



Chemistry Outlook

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



Dolores C. Aquino, 2006 Chair

7

Notes From The Chair

14.0067
Nitrogen

Dolores C. Aquino
San Jacinto College Central
Pasadena, TX

Last issue I wrote about our newly revised brochure describing 2YC₃. One of the questions the brochure poses and answers is:

Who Is 2YC₃ ?

The printed answer is that 2YC₃, the Two-Year College Chemistry Consortium, is an association of two-year college (primarily), four-year college, and high school Chemistry faculty and others interested in chemical education.

My answer is a lot more personal. As I write this, the fall semester is just about to begin. My job as 2006 Chair is far from over, but the pattern is very clear. My year as Chair would have been a dismal failure were it not for the unfailing dedication of all the officers and conference organizers and other members who are the active core of the group.

The level of energy and dedication of the officers has been remarkable. I hesitate to list names for fear of leaving someone out. Some have picked up the broken pieces of conferences and put them together with resounding success. Some have gone the extra mile to implement new strategies and revise old ones in an effort to build a stronger organization and to better communicate with and meet the needs of all members. Some have provided me with solid support as I went through personal difficulties and as I struggled to build a conference schedule for this year and upcoming years. All have unfailingly performed their tasks as executive committee members to keep the month-to-month business of running the organization going.

Therefore, I would like to take this opportunity to thank all of those who have contributed to the success of 2YC₃ this year. I also need to thank the administration of San Jacinto College Central for their support and the Chemistry Department

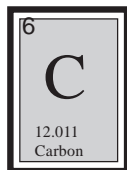
continued on page 2

INSIDE THIS ISSUE

Vol. 2006 – IV

- | | |
|-----|------------------------------------|
| 1 | Notes from the Chair |
| 2 | Conference Calendar |
| 3 | 2006 COCTYC and Support Staff |
| 4-7 | 176th Conference |
| 8 | 176 th Conference Pre-registration |
| 9 | Revisions to ACS Guidelines |
| 10 | Industrial Sponsors |
| 11 | Call for Applications |
| 12 | Advertisements |





Conference Calendar

2006 - 2007 Academic Year

176th Conference (Southern)

November 10-11, 2006, San Antonio College,
San Antonio, TX

Contact: Bill Haley
Phone: (210) 733-2712
Email: whaley@accd.edu

177th Conference (Midwestern)

March 23-24, 2007, Joliet Junior College, Joliet, IL

Contact: Dr. Marie Wolff
Phone: (815) 729-9020 ext. 6701
Email: mwolff@jjc.edu

Remember to check the web for information on future meetings! <http://2yc3.org>

continued from page 1

chair at my college, 2YC₃ past chair Dr. Ann Cartwright, for her encouragement of my active participation in 2YC₃.

2YC₃ is an organization that is totally dependent for its existence and lifeblood on the efforts of its members. The energy described above is a response to the value received from membership in 2YC₃ and participation in its activities. Elsewhere in this issue you will find a call for nominations for the position of 2009 Chair. We are also looking for conference organizers and members of Regional Advisory Boards. I hope that those of you who recognize the value of 2YC₃ will consider devoting your energies to the welfare of our faculty and students by serving in one of these positions in 2YC₃.

See you in San Antonio !

177th Conference (Midwest) Joliet Junior College Joliet, IL 60431 March 23-24, 2007

Preliminary Information

Two sessions will be devoted to student research, one for student talks, and another for talks by instructors. The students will come from programs involved in the undergraduate research project led by Tom Higgins of Harold Washington College.

At least three workshops are tentatively planned for Saturday the 24th. There will be an all-day POGIL workshop, a workshop by Vernier in the use of computers/calculators for data collection and analysis, and a half-day workshop involving the ACS general chemistry textbook.

One session is also being planned involving the use of the POGIL approach in organic chemistry and another in household/everyday chemistry.

A tentative session in memory of Mark Walter, and outstanding member of the chem.-ed community is also in the works.

Call for papers:

We invite anyone involved in teaching chemistry to present a paper dealing with any of the sessions described here or any other aspect of teaching chemistry at the community college. We are very interested in what you have to contribute to the improvement of teaching and learning chemistry.

A detailed schedule will be found on the 2YC₃ website (www.2yc3.org) as the conference develops.

Contact: Dr. Marie Wolff, phone: 815-280-6701, email: mwolff@jjc.edu

AEI Poster Session

Will your department be hiring new faculty? If so, come to the Academic Employment Initiative (AEI) Poster Session at the ACS National Meeting in San Francisco. Candidates seeking faculty positions will present posters about their current and proposed research, teaching philosophy, and experience, and interested departmental representatives can meet and interact informally with these candidates. Brief biographical sketches with links to their poster abstracts of each of this year's candidates are available at chemistry.org/aei.html.

This event will be held during the Sci-Mix on Monday, September 11, in the San Francisco Moscone Convention Center-Hall D North, from 8:00 to 10:00 pm.

2006 COCTYC AND SUPPORT STAFF

Division of Chemical Education, Inc
American Chemical Society

2006 Roster of Committee Members

Chair

Dolores C. Aquino, San Jacinto College Central
P.O. Box 2007, Pasadena, TX 77501-2007
Office: (281) 476-1501 ext. 1663 Fax: (281) 478-2757
Home: (713) 668-8215 Email: dcaquino2000@cs.com

Chair-Elect

Michaeleen Lee, Bucks County Community College
275 Swamp Road, Newton, PA 18940
Office: (215) 968-8364 Fax: (215) 504-8520
Email: leem@storm.bucks.edu

Treasurer/ College Sponsors

Kelly Befus, Anoka Ramsey Community College
11200 Mississippi Blvd., NW Coon Rapids, MN 55433
Office: (763) 433-1863 Email: Kelly.Befus@anokaramsey.edu

Membership Co-Chairs

Lance S. Lund and Patty Pieper,
Anoka-Ramsey Community College,
11200 Mississippi Blvd., NW Coon Rapids, MN 55433
Office: (763) 433-1273 Email: Lance.Lund@anokaramsey.edu
Office: (763) 433-1354 Email: Patty.Pieper@anokaramsey.edu

Industrial Sponsor Chair

John Kenkel, Southeast Community College
8800 O Street, Lincoln, NE 68522
Office: (402) 437-2485 Email: jkenkel@southeast.edu

Newsletter Editor

Carol Handy, Portland Community College
P.O. Box 19000, Portland, OR 97280-0990
Office: (503) 977-8068 Fax: (503) 977-8020
Home: (503) 452-0327 Email: chandy@pcc.edu

Immediate Past Chair

Ed Kremer, Kansas City Kansas Community College
7250 State Ave, Kansas City, KS 66112
Office: (913) 288-7111 Fax: (913) 288-7419
Home: (816) 413-0913 Email: ekremer@toto.net

Past Chairs (Members of COCTYC)

Sonja Davison, Tarrant County College, Northeast
828 Harwood Rd., Hurst, TX 76054
Office: (817) 515-6346 Fax: (817) 515-6601
Home: (817) 485-7833 Email: sonja.davison@tccd.edu

Bill Haley, San Antonio College
1300 San Pedro Ave, San Antonio TX 78212-4201
Office: (210) 733-2712 Fax: (210) 785-6402
Home: (210) 496-3086 Email: whaley@accd.edu

2YC₃ World Wide Web Page: <http://2yc3.org>, Lance Lund
(Lance.Lund@anokaramsey.edu) WebMaster

2YC₃ Membership Form

Please consider supporting the 2YC₃ by becoming a member or renewing your membership. Annual dues are only \$15.

Special Offer: Annual dues are \$15 for the 2YC₃ and \$20 for the American Chemical Society of Chemical Education (DivCHED). If you are not already a member of DivCHED, you may join both organizations today for a total of \$30, a savings of \$5.

I wish to: _____ Become a member of 2YC₃
_____ Renew my 2YC₃ Membership
_____ Join DivCHED as a member (ACS members only) and 2YC₃
_____ Join DivCHED as an affiliate* (non ACS members) and 2YC₃
*affiliates have all membership privileges except voting and holding elective office.

I am a: _____ Two-Year College Teacher _____ Four-Year College Teacher
_____ High School Teacher _____ Other

Your Name: _____

Institution: _____

Address: _____
Street City, State 9-Digit Zip Code

Phone: _____ **Email:** _____

Send ACS Member Form? _____ Yes _____ No

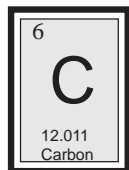
Please send your check, payable to 2YC₃, for \$15 (2YC₃ only) or \$30 (joint membership) to:

Patty Pieper, Anoka-Ramsey Community College, 11200 Mississippi Blvd NW, Coon Rapids, MN 55433-3470.

**The 176th Conference of the
Two-Year College Chemistry Consortium**

“How We Teach Chemistry”

**San Antonio College
1300 San Pedro Avenue
San Antonio, TX 78212**



Conference Program

For the latest update on the conference go to:

www.accd.edu/sac/chemistr/2yc3conf (webmaster: James Petrich, email: jpetrich@accd.edu)

Program: Bill Haley, email: whaley@accd.edu

Local arrangements: Usha Krishnan, email: ukrishnan@accd.edu, Judy Haley, email: judhal@sbcglobal.net

Exhibits: Krishnan Madappat, email: kmadappa@accd.edu)

Friday, November 10

8:00 AM – 4:30 PM Exhibits

8:00 – 9:00 AM Registration and Continental Breakfast

**9:00 – 9:15 AM Welcome and Opening Remarks
Dr. Robert Zeigler, President, San Antonio College**

9:15 – 10:00 AM Keynote Address

10:00 - 10:30AM Refreshment Break and Exhibits – Exhibit Area

Session I Presentations

10:35 - 11:15 AM *Improving Students' Understanding of Chemistry using the Science Writing Heuristic*, Dr. Thomas Greenbowe, Iowa State University, Ames, IA

11:20 – 12:00 Noon *Exploring Undergraduate Research*, Dr. Thomas Higgins, Harold Washington College, Chicago, IL and Dr. Linette Watkins, Texas State University, San Marcos, TX

12:05 - 1:15 PM Lunch and 2YC₃ General Membership meeting, SAC cafeteria. Exhibits in the exhibit area.

Session II Presentations
1:30 - 2:10 PM *Projects for a revolving research group*, Dr. Dan Stanford, William Rainey Harper College, Palatine, IL

2:15 - 2:55 PM *Involving Students in Research Activities at Southwestern College*
David Brown, Southwestern College, Chula Vista, CA

Session III Workshops
1:30 – 5:30 PM POGIL Workshop, either “An Introduction the use of Process Oriented Guided Inquiry Learning in Undergraduate Chemistry courses” or “Implementing the Science Writing Heuristic: An Advanced POGIL Workshop”.(Check Program updates at our website)
1:30 – 3:30 PM Use of data acquisition technology in undergraduate chemistry courses.

Session IV Presentations
3:00 – 3:40 PM TBA

3:45 - 4:25 PM TBA

Social and Banquet
6:30 - 7:00 PM Social Mixer at the Blue Star Brewing Company, 1414 S. Alamo.
7:00 – 8:30 PM Banquet and Speaker.

Saturday, November 11

8:30 – 12:30 Registration and Exhibits

8:30 - 9:00 AM Continental Breakfast

Session IV Presentations
9:00 – 9: 40 AM *The use of a Socratic like method in teaching General Chemistry.*
Dr. John Hutchinson, Rice University, Houston, TX

9:45 – 10: 25 AM *Undergraduate Research Opportunities at the Center for Biological and Environmental Technology at Rice University.*
Dr. John Hutchinson, Rice University, Houston Tx

Session V Presentations
9:00 – 9:40 AM TBA

9:45 – 10:25 AM *What should we cover in Organic Chemistry?*
Dr. Joel Karty, Elon University, Elon, NC

10:30 – 10:50 AM Exhibit Break

Session V Roundtables
11:00 – 11:55 AM Roundtable discussion on Undergraduate Research

11:00 – 11:55 AM Roundtable discusstion on Teaching Organic chemistry

12:00 – 12:55 PM Lunch and Exhibit Break

Session VI Workshop
1:00 – 5:00 PM POGIL Workshop, either “An Introduction the use of Process Oriented Guided Inquiry Learning in Undergraduate Chemistry courses” or “Implementing the Science Writing Heuristic: An Advanced POGIL Workshop”.(Check Program updates at our website)

Session VII Presentations
1:00 – 1:40 PM TBA

1:45 – 2:25 PM TBA

Session VIII Workshop
2:30 – 4:00 PM TBA

4:00 – 4:30 PM Conference Closing

LODGING

Amerisuites Airport Hotel(Aproximately 5.2 miles from the conference)

7615 Jones-Maltsberger (adjacent to U.S. 281) 40 room block, immediate booking
San Antonio, TX 78216 Rooms held until October 20
For Reservations: 210-930-2333 After October 20, reservations
Group Code: TWOYC3 accepted, based on availability
\$90/night (plus 16.75 % room tax) Free Airport shuttle
Employees of the State of Texas 8:00 AM – 11:00PM
can reduce tax to 10.75% with identification
For more information go to: www.amerisuites.com
Hotel is adjacent to the Alamo Quarry Market and two golf courses and near Northstar Mall

Doubletree Hotel, San Antonio Airport (Aproximately 5.5 miles from the conference)

37 N.E. Loop 410 (at McCullough) 10 room block, immediate booking
San Antonio, TX 78216 Rooms held until October 19
210-366-2424 Free Airport Shuttle
\$95/night (plus 16.75% room tax). Texas State employees can get tax reduction.
Reservations for the Doubletree may be made online at: www.doubletree.com where you go to Doubletree Hotel San Antonio Airport and use the group code "TYC".
Hotel is adjacent to Northstar Mall and close to two golf courses and the Alamo Quarry Market

BANQUET

The banquet will be held at the **Blue Star Brewing Company**, a restaurant and microbrewery, at 1414 S. Alamo on Friday night, November 10. The evening will begin with a social at 6:30 PM and dinner will follow at 7:15 PM followed by our speaker and end about 8:30 PM. The local ACS section has held its awards banquet here for the last couple of years. The location is adjacent to the San Antonio River and in an arts center. There are many historical homes in the area and a number of private art galleries and shops. The dinner selections will include a beef entree, a chicken entrée and a vegetarian plate which will be listed on the website. Make your selection when you send in your registration form.

Driving Directions to the Banquet.

From San Antonio College: Exit to the right from the parking lot and turn left onto San Pedro Avenue. San Pedro merges with Main Street and you will continue on S. Main until you reach S. Alamo Street. Turn left onto S. Alamo and stay in the left lane. S. Alamo will turn slightly to the left and you will see Pioneer Flour Mills on the left and a bridge ahead and you will turn right to enter the parking lot for Blue Star Brewing just before the bridge.

From the Amerisuites Hotel: Turn right(southbound) onto Jones-Maltsberger Road and then take the right exit to the on ramp for U.S. 281 South. Continue south on U.S. 281 past the exits for I-35. You will look for a right exit to Commerce Street. Take the exit for Commerce Street and turn right onto Commerce Street. You will turn left at the third traffic signal onto Alamo Street and proceed south. S. Alamo Street turns slightly to the right and crosses S. St. Mary's Street. You will continue until you see a bridge straight ahead and the Pioneer Flour Mills on the right. You will cross over the bridge and make an immediate left turn into the arts center where Blue Star Brewing is located.

From the Doubletree Hotel: Exit from the westside of the parking lot and turn left onto McCullough. Stay in the left lane as you crossover Loop 410 and turn left onto the eastbound access road to Loop 410. Continue on the access road until you reach the exit for southbound U.S. 281. Turn right onto the U.S. 281 access road and take the on ramp onto U.S. 281. Continue south on U.S. 281 past the exits for I-35. You will look for a right exit to Commerce Street. Take the exit for Commerce Street and turn right onto Commerce Street. You will turn left at the third traffic signal onto Alamo Street and proceed south. S. Alamo Street turns slightly to the right and crosses S. St. Mary's Street. You will continue until you see a bridge straight ahead and the Pioneer Flour Mills on the right. You will cross over the bridge and make an immediate left turn into the arts center where Blue Star Brewing is located.

Driving Directions From Blue Star to the Hotels: Turn right out of the parking lot of the arts center onto S. Alamo continue back to the Convention Center area (Tower of the Americas on your right) and prepare to turn right onto **Market Street**. Move to the left lanes when you get on Market Street and there will be a left exit to U.S. 281 North. Move to a center lane on northbound U.S. 281.

Amerisuites Hotel: As you approach the Alamo Quarry Market on your right prepare to take the right exit to **Jones-Maltsberger Road** if you are staying at the **Amerisuites Hotel** and then take a left turn on Jones-Maltsberger to the hotel.

Doubletree Hotel: Continue past the Alamo Quarry Market and look for the **Airport Boulevard and Loop 410 west exit**. Take that exit and move to one of the two left lanes. You will turn left at the third traffic signal onto the westbound access road for Loop 410. Stay on the access road and cross Jones-Maltsberger. Continue to the hotel.



The College Chemistry Consultant Service (C₃S)

Has Moved to DivCHED

C₃S consultants continue to provide general departmental reviews for four-year, two-year and chemical technology programs or more specialized visits on:

- Recruitment and retention
- Curricular development
- Departmental development
- Establishing and maintaining partnerships
- Facilities
- Funding and grant proposals
- Periodic program review evaluations
- Safe laboratory design
- Preparations for approval by CPT and CTPAS

Check us out for costs, initiating a visit, list of consultants and their expertise on our temporary web site:

<http://faculty.une.edu/cas/jmullin/c3s/>

176th Two-Year College Chemistry Consortium Conference
San Antonio College
1300 San Pedro Ave.
San Antonio, TX 78259

Name _____ Institution _____

Institution Address _____

City _____ State _____ Zip Code _____

Phone number(s) _____

E-mail address(es) _____

I teach at a High School _____ 1-Year College _____ 4-year college or University _____

Conference Fees:

Registration (current 2YC₃ members) @ \$20.00 * \$ _____

Registration (includes 2YC₃ membership) @ \$35.00 \$ _____

Friday evening banquet @ (see website) \$ _____

Friday box lunch @ (see website) \$ _____

Saturday box lunch @ (see website) \$ _____

*** There is no conference fee for high school teachers and students**

Meals:

A continental breakfast will be provided for both Friday and Saturday mornings. Lunch will be available in the San Antonio College cafeteria on Friday only but **box lunches** will be available on both days.

The banquet will be held at the Blue Star Brewing Company and restaurant and microbrewery.

A vegetarian option will be available with the box lunches and the banquet. Please check here for the vegetarian option for the Friday **box lunch** _____, the Friday **banquet** _____, the Saturday **box lunch** _____

Workshops(limited to 24 people, unless otherwise noted)

I would like to attend the following workshops(check all that apply)

_____ Introductory POGIL workshop, Friday, 1:30-5:30 PM(or Saturday, 1:00 – 5:00 PM) (check website)

_____ Advanced POGIL workshop: Implementing the Science Writing Heuristic,
Friday, 1:30-5:30 PM(or Saturday, 1:00 – 5:00 PM) (check website)

Additional workshops will be listed on the website.

Revisions to ACS Guidelines discussed at 19th BCCE

The symposium “Revising the ACS Guidelines for Two-Year and Four-Year Programs: A Community Dialog of Issues and Opportunities” was held August 1, 2006 at the 19th Biennial Conference on Chemical Education. Faculty from both two- and four-year programs heard presentations on the proposed changes to the ACS Guidelines for Bachelor’s degree programs, discussed the potential impact the proposed changes could have, and considered ways in which these guidelines and those for two-year chemistry programs could be better aligned.

Curricular Aspects

The proposed revisions to the ACS Guidelines for Bachelor’s degree programs include reclassifying courses into foundation and in-depth categories. Programs would continue to have a great deal of flexibility with introductory chemistry. Beyond introductory chemistry, five one-semester foundation courses would provide breadth of coverage in each of the five major areas of chemistry: analytical, biochemistry, inorganic, organic, and physical. In addition, four one-semester in-depth courses that build upon the foundation courses would be required. Although generally a lower division course, the second semester of organic chemistry, which builds on the first, would be considered an in-depth course. The proposed revisions are intended to provide greater flexibility to approved departments for designing certified degrees and encourage innovation and improvement in curriculum and pedagogy. Those attending the symposium indicated that curricular changes should be discussed with transfer institutions to ensure that students are qualified to transfer into the program.

Student Skills and Abilities

The proposed revisions to the ACS Guidelines for Bachelor’s degree programs also highlight the importance of employability or higher order skills, such as laboratory safety, communication (both oral and written), team skills, problem solving/critical thinking, knowledge integration, professional ethics, and social responsibility. When reviewing programs for ACS approval, the Committee on Professional Training would consider whether they are developing these skills in their graduates, how they are doing this, and how they assess success in doing it. Those attending the symposium indicated that the development of such skills is often integrated throughout the curriculum and should also be discussed with transfer institutions.

Alignment of Guidelines

Since the ACS Guidelines for Chemistry Programs in Two-Year Colleges are also going to be revised, areas where the guidelines for two- and four-year programs differ were identified. The guidelines for two-year programs do note the importance of designing a program that is appropriate for the institution and considers the career goals of its students. They also note the need for innovation and experimentation coupled with a strong assessment component to preserve the vitality of chemistry education. There is a mismatch regarding teaching load, with 15 contact hours per week or less being noted as normal in the two-year guidelines but the maximum in the four-year guidelines. The guidelines for two-year programs also do not mention NMR among instrumentation, computational chemistry capabilities, or the student skills and abilities noted above. The ACS Guidelines for Bachelor’s degree programs do not mention the importance of student transfer or the need for interactions with faculty and students from transfer institutions. Those attending the symposium recommended that these gaps be addressed and that ACS develop a way of recognizing two-year programs that meet the guidelines.

The session was co-sponsored by the Committee on Professional Training and the Society Committee on Education. Links to the presentations are on the CPT website (chemistry.org/education/cpt) and the community college web page (chemistry.org/education/2year.html). Questions and suggestions can be sent to: cpt@acs.org or education@acs.org.

For an overview of the proposed revisions to the ACS Guidelines for Bachelor’s degree programs, visit the CPT website (www.chemistry.org/education/cpt).

Visit www.chemistry.org/education/2year.html for the ACS Guidelines for Chemistry Programs in Two-Year Colleges.



Once again we thank our industrial sponsors for their continuous support. Because of our industrial sponsors, we remain at the forefront of the latest in educational technology and pedagogy. We appreciate their support at our conferences and look forward to a continued relationship.

Ace Glass

1430 N.W. Blvd.
Vineland, NJ 08362

Contact: John Ryan

Middle Tennessee State University

Department of Chemistry
Murfreesboro, TN 37132

Contact: Gary Wulfsberg

Anasazi Instruments

4101 Cashard Ave. #103
Indianapolis, IN 46203

Contact: Donald Bouchard

Benjamin-Cummings

1301 Sansome St.
San Francisco, CA 94111

Contact: Jim Smith

Fisher Scientific

2000 Park Lane Dr.
Pittsburgh, PA 15275

Contact: Jason Hauser

Microlab, Inc.

P.O. Box 7358
Bozeman, MT 59771-7358

Contact: John Amend

The ChemCollective at Carnegie Mellon

4400 Fifth Avenue
Pittsburgh, PA 15213

Contact: Mike Karabinos

CRC Press/Taylor and Francis Group

6000 Broken Sound Parkway NW,
Suite 300
Boca Raton, FL 33487

Contact: Jennifer Spoto

Worldwide Glass Resources, Inc.

638 Gershal Avenue
Norma, NJ 08347

Contact: Jim Crawford

GOW-MAC Instrument Co.

277 Brodhead Road
Bethlehem, PA 18017

Contact: Ken Fincke

Mettler-Toledo

1900 Polaris Parkway
S Columbus, OH 43240-2020

Contact: Kathleen McKenna

Houghton-Mifflin

222 Berkeley
Boston, MA 02116

Contact: Laura McGinn

John Wiley and Sons, Inc.

111 River Street, MS6-01
Hoboken, NJ 07030-5774

Contact Person: Deborah Edson

Measurenet, Inc

4242 Airport Rd.
Cincinnati, OH 45226-1615

Contact: Robert Vorhees

ACS Educational and International Activities Division

1155 16th St. N.W.
Washington, DC 20036

Contact: Jodi Weseman

**Center for Talented Youth
John Hopkins University**

McAuley Hall
5801 Smith Ave. Suite 400
Baltimore, MD 21209

Contact: Karen Weeks

Call for application for the office of Chair-Elect of COCTYC for the year 2008

Application for Chair-Elect for 2008 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. 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 October 13, 2006.

-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 12/31/2006.

-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 Newsletter Editor of COCTYC for the year 2007

Application for Newsletter Editor for 2008 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

-Applications must be received by the Chair no later than October 13, 2006.

-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 12/31/2006.

-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 Treasurer of COCTYC for the year 2007

Application for Treasurer for 2007 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

-Applications must be received by the Chair no later than October 13, 2006.

-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 12/31/2006.

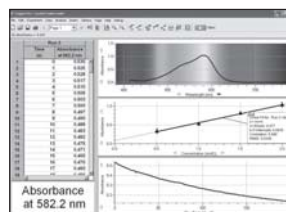
-Ballots will be counted by the Chair in the presence of a Notary.

-The results of the election will be reported in the first possible newsletter.

VERNIER SPECTROMETER

POWERED BY OCEAN OPTICS™

- A complete visible light spectrum, 380-950 nm, is collected in a fraction of a second.
- Other Vernier Sensors can be used simultaneously with the Vernier Spectrometer, expanding your students' opportunities to pursue a variety of research projects.
- Can be used with our award-winning Logger Pro software. **Only \$159 for a department site license.**
- Logger Pro supports other Ocean Optics spectrometers including UV-VIS, Red Tide, and more. Visit our website for pricing information on these and other models.



A wavelength spectrum, Beer's law curve, and kinetics analysis of the crystal violet-sodium hydroxide reaction, shown here in Logger Pro.

V-SPEC | \$199

celebrating 25 years
Vernier
SOFTWARE & TECHNOLOGY

www.vernier.com | Toll Free: 888-837-6437

www.vernier.com/spectrometer



Vincennes University
Committee on Chemistry in the Two Year College
1002 North First Street
Vincennes, Indiana 47591-5201

Nonprofit Org.
Auto
U.S. Postage
PAID
Permit #85
Vincennes, IN 47591

Dolores C. Aquino, CHAIR
Carol Handy, EDITOR
COMMITTEE ON CHEMISTRY
IN THE TWO-YEAR COLLEGE
Division of Chemical Education
American Chemical Society

MIDDLE TENNESSEE STATE UNIVERSITY

MTSU Doctor of Arts in Chemistry

A Doctorate in Chemistry Designed for College Chemistry Teachers
(See Diana Mason in *J. Chem. Educ.* **2001**, 78, 158-160.)
Summers-Based or Year-Round Completion of Program Possible

Fellowships, Assistantships Available for Summers or Full Years

Our D.A. (Doctor of Arts) Degree in Chemistry differs from the Ph.D. and Ed.D. degrees by including a broader curriculum in chemistry and four higher education courses.

Dissertation research projects available in Chemical Education alone or in combination with any of eleven areas of chemistry:

Analytical	Biochemistry
Computational	Environmental
Forensic	Inorganic
Materials	Medicinal
Organic	Physical
Polymers	

Web site: <http://www.mtsu.edu/~chem>

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

Three NEW MicroLab 500-Series Instruments

Cost effective tools to engage your students in science!

MicroLab's 500-Series data acquisition instruments integrate the most used chemical sensors, enabling students to make almost every instrumental measurement required in general and environmental chemistry and biology.

MicroLab's unique **FASTspec™** scanning spectrophotometer provides simultaneous measurement of Fluorescence, Absorbance, Scatter and Transmission at 16 different wavelengths 360-935nm.

With research precision and powerful software, MicroLab's 500-series instruments put the student firmly in control of the experiment and enhance **their learning and your teaching.**



MicroLab FS-522



MicroLab ML-507



MicroLab FS-515

microLAB

For complete product information
www.microlabinfo.com

e-mail: info@microlabinfo.com 888-586-3274