



Chemistry Outlook

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



Ed Kremer, 2005 Chair

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Notes From The Chair

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Ed Kremer
Kansas City Kansas Community College
Kansas City, KS 66112

Dear Colleagues,

How do you begin to write your first “Notes From The Chair”? I’d like to start off by thanking a couple of people for introducing me to the 2YC₃. My boss and mentor Dr. David Klein and the Academic Vice President of KCKCC, Dr. Kaye Walter. Both have been very supportive of my attending 2YC₃ meetings, hosting a meeting, and of my decision to become the Chair.

When I first started attending 2YC₃ meetings, I wasn’t sure what to expect. My first meeting was in Vincennes, Indiana. I gave a talk about our online GOB course. I have attended most of the meetings since then. The meeting that took place the week of 9/11 was a huge success. It was a needed change of pace, during the upheaval in our Nation. I had immense pleasure in seeing Don Showalter and Marvin Lang close out the meeting with their Grand Finale. These two meetings were memorable introductions into the 2YC₃.

Each 2YC₃ meeting sends me back with a new set of ideas to try out with my curriculum and students in Kansas City. Next week I’ll try out a new book, with the kindergarten class at my son’s school. I obtained this inquiry based children’s book, at a workshop at the BCCE in Ames. I might also add that my wife and children loved the performance by the Galileo Players at the BCCE.

There have been many talks and brilliant speakers at the 2YC₃ meetings. Each program has been world class for several reasons, including the following:

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Conference Calendar

2005 - 2006 Academic Year

170th Conference (Western)

March 11-12, 2005 Palomar College, San Marcos, CA

Contact Bettina Heinz

Email: bheinz@palomar.edu

ACS - San Diego, CA, March 13-17, 2005

171st Conference (Eastern)

October 14-15, 2005 Bucks County Community College, PA

Contact Michaleen Lee

Email: leem@storm.bucks.edu

172nd Conference (Midwestern)

late fall, 2005 W. R. Harper College, Palatine, IL

173rd Conference (Southern)

March 26-30, 2006 Atlanta, Georgia

174th Conference (Eastern) 19th BCCE,

July 30-August 3, 2006, Purdue University Campus, West Lafayette, Indiana

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



Concordia University, Carol Handy, Clarita Bhat, and Frank Koch

continued from page 1

1. Having the ACS President speak at a program most years.
2. Hearing presentations from leading General Chemistry authors.
3. Speaking with the current NSF program directors, for the Department of Undergraduate Education. Harry Ungar, the current chemistry program director (a community college instructor) attended the November meeting in North Carolina.
4. Joint meetings have allowed us to look at more cutting edge chemistry. It was nice to read posters on nanotechnology and semiconductors at the SERMACS meeting.
5. The meeting provides a chance to share ideas and frustrations with colleagues; who are in the same boat as you and have similar students. The camaraderie we share is a great asset both during the meeting, and later upon return to our home institutions.
6. The industrial sponsors have been very supportive to the organization and truly want our feedback on how their products function for us in the trenches.
7. The hosting institutions have rolled out the carpet for each meeting and provide a warm welcome to all attendees. Not only did Concordia University provide us a beautiful campus, they also arranged for a whale to visit me, as I took an early morning walk along the beach.

I encourage all of our members to attend the regional meetings in their area, whenever possible.

To that end I look forward to seeing you at 170th program at Palomar College in March. It promises to be another hallmark.

In closing, I want to recognize the contributions of our past chairs. Their dedication and commitment has made the 2YC₃ the organization what it is today. Three of the more recent include: Frank Koch, Clarita Bhat, and Rick Bolesta. Each of these individuals has provided a keen leadership to our organization. Their dedication and hard work will serve as a benchmark to me as I perform my duties.

2005 COCTYC AND SUPPORT STAFF
Division of Chemical Education, Inc
American Chemical Society
2005 Roster of Committee Members

Chair

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Clarita Bhat, Shoreline Community College
 16101 Greenwood Ave North, Shoreline, WA 98133
 Home: (425) 745-9550 Email: clarita@bclabs.biz

2YC₃ World Wide Web Page: <http://2yc3.org> or <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

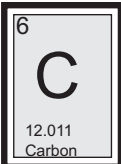
170th 2YC₃ Conference
“Chemistry and Other Fields”

March 11-12, 2005

Palomar College

1140 W. Mission Road, San Marcos, California 92069

<http://daphne.palomar.edu/bheinz>



Conference Program

Program Chair: Bettina Heinz, Palomar College, San Marcos, California

Phone: 760-744-1150 (x2507) / 760-738-0167 / Fax: 760-744-8123

Email: bheinz@palomar.edu or bettina_Heinz@yahoo.com

Exhibits and Local Arrangements: Bettina Heinz, Jennifer Zabzdyr, and Patricia Brandon, Palomar College, San Marcos, California

Phone: 760-744-1150 (x2543) / Fax: 760-744-8123

email: jzabzdyr@palomar.edu email: pbrandon@palomar.edu

Thursday, March 10

6:00 - 9:00 PM *Social Mixer and Cocktail Hour at InterArt Gallery, 218 E. Grand Avenue, Suite #6, Escondido, CA 92025 (optional)*

Friday, March 11

8:00 – 9:30 Registration and Continental Breakfast

8:00 – 5:00 Exhibits

9:30 – 9:45 Welcome and Opening Remarks

9:45 – 10:45 Keynote Address
Preston MacDougall, Middle Tennessee State University, Murfreesboro, Tennessee, *The State of the Art in Theoretical Chemistry*

10:45 – 11:00 Morning Break – Exhibits and Snacks

11:00 – 11:30 Matthew Johil, Illinois Valley Community College, Oglesby, Illinois, *Forensic Chemistry in the Classroom: Capturing Student's Curiosity*

11:30 – 12:00 Linda A. Wilson, Middle Tennessee State University, Murfreesboro, Tennessee, *Teaching Chemistry in Forensic Science Courses for Criminal Justice Majors*

12:00 – 1:30 Lunch, Exhibits, 2YC₃ General Membership Meeting

1:30 – 2:30 Anthony “Rick” Cardoza, San Diego County Medical Examiners Office, Director of the California Dental Identification Team (CalDIT) and Consultant of the California Department of Justice, ***Introduction to Forensic Dental Postmortem Identification with Special Focus on the 2003 Cedar Fire Victims or “Death takes a Holiday”*** (borrowed title of a Sacramento Forensic Conference, January 28, 2005)

2:30 – 2:45 Break, Exhibits

2:45 – 5:00 Concurrent Sessions

Session 1

2:45 - 4:45 Workshop Presentations

- (1) Harry Ungar, National Science Foundation
Introduction to Grant Opportunities at NSF (3 hrs)
- (2) to be announced (using Molecular Modeling Programs)
- (3) to be announced (proposals welcome)

Session 2

2:45 – 3:15 Carnegie-Mellon (Presenter to be announced)
New Developments on Virtual Labs

3:15 – 3:45 Carnegie-Mellon (Presenter to be announced)
Virtual Labs in Chemistry

3:45 – 4:00 Break, Exhibits

4:00 – 4:30 Jennifer Zabzdyr, Palomar College, San Marcos, California
Using Chemistry to Probe Single Cell Gene Expression

4:30 – 5:00 Steven C. Welch, California State University, San Marcos, California
Developments and Outlook for Graduate Chemical Studies in Southern California

6:00 – 6:45 Michael Mufson, Palomar College, Performing Arts Department, San Marcos, California, ***The Dance of the Molecules*** – A special theatre production in honor of the 170th 2YC3 Meeting

7:00 – 9:00 Banquet

Dinner Speaker: Preston MacDougall, Middle Tennessee State University, Tennessee, ***China, Art, and Molecules***

Saturday, March 12

8:00 – 2:00 Registration and Exhibits

7:30 – 9:30 Continental Breakfast

8:00 – 9:00 Keynote Address
John E. Sasser, Midway College, Midway, Kentucky
Issues and Barriers to Interdisciplinary Work in Chemistry and Mathematics

9:00 – 9:30 Matthew Johil, Illinois Valley Community College, Oglesby, Illinois
Community College Chemistry Clubs: Challenges, Successes and ACS Recognition

9:30 – 9:45 Break – Exhibits, Refreshments

9:45 - 12:45 Concurrent Sessions

Session 1

9:45 – 12:45 Workshop Presentations
(1) Harry Ungar, National Science Foundation
Introduction to Grant Opportunities at NSF (3 hrs)
(2) to be announced (proposals welcome)
(3) to be announced (proposals welcome)

Session 2

10:45 – 11:15 Charles Apel, NASA, Ames Research Center, Moffett Field, CA 94035, *Prebiotic Self-Assembly*

11:15 – 11:45 Treasure J. Sucheck and David R. Brown, Southwestern College, Chula Vista, California, *Establishing a Program in Chemical Technology at Southwestern College*

11:45 – 12:15 Wenotiah Vercoutere, NASA Ames Research Center, Moffett Field, CA 94035, *Nanopore Analysis of DNA*

12:15 – 12:45 Linda A. Wilson, Middle Tennessee State University, Murfreesboro, Tennessee, *Are Summer Students Different from Fall Semester Students in Introductory General Chemistry?*

12:45 – 2:00 Lunch, Exhibits

2:00 – 2:30 David R. Brown and Treasure J. Sucheck, Southwestern College, Chula Vista, California, *Chemical Research Undertaken in a Community College Setting*

2:30 – 3:00 Carl Krochmal
A New Chemistry Field for Students: Homeland Security

3:00 – 3:15 Break, Exhibits

3:15 – 3:45 Bettina Heinz, Palomar College, San Marcos, California, *Algorithmic Arts: Converting Molecular Sequences into Mush*

3:45 – 4:15 Joseph Chimeno, College of Eastern Utah, Price, Utah, *A Novel and Effective Way to Teach Inorganic Chemical Nomenclature*

4:15 – 4:30 Closing Remarks

Saturday Evening – Division of Chemical Education Dinner. This is a dinner traditionally held prior to the start of the ACS meeting at a local restaurant. It is an ACS-sponsored “event.” Please check the ACS web site or C&E News for ticket information. ACS membership, DivCHED membership, and ACS meeting registration are NOT required.

Sunday, March 13

10:00 – 4:00 *Bus Tour to Julian and Palomar Mountain Observatory (optional)*

Conference PRE-REGISTRATION

170th TWO-YEAR COLLEGE CHEMISTRY CONFERENCE (2YC₃)

Palomar College, San Marcos, CA 92069

March 11 – 12, 2005

Name _____ Institution _____

Institution's Address _____

Phone Number: _____ Email: _____

Memberships: (Check all that apply) _____ 2YC₃ _____ ACS _____ DivCHED

I teach at a: _____ Two-Year College _____ Four-Year College _____ HS (No Membership Fee for High School Teachers.)

Conference Fees:

Registration (current 2YC ₃ members) @ \$20.00	\$ _____
Registration (includes 2YC ₃ membership) @ \$35.00	\$ _____
Friday Evening Banquet @ \$20.00	\$ _____
Friday Lunch @ \$7.00	\$ _____
Saturday Lunch @ \$7.00	\$ _____
Total	\$ _____

Meals:

Breakfast: Continental style at Faculty Lounge and/or Student Union Building/Café

Lunch:

Excellent, extensive "Asian Buffet" nearby (15-20 min. walking, 3-5 min driving), 100 N Rancho Santa Fe Road, San Marcos, CA 92069, 760-599-6648 (fax 6617)
Palomar Campus Cafeteria Specials

Dinners:

Banquet: Gala Dinner at the Student Union Auditorium (Friday)
Division of Chemical Education, pre-ACS dinner (to be announced) (Sat.)
Wild Animal Park Dinner (Sat. alternative)

Please send your registration form and check to:

Dr. Bettina Heinz, 170th 2YC₃
Palomar College
1140 West Mission Ave
San Marcos, CA 92069

Palomar College / 2YC₃

AIRPORT, HOTEL, AND TRANSPORTATION INFORMATION 170th 2YC₃ Conference, Palomar College, San Marcos, California

Lodging:

(1) **Hampton Inn San Marcos, Manager: James Chang;**

Palomar Conference Rate: \$75.00 + Tax/ night

123 E Carmel St. (Exit Twin Oaks from Interstate 78)

San Marcos, CA 92069

Tel.: 760-736-9249/Fax: 760-738-4872

(2) **Ramada Limited Suites, Manager: Carl Lux**

Palomar Conference Rate: \$49.00 + Tax/ night

517 W. San Marcos Blvd. (Exit Twin Oaks from Interstate 78)

San Marcos, CA 92069

Tel: 760-471-2800

Both hotels are about 5 minutes from the Palomar San Marcos Campus. Taxicabs are very reasonable. Escondido: Escondido Yellow Cab : 760-745-7421, SanMarcos (Vista, Oceanside) Courtesy Cab: 760-599-4221 or Vista Yellow Cab: 760-722-4214

Airport:

San Diego Airport (Lindberg Field Airport)

North County Shuttles available (different Van Companies such as "Cloud 9" etc.) in front of Terminals (reasonable prices to Escondido and San Marcos (40-60\$/person, multi-passenger)

Driving Directions:

From South/East – Interstate **15** north to Interstate **78** junction at **Escondido**, direction West to **San Marcos**, en-route to Vista, Oceanside and Interstate 5, exit at **Twin Oaks** or **Rancho Santa Fe Road**, watch for signs to **Palomar College**, drive through main gate and park up front in main parking lot (free visitors parking after registering at campus gate)

Bus Lines: Express Bus **320** from Oceanside (**Coaster** Connection), West or from Escondido, East (**Greyhound** connection) to **Palomar College Transit Center**.



168th Conference in Leavenworth, WA

Preliminary Program for 171st 2YC3 Conference

Theme: The History of Chemistry: From the Past Comes the Future

The 171st conference will be held on October 14-15, 2005. This joint conference will be held with the Bucks County Science Teachers Association (K-College).

Program Chair: Michael Lee, leem@storm.bucks.edu

Friday: *Morning*

Welcome

Keynote: Mark Michalovic, Chemical Heritage Foundation

“Invite a Chemist to Lunch”, George Kriz

“Dyeing Technology of the 18th Century,” Kim Browning

Lunch prepared by our own Chef’s Apprentice students and served in our historic Tyler Mansion overlooking the Neshaminy Creek and Indian Council Rock with a spectacular view of Tyler State Park.

Afternoon

Keynote: History of Chemistry

Workshop: John Penn

Panel: Making the Organic curriculum more manageable – could also be a

“Birds of a Feather” session- Please let me know if you would like to be a panelist or contributor.

“The International Center of First-Year Undergraduate Chemical Education: The Richness of Difference” – Paul Kelter

Banquet: In Tyler Mansion and prepared and served by of Chef’s Apprentice students.

Speaker: William Jensen “An illustrated Tour of the Oesper Collections in the History of Chemistry”

Saturday: *Morning*

Keynote: “A History of the Chemistry Textbooks” James Spencer

POGIL Workshop

Panel: Coming Full Circle: student to teacher

If any of you are now teaching at the school where you were a student, we invite you to be a member of this panel.

Panel: K- 12 teachers – through the decades: Has teaching science REALLY changed?

I also extend an invitation for this panel.

“Competitive Exercises in the classroom as a means of engaging students”, Kevin Cannon

“Using LabWorks in General Chemistry”, Bill Yorke

Community College Chemistry Instructor Jobs

Truckee Meadows Community College, located in Reno, Nevada, invites applications for a, tenure-track, chemistry instructor. This position will begin August 10, 2005. Minimum qualifications: A master’s degree in chemistry from a regionally accredited institution and two (2) years teaching in a higher education setting. A detailed position announcement including the preferred qualifications, responsibilities and salary can be obtained by contacting: TMCC, Director for Human Resources, 7000 Dandini Blvd., RDMT 211, Reno, NV 89512-3999, Tel (775) 673-7168 or TDD: (775) 673-7000 or visit TMCC’s Web site at www.tmcc.edu/hrs. TMCC is an EEO/AA institution.

Portland Community College in Portland, Oregon, invites application for a tenure-track chemistry instructor for the fall of 2005. A detailed position announcement can be found at www.pcc.edu.

Call for application for the office of Chair-Elect of COCTYC for the year 2007

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, 2005. (As soon as possible!)
- 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 12/31/2005.
- 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.

Remember our colleagues in Canada! Attending a meeting in Canada can be a rewarding experience.

College Chemistry Canada
32nd Annual Conference
St. John's, Newfoundland
June 16-19, 2005

for info, www.c3.douglas.cd.ca or
John Olson, President of C3 olson@augustana.ca

THOSE WHO CAN TEACH!

Do you want to help your adjunct faculty? We recommend the following publication from the ACS.

A Guide To Classroom Instruction For Adjunct Faculty

This guide is a 48-page, full-color self-study instructional guide for faculty across all disciplines in higher education to use in preparing for classroom instruction.

The guide includes:

- (1) Introduction to Classroom Instruction;
- (2) Fundamentals of Learning;
- (3) Methods of Delivering Instruction; and
- (4) Administration, Evaluation and Feedback.

Each module contains a case study that presents a problem or situation.

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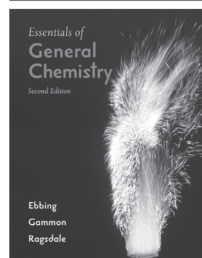
Web site: <http://www.mtsu.edu/~chem>

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

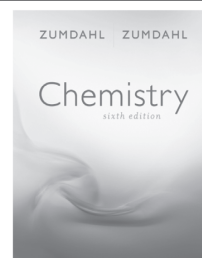
or Write: Department of Chemistry, Box 68,
Middle Tennessee State University, Murfreesboro, TN 37132

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