April 26- May 25)	\$150	\$115	\$75	\$65
Late (May 26- July 18)	\$165	\$130	\$90	\$80
On-site (After July 18)	\$185	\$150	\$110	\$100

* Non-participating spouses will not be charged. Non-participating Spouses & Children can attend Appetizer Social, Ice-cream Social and Wine & Cheese Social and Antique Roadshow. You must be a Participating Spouse to attend sessions or workshops.

One Day Special

(if you are only attending the conference for a single day)

Early Bird (Now-April 25)	\$50
Regular (April 26- May 25)	\$60
Late (May 26- July 18)	\$75
On-site (After July 18)	\$90

Conference Housing

PART 2

In order to access the conference housing form, you will be asked to provide your registration confirmation number from Part 1. Organized conference housing will involve three choices:

- * Auburn University Hotel and Conference Center
- * The Commons (deluxe dorms off campus)
- * Campus dorms

Events/Workshops

PART 3

Types of events you can order tickets on the Special Events form:

- * Tours
- * Ticketed and paid workshops
- * Mole-a-thon Fun Run
- * Mole Breakfast
- * Conference T-shirts and golf shirts
- * Additional tickets for the Wednesday night BBQ

(note: each paid registrant will receive a ticket to the BBQ – additional attending family members will need to purchase a ticket)

In order to access this form, you will be asked to provide your registration confirmation number from Part 1.

More pictures from the 162 nd conference in New Orleans!



**164th 2YC₃ Conference,
Friday/Saturday October 17-18, 2003.
Elizabethtown, Kentucky**

You are invited to Elizabethtown Community College for the 164th 2YC₃ Conference, Friday/Saturday October 17-18. Elizabethtown, Kentucky is centrally located within 44 miles of Louisville to the North, 75 miles of Lexington to the Northeast, and 131 miles of Nashville to the South and is located at the intersection of three major highways - Interstate 65, Bluegrass Parkway, and the Western Kentucky Parkway. ECC is a part of the Kentucky Community and Technical College System, with a goal to be the best two-year college system in the country by 2020.

Nearby are several distilleries that produce some of the country's finest liquors, Abraham Lincoln's birthplace, Bernheim Forest, camping, and My Old Kentucky Home. Elizabethtown is home to fourteen motels with reasonable prices and nearly fifty restaurants. This town of 20,000 is served by the Louisville International Airport, with all major airlines serving the area.

We will give you an opportunity to find out "How Chemistry Education Pays" during the conference. ECC has recently opened a new science building, which will be available for tours. For further information about Elizabethtown, please visit the website:

www.elizabethtownky.org

Local Arrangements Chair:

Sue Ballard
Elizabethtown CC
600 College Street Rd.
Elizabethtown, KY 42701
(877) 2GO-2ECC
sue.ballard@kctcs.edu

Program Chair:

Wheeler Conover
Southeast CC
700 College Rd.
Cumberland, KY 40823
(888) 274-SECC
wheeler.conover@kctcs.edu

You may submit proposals for talks during the conference via e-mail or hard copy until JUNE 15, 2003. Further information, including registration, will be available later this summer.

Please check the 2YC₃ Web site, <http://2yc3.vinu.edu/>, for current information on the conference!

CALL FOR PAPERS

Two-Year College Chemistry Consortium 165th 2YC₃ Conference

If You Are What You Eat, What Are You?

Integrating Food Chemistry, Health, and Technology

November 14-15, 2003

Jointly Sponsored by
University of Massachusetts, Lowell
New England Association of Chemistry Teachers
Middlesex Community College

We look forward to welcoming all of our colleagues from around the country to the 165th conference, held at our Lowell Campus in the heart of the historic city of Lowell, Massachusetts.

As always, this conference is about how our students emerge engaged, excited, and chemically literate. We know that making chemistry up close and personal is the best way to engage students. What could be of greater interest to students than food? (Don't answer that.)

The topic for this conference, the Chemistry of Food, is a natural outgrowth of recent advances in genetic engineering (GMOs), radiation physics (food irradiation), military provisioning, space exploration, the 'Green Revolution', and public policy. Leading edge research at nearby universities such as the U of Lowell, Harvard, MIT, and Tufts provides excellent resources for these topics. We are already planning tours of the nuclear reactor at the University of Lowell and of the Natick Labs. which prepare rations for every branch of the military.

Lowell itself is a destination city: the birthplace of the Industrial Revolution, it is just 20 miles northwest of Boston and an hour from Maine's rocky coast.

We invite you to submit panels, papers, and workshops. Topics and areas include but are not limited to:

- * Interdisciplinary
- * Hybrid and On-line courses
- * Collaborative Learning
- * Problem Based Learning
 - o GMOs
 - o Irradiation
 - o Organic Food
 - o Public Policy

Please submit abstracts (200-300 words) to program chair:

Dorothy Stump
Middlesex Community College, Springs Road, Bedford, MA 01730
Phone: 781-280-3863
email:stumpfd@Middlesex.cc.ma.us

For up-to-date information on this conference, please go to the 2YC₃ web site, <http://2yc3.vinu.edu/>.

Making the Two-year College Chemistry Survey a Success

Jodi L. Wesemann

What is it that makes a scientific investigation truly successful? It is not only high quality data. The results must be disseminated and be relevant to the scientific community. Informative results will also raise more questions to be investigated in the future.

The Education and International Activities Division at the American Chemical Society (ACS) hopes that you will help make the recently completed survey of two-year college campuses a success. In collaboration with the Statistic Research Center at the American Institute of Physics (AIP), the ACS distributed a one-page survey in the fall of 2001 to all two-year campuses that offer chemistry. The data was analyzed, providing insights into the chemistry programs, faculty, and courses around the country. With a response rate of 77% and the consistency of the responses with unofficial data from institutions that did not respond, the results are assumed to reflect at least 94% of the two-year campuses that offer chemistry.

Representative data is not sufficient for this survey to be a success. The next step is getting the results in the hands of people who can make use of it. As the recent summary published in the *Journal of Chemical Education* (Feb 2003, p 129-131) indicated, the full report from the two-year college chemistry departmental survey is available on the web at www.chemistry.org/education/2year.html. If you have not already done so, please read and disseminate the documents to your colleagues.

The information collected, although limited due to costs and survey length, promises to be useful to the academic community. The results confirm that there is a wide range of situations at two-year colleges. Institutions can determine how they fit into this range with respect to types of classes offered, gender equity, part-time faculty, and other demographics. Along with being of interest to those who are currently at two-year institutions and those who work with students from two-year colleges, the information could be quite beneficial to educators working to implement changes.

It was apparent even before this survey was prepared, that many interesting and important questions about chemistry at two-year colleges would not be answered in this investigation. To do this, a more comprehensive survey of faculty is needed. While funding for such a survey is being sought, it would be helpful to know how you have used the data from the departmental survey and what additional data still needs to be gathered. Please send your responses to j_wesemann@acs.org, indicating what impact the departmental survey has had. Sharing individual experiences will make the recently completed departmental survey a success and set the stage for future investigations.

- That General Chemistry courses are offered by 93% of the two-year college campuses that teach chemistry?
- That, during the Fall 2001 semester, an average of 7.8 sections of chemistry (excluding laboratories) was offered by two-year college campuses that teach chemistry?
- That 41% of the chemistry faculty at two-year colleges are part-time?
- That 28% of the two-year college campuses that teach chemistry have only one chemistry faculty member?
- That 32% of the chemistry faculty at two-year colleges are women?

From *The Status of Chemistry in Two-Year Colleges: Results from a Survey of Chemistry Departments*, available at www.chemistry.org/education/2year.html

College Chemistry Consultant Services, C3S

You may be familiar with the College Chemistry Consultant Service (C3S). The program, which has a number of consultants who can visit institutions and provide advice on a number of issues, has been in existence for quite some time. Steven Iwanowski, s_iwanowski@acs.org, the staff coordinator for this CHED/SOCED program, would like to increase its visibility, especially among the two-year colleges.

Although the 2YC3 members are all on the ChemTechLinks mailing list, there are a few aspects of that project that may be good to highlight in the 2YC3 Chemistry Outlook. First, the newsletter will be shifted from paper to electronic distribution later this year. Thus, please submit your e-mail address to Steven if you would like to be sent a message when the electronic issues has been posted. Steven is the ChemTechLinks newsletter editor. Another ChemTechLinks project, "A Guide to Classroom Instruction for Adjunct Faculty", has proven to be a very useful resource for all faculty. Brochures and videos on careers in chemical technology have also been recently completed. Sam Stevenson, the PI for the ChemTechLinks project, s_stevenson@acs.org can provide more information on those materials.

A Message from John Kenkel

I would like to invite you to consider making a presentation in a symposium I am organizing for the Fall, 2003, national ACS meeting in New York City. This meeting will be held September 7-11, 2003 and the symposium is titled "Implementing Modern Chemical Education Strategies in the Two-Year College."

The description of this symposium reads as follows: "This symposium will report on personal successes of educators in the two-year colleges - successes relating to the implementation of modern

Did You Know...

chemistry educational strategies. Such strategies will include the use of the Internet or modern technology to improve student learning, use of the Internet or other methods for distance education, unique assessment strategies, special cooperative learning techniques, and the like.”

The ACS OASys system for submitting abstracts is now open for this meeting and you may go to the Web site and submit your abstract. The Web site for this abstract submission is <http://oasys.acs.org>.

If you know of someone who has had personal successes as described, feel free to forward this to them, or please give me their name and email address and I will personally invite them. Thanks.

John Kenkel, 402-437-2485, jkenkel@southeast.edu
Southeast Community College
Lincoln, Nebraska

Linus Pauling DNA website unveiled

<http://osulibrary.orst.edu/specialcollections/dna>

The Oregon State University Libraries Special Collections has launched a new website, “Linus Pauling and the Race for DNA: A Documentary History.”

The website explores one of the greatest scientific achievements of the 20th century - the discovery of the structure of deoxyribonucleic acid, or DNA, the basic foundation of life. More than 800 original letters, manuscripts, photographs, audio-clips and video excerpts - many never before available outside of archives - form the heart of the site. They include a number of important and unique items, such as:

- * An extremely rare prepublication typescript of James Watson and Francis Crick’s groundbreaking DNA paper;
- * A one-of-a-kind prepublication typescript of Rosalind Franklin’s DNA paper, published in the same issue of “Nature” as Watson and Crick’s, with handwritten additions by Franklin;
- * Linus Pauling’s contemporaneous laboratory notes outlining his DNA work, and a much-corrected manuscript of the paper relating his famously mistaken structure;
- * Scores of manuscript letters written at the time, including correspondence between all the major players in the race for DNA.

The original documents are tied together with a

unique narrative of the discovery from the largely unknown viewpoint of the major “loser” in the race, Pauling. A comprehensive, day-by-day account of all of Pauling’s personal and professional activities in the years 1952 and 1953 is also included as an adjunct to the main DNA narrative, with scanned images of documents and photographs accompanying the text. “This site is for anyone interested in the DNA story,” said Clifford Mead, head of Special Collections at OSU. “General users can benefit from an interesting site that shows history in the making, through the words of the participants. The site also offers a comprehensive set of links to other DNA sites, as well detailed information on all the major players.” “But it goes deeper,” Mead added. “This site makes available for the first time the raw material of this important piece of history.”

**Call for application for the office of Chair-Elect of
COCTYC for the year 2005**

Application for Chair-Elect must include:

- a. Pertinent personal data such as name, college, job title, address, etc.
- b. Brief statement of pertinent qualification, signed by the nominee.
- c. A statement indicating a willingness to serve signed by the nominee.
- d. A statement of support from an appropriate person in the applicant’s school.
- e. To be eligible to be nominated an individual must:
 1. be a two-year college chemistry teacher
 2. have been a dues paying member of 2YC₃ a minimum of three years prior to nomination
 3. be a member of DivCHED
 4. be a member of ACS
 5. have demonstrated leadership and organizational ability by serving as Chair or Co-Chair for a conference and in one or more of the following capacities:
 - a. served three years on the Executive Committee
 - b. served as Local Arrangements Chair for a Conference
 - c. chaired a sub-committee
 - d. contributed within the past three years two or more ways such as:
 - acted as local industrial sponsor coordinator,
 - chaired a conference section,
 - presented a paper at a conference,
 - moderated a panel at a conference,
 - other ways an individual has contributed

-Applications must be received by the Chair no later than September 1, 2003.

- The COCTYC will serve as a nominating/screening committee to generate a slate of two candidates.
- Each 2YC₃ member shall vote for one nominee and the candidate who receives the greater number of votes shall be declared elected.
- Ballots must be received by the Chair postmarked no later than 12/31/2003.
- Ballots will be counted by the Chair in the presence of a Notary.
- The results of the election will be reported in the first possible newsletter.

1. be a two-year college chemistry teacher
 2. have been a dues paying member of 2YC₃ a minimum of three years prior to nomination
 3. be a member of DivCHED
- Applications must be received by the Chair no later than September 1, 2003.
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 - Ballots will be counted by the Chair in the presence of a Notary.
 - The results of the election will be reported in the first possible newsletter.

Call for application for the office of Membership Chair of COCTYC for the year 2004

Application for Membership Chair must include:

- a. Pertinent personal data such as name, college, job title, address, etc.
- b. Brief statement of pertinent qualification, signed by the nominee.
- c. A statement indicating a willingness to serve signed by the nominee.
- d. A statement of support from an appropriate person in the applicant's school.
- e. To be eligible to be nominated an individual must:

Last Election Results

Ed Kremer was elected as our new Chair-Elect, 2004, and Rick Bolesta will be our new Treasurer.

Congratulations to both of them

MIDDLE TENNESSEE STATE UNIVERSITY

MTSU Doctor of Arts in Chemistry

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(See Diana Mason in *J. Chem. Educ.* **2001**, 78, 158-160.)

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Contact: William H. Ilsley: wilsley@mtsu.edu (615)898-2078
or Martin V. Stewart: mstewart@mtsu.edu (615)898-2073

or Write: Department of Chemistry, Box 68,
Middle Tennessee State University, Murfreesboro, TN 37132

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IN THE TWO-YEAR COLLEGE**
Division of Chemical Education
American Chemical Society

**Economical
& Efficient**



**ACE
Micro/
Mini-Lab[™]
Kits**

Basic Kit II

This economical microscale kit utilizes 3/14/10 joints and features the Hickman-Hinkle Still with side port and multi-purpose thermometer adapter for added versatility. Basic Kit II will perform 95% of the experiments in *Microscale Organic Laboratory*, Mayo, Pike and Butcher, as well as the majority of experiments in *Organic Laboratory Techniques*, Davis, Lampman, Kriz and Engel.

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