Chemistry Outlook

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

Website: http://2yc3.org

We're Now on Facebook and Twitter! - See page 2

Mark Matthews, Chair

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Vol. 2011 – I

ACS Chemistry for Life™

Notes From The Chair

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Mark Matthews
Durham Technical Community College
Durham, NC

Last fall, I was asked to teach organic chemistry for the first time in six years. After dusting off my notes, I asked my local book rep for a copy of the ancillary CD that had all the figures, tables, and other stuff from the book. He reminded me that we now have this thing called the "internet" where all that stuff is kept these days, then gave me the URL and password where I could "download" them. At that moment, I felt myself age a hundred years, like that guy from Indiana Jones and the Last Crusade that "chose poorly." You see, having been a geek for most of my life, I've always prided myself with being on top of all things technological. I've built websites using HTML, I'm not afraid to tinker with a Windows registry, and I even build my own PCs. Yet here I was, in 2010, asking for a compact disc, a format that's probably two or three years away from going the way of the dodo and the VHS tape. Now, I say all this knowing that many reading this are ten to twenty years my senior. Some of you remember teaching with floppy discs that were actually floppy and making copies on mimeograph machines. You folks are free to have a good, empathetic laugh at my expense. Those younger may not want to laugh too hard, though. I promise, you'll have your own mid-life crisis soon enough.

Looking back at the last decade, it's amazing how technology's changed the way we teach. In 2000, as I completed my dissertation, I would regularly back up my work on a Zip drive. Remember those? Those thick, blue discs with an amazing 100 MB of storage? Sold separately, they cost about $20 each. At the most recent $2YC_3$ meeting in Raleigh, attendees received a 1 GB flash drive as a swag item. It was also 10 years ago that I began my teaching career. I remember having to design my own website to supplement my courses (using Microsoft FrontPage), though I still kept old exam files on library reserve and posted answer keys on a bulletin board outside my lab. Now we have course management systems like Blackboard and Moodle that take care of

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Conference Calendar

2011

191st CONFERENCE (Western)
March 25-26, 2011

Mt. San Antonio College
Walnut, CA
Conctact: Charlie Newman
Email: CNewman@MtSAC.edu

192nd CONFERENCE (Midwestern)
May 5-7, 2011

Stark State Community College
Canton, OH
Conctacts: Amy Jo Sanders
Email: ASanders@starkstate.edu
Michele Turner
Email: cmt@uakron.edu

193rd CONFERENCE (Southern)
Sept 16-17, 2011

Brevard Community College
Cocoa, FL
Conctact: Mary Roslonowski
Email: RoslonowskiM@brevardcc.edu

194th CONFERENCE (Eastern)
Nov 11-12, 2011

Montgomery College
Montgomery County, MD
Conctact: Virginia Miller
Email: virginia.miller@montgomerycollege.edu

"Notes from the Chair" ...continued from page 1

all that. Heck, I don't even have a print version of my lab manual, anymore.

The biggest change, arguably, has been the emergence of web-based distance learning, particularly in the sciences. Ten years ago, how many of us actually believed that teaching a laboratory-based chemistry course over the internet was even remotely possible? Despite my love of all things geek, I certainly didn't, but I now teach a fully online General Chemistry I course each semester and seminars on distance learning have quickly become commonplace at $2YC_3$ conferences.

As an organization, $2YC_3$ has seen fantastic growth over the last decade. The most striking way to track this is through the progression of our website. In 2001, there was no "2yc3.org" (that was still a couple of years away). The original site was overseen by then-Newsletter Editor Jay Bardole, using his faculty web account at Vincennes University (for the curious, you still can find Jay's old site at http://bit.ly/hIla5c, courtesy of archive.org). Today, the Webmaster is an official part of $2YC_3$'s executive committee and we'll begin 2011 with a new, redesigned website. Each member will have their own personal account, allowing you to view and manage your membership status and conference registrations. As of this writing, the new site is scheduled to be live by the time you receive this newsletter, so stop by 2yc3.org and set up your account.

Finally, ten years ago the primary methods of sharing and collaborating with your fellow $2YC_3$ members were limited to our quarterly newsletter and – if it was close enough – a conference in your region (and maybe a listserv account – remember those?). But now, with our new website and the rise of social networking, we have the opportunity to be a collaborative, sharing organization all year round. As the new website evolves in the months to come, we hope to add even more value to your membership, so be sure to let us know what you think and tell us what you'd like to see there in the future. In the meantime, make sure to join our Facebook page (facebook.com/twoyearchem) and follow us on Twitter (@2yc3) for the latest news and events.

So what happens in the next ten years? If/when the 14th edition of Chang's or Timberlake's textbook comes out, will there actually be a print edition? Will our PowerPoint slides be in 3D? Will we even see our students face-to-face, or will it all be done via the internet? I'm not sure, but it's a safe bet that someone in 2021 will stumble across this article in the $2YC_3$ newsletter archives and be very amused that people today were still using flash drives and printed textbooks. Go ahead and laugh it up, you little whippersnapper!

Connect with $2YC_3$ online!

Facebook:
http://www.facebook.com/twoyearchem
Check out our fantastic Facebook page! See photos of conferences! Get updated 2YC information! Make friends! Check it out today!

Twitter: twitter.com/2yc3
Get short, timely messages from $2YC_3$.
Twitter is a rich source of instantly updated information. It's easy to stay updated on an incredibly wide variety of topics. Join today and follow "@2YC3".

2011 COCTYC AND SUPPORT STAFF
Division of Chemical Education, Inc
American Chemical Society
2011 Roster of Committee Members

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Luca Preziati, Stark State College
6200 Frank Ave NW, North Canton, OH 44720
(330) 966-5457 Ext 5267 Email: webmaster@2yc3.org

$2YC_3$ Membership Form

Please consider supporting the $2YC_3$ by becoming a member or renewing your membership. Annual dues are only **$25**.

There is no longer a special rate on joint membership with DivCHED. If you are interested in joining DivCHED, please go to *http://www.divched.org/* and click the *Membership* link on the left.

I wish to: _____ Become a member of $2YC_3$
_____ Renew my $2YC_3$ Membership

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:** _____

Current Member of: _____ ACS _____ DivCHED

Names of current members are posted on the $2YC_3$ website. The list includes names, institutional affiliation, and membership expiration date only. Email addresses and phone numbers are NOT listed. If you do NOT want your name listed, check here _____.

- **NEW! Membership dues can now be paid by credit card or PayPal on the $2YC_3$ website by visiting http://www.2yc3.org/membership/**
- **If paying by check, please send your check**, payable to $2YC_3$, for $25 to:
  Thomas Higgins, Harold Washington College, 30 E Lake St, Chicago, IL 60601

191st 2YC$_3$ Conference

TIPS
Transformative Instructional Practices and Strategies

Conference Program

March 25 – 26, 2011
Mt. San Antonio College
Walnut, CA

27 Co 58.933 Cobalt nference Information

Program Chair:	Charles Newman	cnewman@mtsac.edu	909-594-5611
Local Arrangements:	Jenny Leung	jleung@mtsac.edu	909-594-6311
Exhibits Coordinator:	Eileen DiMauro	edimauro@mtsac.edu	909-594-4533

Friday, March 25

8:00 – 5:00 Exhibits

8:00 – 8:30 Registration, Refreshments, and Exhibits

8:30 – 8:45 Welcome and Opening Remarks

8:45 – 9:45 Keynote Address
Title TBD, Ramesh D. Arasasingham, University of California, Irvine, Irvine CA

9:45 – 9:55 Refreshment Break and Exhibits

9:55 – 10:25 2YC$_3$ General Membership Meeting – 50th Year Celebration
Congratulations Arelene Russell, our new 2011 DivCHED chair (University of CA, Los Angeles, Los Angeles, CA)

10:30 – 11:15 Presentation Session 1
A. Why do I come to Class? Giving Students a Reason to Want to Come to Chemistry
Karelyn Hoover, Mt San Antonio College, Walnut, CA

B. The Supplemental Instructors in Chemistry, Increasing student success with dedicated tutors.
Eva Figueroa, Mt San Antonio College, Walnut, CA

C. Making the Most of Your Opportunities: Leveraging Key Resources and Connections
Joan M. Sabourin (American Chemical Society)

11:15 – 11:30 Refreshment Break and Exhibits

11:30 – 12:15 Presentation Session 2
A. Student Connections to Laboratory Safety, Building Safety Videos that Connect Student to Their Laboratories
Charles Newman, Mt San Antonio, College, Walnut CA

B. The Future of Chemical Education, An Open Forum
Jody Williams-Tyler, Mt San Antonio College, Walnut CA

12:15 – 1:00 Lunch Break, Exhibits, and Student Poster Session
Lunch Speaker, Adam Gonzales on Creating your own Cartoon Video.

1:00 – 2:00 Presentation Session 3 – Vendor Presentations and Student Poster Session
A. Vendors offering Textbooks and Learning Tool
B. Vendors offering Laboratory Equipment
C. Student Poster Sessions – Open from 1:00 until 3:00

2:00 – 3:00 Presentation Session 4 – Campus Tours and Laboratory Demonstrations - Choose either time slot for each tour
A. 2:00 to 2:30 AND 2:30 to 3:00 - MeasureNet/tour Lab
B. 2:00 to 2:30 AND 2:30 to 3:00 - Exploratorium and the B. J. Meek Center tour
C. 2:00 to 2:30 AND 2:30 to 3:00 - Astronomy Dome/Planetarium tour

2:45 – 3:00 Refreshment Break, Exhibits, and Student Poster Session

3:00 – 3:45 Presentation Session 5
A. Resource Materials for Nanochemistry Education
Kathy Flynn, College of the Canyons, Santa Clarita, CA
B. Nanochemistry in General Chemistry
David Brown, Southwestern College, Chula Vista, CA

3:45 – 4:00 Refreshment Break and Exhibits

4:00 – 4:45 Presentation Session 6
A. Applying ACS Resources to Improve Effectiveness at Your Institution: A Collaborative Project of $2YC_3$ and the ACS
Candice McCloskey Campbell and Heather Skelnicka.
B. Catalyzing Pathways to Student Success: Focusing on the Transition from Introduction to General Chemistry to General Chemistry
Kamran Golestaneh and Jenny Leung, Mt San Antonio College, Walnut, CA

5:00 – 6:00 Tour of the Center for Regenerative Studies, California State Polygenic University, Pomona, CA.

6:00 – 8:30 Dinner Banquet and Address
Dinner/Speaker, Topic TBD, Nel Groenveld, Laboratory Director, Inland Empire Utility Agency, Ontario, CA.
Location to be Determined

Saturday, March 26

8:00 – 2:00 Exhibits

8:00 – 8:45 Registration and Refreshments

8:45 – 9:00 Opening Remarks

9:00 – 9:45 Presentation Session 7
Panel Discussion: From Adjunct to Full-time Faculty, Skill-Sets that Set Candidates Apart
Gayane Godjoian, East Los Angeles College, Monterey Park, CA, John Davison, Irvine Valley College, Irvine CA, Robin DeRoo, Cypress College, Cypress, CA and Charles Newman, Mt San Antonio College, Walnut, CA

9:45 – 10:00 Refreshment Break and Exhibits

10:00 – 10:45 Presentation Session 8
A. Options Overload: What's happening with chemistry textbooks and Internet tools?
Mark Bishop - Monterey Peninsula College, Monterey, CA
B. Visual Chemical Demonstration for Predicting Molecular Geometry and Hybridization
Mohamed Ayoub, University of Wisconsin-Washington County, West Bend WI

10:45 – 11:00 Refreshment Break and Exhibits

11:00 – 11:45 Presentation Session 9
TBD

11:45 – 12:30 Lunch Break, Exhibits, and Western Regional Advisory Board Meeting

Continued next page...

12:30 – 2:00 Presentation Session 10

A. Incorporation of Green Chemistry Principles and Practices into Undergraduate Education
Thomas Goodwin, Hendrix College, Conway, AR

B. Green Chemistry (Title TBD), David Vosburg, Harvey Mudd College, Claremont, CA

C. Green Chemistry (Title TBD), Iraj Nejad, Mt San Antonio College, Walnut CA

Registration

For registration information, the conference website and current updated information, please go to the $2YC_3$ website: 2YC3.org. Other information regarding the conference can be had by contacting Charlie Newman, program chair, at ***cnewman@mtsac.edu***.

Lodging

Reservations at the conference hotels must be made by March 7th to secure the conference block of rooms. Ask for the $2YC_3$ group rate when making your reservations.

Shilo Inn-Pomona
3200 Temple Avenue
Pomona, CA 91768
909.598.0073
$79/rm (single/double occupancy); rate subject to change based on availability
http:///www.shiloinns.com
3 miles from Mt SAC

Shilo Inn Hilltop Suites-Pomona
3101 Temple Avenue
Pomona, CA 91768
909.598.7666
$79/rm (single/double occupancy); rate subject to change based on availability
http://www.shiloinns.com
3 miles from Mt SAC

Ayres Suites-Diamond Bar
21951 Golden Springs Drive
Diamond Bar, CA 91765
909.860.6290
$96/rm (lower rate may apply pending on the number of rooms booked); rate subject to change based on availability
http://www.ayreshotels.com/diamondbar
4 miles from Mt SAC

Getting to Mt San Antonio College

Mt San Antonio College is located about 30 miles east of downtown Los Angeles. The College is 18 miles from Ontario Airport, 30 miles from John Wayne, Orange County Airport and 41 miles from Los Angeles International Airport. Outside of renting a car, the Shilo Inn offers free airport service to and from Ontario Airport.

Enjoying your stay in Southern California

Southern California offers a multitude of cultural, entertainment and amusement parks. Some of these include The Fullerton Arboretum, a collection of over 4000 plants on 26 acres, open from 8am-4:30pm everyday (13 miles/16 min); Medieval Times, including dinner and jousting tournament. Adults-$57.95, child (12 and under)-$35.95 (23 miles/28 min). Knott's Berry Farm and Theme Park with over 150 rides, shows and attractions. Open at 10 am everyday. Adults- $54.99, child (3-11)-$23.99 (24 miles/29 min). Disneyland theme park, (20 miles/27 min). The Aquarium of the Pacific, containing exhibits of plants and animals of the Pacific Ocean. Open from 9am-6pm. Adults-$33.95, child (3-11): $15.95 (38 miles/45 min). The Huntington Library, Art Collections and Botanical Garden, wherein the library contains rare manuscripts and books related to American and British History. The Botanical Garden is located on 120 acres with more than 12 specialized gardens. Adults-$20, child (5-11)-$6 (20 miles/ 30min). Griffith Observatory Science Museum, Observatory and Park area (30 miles/35 min). Los Angeles Zoo and Botanical Gardens, adults-$14, child (2-12)-$9 (31 miles/36 min).

192nd $2YC_3$ Conference

$2YC_3$ Hall of Fame: Celebrating 50 Years of Chemical Education

Stark State College, Main Campus, North Canton, OH
Friday - Saturday, May 21-22, 2011

Conference Theme

How would you like to feel rejuvenated about your career as an educator? Many of our conference attendees come away with fresh ideas about how to better engage their students, incorporate the newest technologies in their classrooms, improve retention of their STEM students, design or redesign their chemistry courses, and numerous other areas of professional development. You will find that the simple act of socially networking (**in person**) with your colleagues across the nation will be invigorating. 2011 is a special year for our organization as it is our 50th anniversary. Come join in the celebration of 50 years of improving chemical education.

Preliminary Information

We are delighted to announce that Robert Blackledge will be our keynote speaker. He received his BS (chem.) from The Citadel in 1960 and his MS (chem.) from the University of Georgia in 1962. His first job after getting out of the Army (2-year hitch as an officer in the Chemical Corps) was as an instructor of chemistry and physics at Prestonsburg Community College in Prestonsburg, Kentucky. Starting with the Florida Department of Law Enforcement's Tallahassee Crime Lab in 1971, Bob worked in forensic science for over thirty years. Stops along the way included eleven years with the U.S. Army Criminal Investigation laboratory-Europe, back during the Cold War when there was a crime lab in Frankfurt, Germany. Bob's final stint was as the Senior Chemist with the Naval Criminal Investigative Service Regional Forensic Laboratory-San Diego from 1989 to 2006. Bob will be presenting "*Bad Science – The Floyd Landis Case*."

Our conference will include symposia, workshops, and panel discussions focused on the chemistry behind sports medicine, chemical education research, 2-year degrees and certificates in chemistry, online chemistry, technology in chemical education, the role of chemistry in alternative energy, teaching chemistry at satellites, grants and partnerships, computational chemistry, as well as other presentations of general interest. In addition, there will be many opportunities to meet vendors with state-of –the-art lab equipment and classroom technologies.

The conference committee is working to organize at least one of the following workshop opportunities: Wavefunction academic software use, POGIL (Process Oriented Guided Inquiry Learning), chemical education research, or NSF grant writing. We are also partnering with local industries to provide an exciting tour. Some possibilities include: The Timken Steel Company, Goodyear Tire and Rubber Company, GoJo, or a Marathon Oil refinery. Keep checking the website for more details as they become available: ***www.starkstate.edu/2yc3***.

Call for Papers

The conference committee would like to invite you to contribute to our program. There are still many slots available. You may submit contact one of the program chairs or go to our program website www.starkstate.edu/2yc3 to submit an abstract in any of the aforementioned areas.

Program Chair:	Amy Jo Sanders	ASanders@starkstate.edu	330-494-6170
Program Chair:	Michele Turner	cmt@uakron.edu	330-684-8925
Local Arrangements Chair:	Daryl Stein	DStein@starkstate.edu	330-494-6170
Exhibits Chair:	William Robinson	WRobinson@starkstate.edu	330-494-6170

193rd 2YC$_3$ Conference Preliminary Information and Call for Papers

Striving for Excellence in Chemistry Teaching and Learning

September 16 - 17, 2011
Brevard Community College
Palm Bay, FL 32909

To Submit Papers or Request Information,
Contact Mary Roslonowski , Program Chair
roslonowskim@brevardcc.edu
Submissions due by June 1, 2011

Tentative Sessions/Symposia/Workshops

- Inquiry Based Laboratories for General and Organic Chemistry
- Chemistry Demos that Amaze and Produce Student Learning (***Competition with Prizes)
- Green Chemistry
- Best Practices in Teaching Chemistry
- 2-Year College Research Programs
- Collaborative Efforts between High School, Middle School, and College Chemistry Teachers
- Best Practices in Assessment of Chemistry Learning
- Best Practices in Service Learning for Chemistry Students

-Friday Night Banquet and Guest Speaker: Location TBA
-Saturday Night Excursion: Kennedy Space Center!
-Optional: Process Oriented Guided Inquiry Learning (POGIL) workshop on Saturday afternoon and Sunday morning

Election Results
2011 2YC$_3$ COCTYC Positions

Congratulations and welcome to the following new COCTYC members:

- Chair-Elect 2012: **Pam Clevenger**, Hinds Community College.
- Membership Chair: **Tom Higgins**, Harold Washington College.

Thank you to Lance Lund, outgoing Chair and Frank Ramdayal for his tenure as Membership Chair.

Chemistry Collaborations, Workshops and Community of Scholars (cCWCS) Announces 2011 Workshop Schedule!

David M. Collard
Professor and Associate Chair
School of Chemistry and Biochemistry
Georgia Institute of Technology
Atlanta, GA 30332-040

It is a pleasure to announce the 2011 schedule of workshops organized under the auspices of the NSF-sponsored Chemistry Collaborations, Workshops and Community of Scholars (cCWCS), the successor to the Center for Workshops in the Chemical Sciences (CWCS). These workshops provide a background and modern perspective on various topics in the chemical sciences, along with methods to introduce these topics into the college curriculum. Attendance at the workshops is FREE. More information and the online application are available at: www.ccwcs.org

- Nuclear Magnetic Resonance - Part 1, June 5-8; Part 2, June 8-11
- Computational & Theoretical Chemistry – June 12-17
- Crystallography for Chemists (and others!) – June 19-24
- Forensic Science – June 19-24
- Chemistry of Art – June 19-24
- Mitochondrial Biochemistry, Genetics & Molecular Biology - Jun 26 - Jul 1
- Materials Science & Nanotechnology – July 10-15
- Guided-Inquiry Organic Labs – July 10-15
- Green Chemistry – July 16-21

In addition, we are continuing a collaborative initiative with the Telluride School on Theoretical Chemistry in offering:

- Advanced Workshop on Theoretical Chemistry – Jul 10-16

The cCWCS workshop program is open to faculty, instructional staff and laboratory coordinators at two-year and four-year colleges, and universities, as well as post-docs and advanced graduate students who plan to embark on a career in teaching college-level chemistry. Registration, accommodations and a per diem for food are provided at no cost to participants.

We hope that you will consider attending one of the workshops and that you will also bring this program to the attention of your colleagues. Some of the workshops have a long history of engaging faculty in new areas and providing great support for enhancing the curriculum at a variety of colleges.

The cCWCS program provides significant enhancements over the previous CWCS program. These include the development of online communities of scholars and a small grant program for implementation and dissemination activities.

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cCWCS is supported by the NSF CCLI program as a Phase III project.

The Center is co-directed by:
J.C. Smith, Georgia State University
David M. Collard, Georgia Institute of Technology
Lawrence J. Kaplan, Williams College
Pat Hill, Millersville University.

>From 2001 to 2010, more than 1800 individuals have attended workshops at 30 different locations. Aspects of the impact of the program at a wide variety of institutions are discussed on the cCWCS website: www.ccwcs.org.

NSF-sponsored cCWCS Chemistry Collaborations, Workshops & Communities of Scholars

What's Happening in My Area?
News From the Regional Advisory Boards (RABs)

Western RAB
Dick Gaglione, Chair

The College of Southern Nevada (CSN) is launching a new online science course entitled Food Chemistry (CHEM 107) for the Spring 2011 semester. The course has no prerequisites and is intended for students who have never taken a chemistry course. It serves as an introduction to chemistry and specifically to the function of water and other nutrients such as carbohydrates, proteins and fats in addition to the changes that they undergo during processing and storage. The scientific method will be employed by the students in order to also explore the chemistry of food colorings, additives, flavors, minerals and vitamins and their interactions in the human body. Students will receive a total of 4 credits for successful completion of the 3 credit lecture and 1 credit laboratory components of CHEM 107. Students will be required to purchase a $75 laboratory kit for performance of innovative experiments using household items. Required textbooks will be posted online and reserved in the College Library. Chemistry Professor, Gunay Ozkan, of the Physical Sciences Department designed the curriculum for CHEM 107 and will be the online instructor for the initial offering of this course.

CSN is a multi-campus institution offering chemistry courses in support of certificate and associate degree programs. The CSN Cheyenne Campus is currently undergoing renovation of thirty-five year old science labs which will result in a new Chemistry Laboratory. The existing Chemistry Lab with only three 3 foot chemical fume hoods will be replaced with a larger space that includes six 8 foot, two 6 foot, and one 4 foot chemical fume hoods. This will allow the CSN Cheyenne Campus to offer Organic Chemistry Labs which were previously restricted to the Charleston Campus for safety reasons. Physical Science Department Chair, Dr. Mark Garner, has also submitted a request to the American Chemical Society to convert the College's Chemistry Club into an ACS Student Affiliate Chapter. The Physical Science Department offers a Special Topics course, Introduction to Undergraduate Research in the Chemical Sciences, taught by Dr. Kaveh Zarrabi who with the support of Dr. Garner, has submitted seven student poster presentation requests for the ACS Anaheim, CA National Meeting in March 2011. Garner also serves as the Chemistry Olympiad Coordinator for the ACS Southern Nevada Section. Each year Chemistry Honors and AP Teachers at 35 local High Schools are contacted to send students to the Chemistry Olympiad Local Exam held at CSN. The ACS Southern Nevada section then selects the top 10 students to participate in the Chemistry Olympiad National Exam. The ACS Southern Nevada Section has been participating in the ACS Chemistry Olympiad for 27 consecutive years.

Eastern RAB
Brahmadeo Dewprashad, Chair

The 2011 ACS Mid-Atlantic Regional meeting (MARM) will be held at at the University of Maryland, College Park, Maryland May 21-24, 2011. The theme of the meeting is "International Year of Chemistry 2011." This meeting will feature national and international leaders in the chemical sciences and will include a broad selection of symposia in Biochemistry / Organic Chemistry, Inorganic / Materials Chemistry, Analytical / Physical / Theoretical Chemistry, and Career / Education / Professional areas. Several Workshops are planned, and there will be events that feature career development, funding opportunities, and education. Additional information can be obtained from the ACS website at *http://www.marmacs.org/2011/general.html*.

There is good news from Montgomery County Community College. NASA, as part of its Cooperative Agreement Notice, "Global Climate Change Education: Research Experiences, Teaching and Learning," awarded a $486,919 grant to Dickinson College, which will work with its community college partners—Montgomery County Community College, Northampton Community College, Harrisburg Area Community College and Montgomery College in Maryland—to promote interdisciplinary teaching about climate change.

Geology Professor Robert Kuhlman will lead the initiative for MCCC and will be working closely with Neil Leary, director of Dickinson College's Center for Environmental and Sustainability Education. Representatives from participating colleges will serve on a Climate Change Curriculum Task Force that will shape the development of the curriculum and teaching practices. In addition to resources and materials provided by NASA, task force members will be able to utilize information from the Center for Climate System Research at Columbia University.

"These are pertinent, timely issues," Kuhlman said. "This program will enable us to tap into talent and expertise beyond

Continued next page...

Montgomery County Community College and then allow us to integrate this information and make changes here at the College to further enhance the program for our students." While these concepts are currently taught in environmental and science classes at the College, the program will strengthen the quantitative elements in the existing instruction and will help to infuse climate change and sustainability into a variety of courses, Kuhlman explained.

The Earth's evolving climate not only produces environmental changes, but also economic, social and political ramifications. Professors can include and discuss these results in economics, political science, history and humanities classes.

"The College acknowledged this by its decision to incorporate concepts of sustainability in our new Core curriculum," he said.

Southern RAB
Ken Capps, Chair

The 190th Conference of the $2YC_3$ was held on November 12 and 13, 2010 in Raleigh, North Carolina. Events were held at the newly constructed and modern North campus of Wake Technical Community College. The theme for the conference was "Education, Technology and Green Chemistry" and featured a keynote address from Deborah Exton, Senior Instructor at the University of Oregon. Her talk was entitled "Debunking the Kermit Myth: It IS Easy Being Green" and focused on the challenges of green chemistry and provided suggestions for raising awareness and teaching green chemistry concepts in the undergraduate classrooms and laboratories with a particular emphasis on general chemistry. This was followed by very informative presentation sessions that included topics on developing online lab courses, promoting active student learning, developing a chemical inventory database, teaching to a diverse student body, and ACS lab exams. The $2YC_3$ banquet capped off the evening and featured a talk by Professor Siddhartha Mitra of East Carolina University. Dr. Mitra gave a humorous and informative talk entitled "Should We Treat Chemophobia with Medication?". The conference continued the next day with additional presentation sessions on topics that included: fostering higher-order thinking skills, constructing a math skills questionnaire, improving retention of minority students, and lab solutions for online courses.

Overall, this conference was a big success with approximately 85 attendees and a great opportunity to socialize and network. By and large, a great conference and a superb job by program chair, DeeDee Allen, and her coordinators. We congratulate and thank them for all the hard work they did!

Midwestern RAB
Amy Jo Sanders, Chair

Greetings from your Midwestern RAB. We are happy to announce that our own Bal Barot has recently won two prestigious awards! He has been named a Fulbright Scholar and Michigan's top college science teacher. As winner of a Fulbright US Scholars award, Barot will teach chemistry in India, his native country. He will teach at Kochi University of Science and Technology in southern India for six months, beginning in January. Barot won the award based on his merits, proposal, recommendations and nominations, Lake Michigan College said in a news release. The Fulbright program is designed to increase mutual understanding between the people of the US and other countries. It awards grants for the international educational exchange of scholars, educators, graduate students and professionals. "The experiences Dr. Barot will bring back to the classroom from this opportunity will further enhance the learning experience for our students. We are very proud to have him as part of our faculty" LMC President Robert Harrison said. Barot was also named College Science Teacher of the Year for 2011 by the Michigan Science Teachers Association. He was given the award based on his ability to inspire students, his innovative teaching techniques and for being an excellent role model for students and other instructors. Barot has been a chemistry professor at LMC since 1993. He earned his doctorate in chemistry form Oklahoma State University. Bal has been a great addition to our Midwestern RAB and is an inspiration to us as well. Thank you, Bal, and safe travels this winter.

In other Midwest news; we have all been very busy preparing for our next Midwestern Conference: $2YC_3$ Hall of Fame. Please be sure to review the preliminary program information in this newsletter. If you would like an electronic copy of the conference poster to hang up at your institution, please send me an email: *ASanders@starkstate.edu*.

ChemSource

A Support Strategy for PreService/InService Chemistry Teachers

ChemSource

Instructional Resources for Preservice
Inservice Chemistry Teachers

The New ChemSource Is Here!

ACS
Chemistry for Life™

For those of you who knew and used the various versions of ChemSource, whether as the SourceBook v. 2.0 or earlier, or SourceView videotapes, or the GuideBook for your pre-service teachers, you may want to look at the new version. For those of you who do not know about ChemSource, please read on – you will be glad you did!

The ChemSource materials represent an array of linked products designed to provide chemistry teachers with quality support to enhance their effectiveness in the classroom. Since its inception back in 1988, this National Science Foundation-supported project has gone through several iterations and marketed by the ACS Education Division. But a lot has changed since 1988. New emphasis has been placed on forms of **assessment**. National and state **standards** were introduced. The development of **inquiry- based laboratory activities** made its way into the standards and the literature. New and improved technology for teaching students with **disabilities** has rendered some tried and true methods obsolete. The internet explosion and the subsequent **computer usage** for laboratory and lecture has grown incrementally. All of these issues had to be addressed in any updating of what has proven to be a solid resource for chemistry teachers.

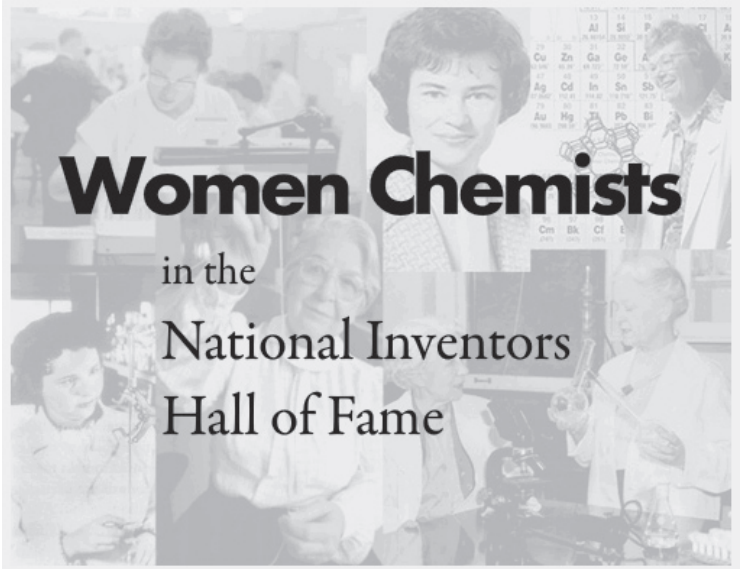
Components:

SourceBook: 2300 pages of resources to supplement any chemistry curriculum. Activities, demonstrations, history, humor, cartoons, problem-solving, links and connections, media, references. SourceBook is a resource containing the collected wisdom of experienced chemistry teachers from around the country.

SourceView: 5+ hours of video on three DVDs illustrating 21 teaching episodes in the classroom and laboratory, with a section on mathematical problem-solving; Users Guide to be used for teaching diagnosis of both the episodes and one's own videos. The videos consist of episodes illustrating exemplary and simulated poor chemistry instruction at the high school level.

GuideBook: A guide to Pre-Service Use of ChemSource, would be particularly helpful to graduate students in chemical education. GuideBook is designed to assist the methods instructor in the task of fitting the ChemSource materials into the established patterns of typical chemistry courses.

These sets of materials promote excellence in chemistry teaching and learning at various levels of instruction. Please visit *www.chemsource.info* for more information. Visit *www.acs.org/store* and click on Education if you wish to purchase the entire set of materials. For more information, contact Mary Virginia Orna at *chemsource.info@gmail.com*.



WOMEN CHEMISTS IN THE NATIONAL INVENTORS HALL OF FAME: TELLING THEIR STORIES

Mary Virginia Orna
Symposium Organizer

Meet the inventors, read about their achievements, and listen to their own reminiscences. The website referenced below gives you a feel for the invention process through the eyes of women who have been successful in very challenging areas. Hear the inventors speak about a variety of topics: In addition to commercial, scientific, and lifetime achievement, they also touch on career choices, pathways and environment, education, family, fears, gender and discrimination, interesting personal and professional stories, the joy of doing science and of mentoring, and have something to say about advice both given and received. Find also complete information about the 2008 ACS National Meeting Symposium, "Women Chemists in the National Inventors Hall of Fame: Telling Their Stories," including background, abstracts, and selected presentations, complemented by the complete article on the symposium subsequently published in the Bulletin for the History of Chemistry. The website of the ACS Women Chemists Committee (*http://womenchemists.sites.acs.org*) says "This project is intended to entertain you and to bring you to a new state of understanding about people and science, about scientists and inventors, about a group of people who could have lived next door to you." Check out this exciting and inspiring pedagogical tool; your students will be glad you did.

Please visit thes website: ***www.layingthegroundwork.com/inventors***

ACS Chemistry for Life™ **Women Chemists Committee** Women CHEMISTS Committee

Thank You Michaeleen Lee!

As the $2YC_3$ moves into the next decade and we celebrate our 50th anniversary this year, we also say goodby to Michaeleen Lee who completes her tenure as a COCTYC member after *15 years* of service to the ACS and two-year college faculty.

We'd like to thank Michaeleen for her many years of service as a COCTYC member. Michaeleen served as the Industrial Sponsors Chair for 9 years and 6 years in her progression through chair elect, chair, and past chair, with the last 3 of those years as the Regional Advisory Board (RAB) Coordinator. Under Michaeleen, the RABs have come a long way.

Michaeleen - we have enjoyed working with you these past few years and wish you the very best as you move on! It will be difficult to replace you!

Inquiry and Visualization in General Chemistry

A 2-1/2 day Summer Conference for Chemistry Faculty
Montana State University - Bozeman, MT
July 18-20, 2011

Participants in this two-and-a-half day conference will work with national leaders in chemical education to discuss, practice, and evaluate new instructional strategies and the use of technology to improve learning, to use lab time and space more effectively , and to reduce chemical costs and increase safety.

Experience MSU's new chemistry labs. Enjoy the Mountain West. Two graduate credits optional.

CONFERENCE STAFF:

Dr. Norb Pienta, Professor of Chemistry, The University of Iowa, Editor of the Journal of Chemical Education.
Using Live Graphics and Visualization to Improve Understanding in the General Chemistry Laboratory

Dr. Tom Greenbowe, Professor of Chemistry, Iowa State University, past Chair of the ACS Division of Chemical Education.
Using the Science Writing Heuristic to Improve Understanding in the General Chemistry Laboratory

Dr. Mike Seymour, Professor of Chemistry, Hope College. Past Head of the Department of Chemistry at Hope College, Holland, MI.
Integrating Research Strategies into the General Chemistry Laboratory

Dr. John Amend, Professor of Chemistry Emeritus, Montana State University, President, MicroLab, Inc.
Computers and Color Graphics as Tools for Inquiry: Drawing Concepts from Experimental Data.

Contact Diana Paterson, dianap@montana.edu, at the MSSE Program at Montana State University (406) 994-5679 for registration or graduate credit information. Contact John Amend, jamend@microlabinfo.com, at MicroLab (406) 586-3274, for conference content information. The conference brochure is on the MicroLab web site, microlabinfo.com. Sponsored by MSU's Master of Science in Science Education Program, and Microlab, Inc.

Special Symposium on Alternative Energy Systems in Two Year Colleges

ACS National Meeting
March 27-31, 2011
Anaheim, CA

The ACS Committee on Science is sponsoring a symposium on alternative energy systems in two-year colleges at the 241st ACS National Meeting March 27-31, 2011 in Anaheim, California. Discussion by experts in the field will include the partnerships in developing renewable energy programs, curriculum for geothermal plant operators, teaching enzyme kinetics using cellulosic ethanol production, integration of sustainability in the community college, materials selection, solar power technologies, energy efficiency, and biofuels production and analysis. More information will be shared as soon as the time and date of the symposium are finalized.

ACS Chemistry for Life™

Help $2YC_3$ Celebrate its 50th Anniversary!

An Invitation for Submissions to the Chemistry Outlook

From the Editor: This year, $2YC_3$ celebrates its 50th Anniversary! We are planning a celebration issue for our second issue, but we expect to celebrate all year long! You can join in by attending one of our upcoming meetings (see page 2 for the list). In additon, I would like to invite any and all members of $2YC_3$ to consider submitting interesting and relevant articles, commentary, announcements, job postings or photographs for inclusion into the Chemistry Outlook. *Do you have an interesting and relevant story to tell about your past $2YC_3$ experiences?* Do you have an interesting classroom activity you'd like to share? How about a demonstration or a teaching technique that you think works especially well? In the past we have published conference commentary, "It Works for Me", photographs of students excelling at presentations and workshop announcements.

I would ask that submissions be fairly short so that we can include more in the newsletter. Submissions may be published on an editorial appropriateness and space-available basis, and should by typed in Times New Roman font, single-spaced, 12-pt. I look forward to hearing from you!

Deadlines for submissions for 2011:

Vol II (due out mid-March): February 15 - Our Anniversary Issue!
Vol III (due out mid-Aug): June 15
Vol IV (due out mid-Sept): July 15

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