The 177th Conference of the Two Year College Chemistry Consortium "100 Years of Community College Chemistry" Joliet Junior College 1215 Houbolt Road Joliet, IL 60431

Program: Marie Wolff, email: mwolff@jjc.edu

Local Arrangements: Patrick Mills, email: pmills@jjc.edu

Exhibits: Marie Wolff: mwolff@jjc.edu

Friday March 23

8:00 – 4:00 PM Exhibits

8:00 – 9:00 AM Registration and Continental Breakfast (Breakfast provided by Prentice Hall)

9:00 – 9:15 AM Welcome and Opening Remarks

9:15 – 10:00 AM Keynote Address: Science Literacy: Why Understanding Chemistry Can

Make You Happy; Nivaldo Tro, Professor of Chemistry, Westmont College,

Santa Barbara, CA

10:00 – 10:40 AM Refreshment Break and Exhibits

Session I – Workshop

10:35 AM – 12:00 noon Prentice Hall MasteringGeneralChemistry Workshop

For instructor-assigned homework, MasteringGeneralChemistryTM provides the first adaptive-learning online tutorial and assessment system. Based on extensive research of the precise concepts with which students struggle, the system is able to coach students with feedback specific to their needs, and with simpler subproblems and help when students get stuck. The result is targeted tutorial help to students optimize study time and maximize learning. For instructors, MasteringGeneralChemistry provides deeper, more readily available insight into the progress of your students than ever before. Mastering General Chemistry is the only system to capture the step-by-step work of each student-including wrong answers submitted, hints requested, and time taken on every step. This data populates a gradebook unprecedented in available detail. For professors short on time, the Gradebook Homepage provides class grades at a glance. You can even compare performance with the national average or previous classes. For more detail, the Diagnostics Dashboard provides a one-click customizable suite of your favorite weekly diagnostics. Other links let you assess class performance step-by-step through any activity, or review the detailed work of any student. This workshop will explore the use of MasteringGeneralChemistry.

Session II – Presentations

10:30 – 10:55 AM The Chemistry of Fishing; Patrick Mills, Professor of Chemistry, Joliet Junior

College, Joliet, IL

Art as Experience: Arts Integration in the Science Curriculum; Jo Ella Eaglin 11:00 – 11:25 AM

Siuda, The Illinois Institute of Art @ Chicago, Chicago, IL

11:30 - 11:55 Inquiry Based Learning in the Laboratory: Dale Hammond, Brigham Young

University Hawaii, emeritus

12:05 – 1:15 PM Lunch and 2YC₃ General Membership Meeting

Session III – Workshops

1:20 - 3:20 PMPolymer FUNdamentals Will S-T-R-E-T-C-H Your Student's Interest and

Understanding,

Join us for a whirlwind tour of a "super-center" store focusing on familiar products you can use to stimulate student interest in General Chemistry, Material Science, or Plastic Technology. Participants will learn about polymeric materials AND try fun and simple demonstrations to share that knowledge with students.

Lynn Higgins, Polymer Ambassador for Illinois, Riverside, IL

2:00 - 5:00 PMMicroLAB Workshop

> MicroLab has introduced an exciting new instrument for electronic data collection. The FS-522 can accept sensors for over 24 different measurements as well as perform closed loop control of an experiment. It also contains the 16 wavelength FASTSpecTM scanning spectrophotometer capable of simultaneous measurement of transmission, absorbance turbidity, nephelometry, scatter and fluorescence; along with color kinetics and color comparison measurements. The workshop will be a hands on exploration of the capabilities of this instrument, and will demonstrate how this instrument facilitates inquiry based learning in the laboratory.

Mike Seymour, Hope College

John Amend, Montana State University emeritus

Dale Hammond, Brigham Young University Hawaii, emeritus

2:45 – 4:45 PM Foundations for Excellence; Using the ACS Chem Tech Standards database for curriculum development;

> Skill standards are compilations of the knowledge and skills industry expects of high-performing employees. Since 1993, the American Chemical Society has maintained sets of skill standards for chemical technicians. Working with local industry partners, academic chemical technology programs use the skill standards to align their curricula with local industry needs.

In 2006, the on-line database supporting the ChemTechStandards underwent a series of critical upgrades, including the addition of a new set of skill standards specifically for laboratory analysts in pharmaceutical manufacturing. In this hands-on workshop, participants will learn about these upgrades and how to use the ChemTechStandards database to develop or revise their own curricula.

Blake Aronson, Senior Education Associate, Technician Education, American Chemical Society, Washington, DC

Session IV – Poster Session

1:30 – 3:00 PM Posters by Student Researchers from Harold Washington College, Chicago, IL

and Harper College, Palatine, IL

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1:15-1:45	Building a Strong Chemical Technology Program: ACS Chemical Techno	ology
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Program Approval Service, Joan Sabourin, CTPAS chair

1:50 - 2:35 PM Building Local Foundations for Technology Curriculum Design, Onofrio

Gaglione Adj. Prof., Community College of Southern Nevada, Las Vegas, NV and Kenneth Chapman Principal Partner Cardinal Workforce Developers,

LLC, Ruther Glen, VA

2:30 – 2:50 PM Refreshment Break and Exhibits

3:00 – 4:00 PM Chemical Principles Visualized, David A. Katz, Chemist, Educator, Expert

Demonstrator, Science Communicator, and Consultant, Pima Community

College, Tucson, AZ

4:00 – 5:00 PM Six Points of Chemical History that Belong in the Curriculum, Otis

Rothenberger, Chemistry Professor, Illinois State University, emeritus and James Webb, Chemistry Professor, Illinois State University, emeritus

6:30 – 9:00 PM Banquet at Joliet Junior College by the JJC Culinary Arts Department

Banquet Speaker: Paul Kelter, Professor of Chemistry, University

Distinguished Teacher/Scholar, University of Illinois at Urbana-Champaign

Saturday March 24

8:00 AM – 1:00 PM Registration and Exhibits

8:00 – 9:00 AM Continental Breakfast

Session VI – Workshops

9:00 AM – 12:00 Noon ACS GenChem Textbook Workshop

The textbook, *Chemistry*, a project of the American Chemical Society, is designed to support and reinforce an activity-based, student-centered approach to teaching your general chemistry course. This half-day workshop includes a brief presentation of the background and motivation for the project and the rationale for the structure of the textbook. Most of the workshop is devoted to hands-on participation in group activities and pointers from users of the text about how this approach is accomplished in actual classrooms and how the text can be used with guided inquiry and other innovative learning methods to incorporate activities to reinforce that learning. Jerry A. Bell Senior Scientist and Chief Editor, ACS GenChem Project Education Division, American Chemical Society

9:00 AM - 4:00 PM

Introduction to POGIL: Process-Oriented Guided Inquiry Learning Note: Participants must register through POGIL website for this workshop at www.pogil.org, click on "see list of upcoming events" link.

POGIL is a student-centered instructional paradigm that combines a group learning approach with specially designed guided inquiry activities. The goal is to not only enhance student mastery of course content, but also to develop important learning process skills such as communication, problem solving and critical thinking. This workshop will introduce the POGIL approach and actively engage the participants in a POGIL exercise.

Karen Anderson, Science Instructor, Madison Area Technical College, Madison, WI and Frank Creegan, W. Alton Jones Professor of Chemistry and Chair, Department of Chemistry, Washington College, Chestertown, MD

1:00 - 3:00 PM

Vernier Software

This workshop offers hands-on experience collecting and analyzing chemistry data using the Vernier LabPro interface. See how this versatile system can be used to conveniently collect data using computers, TI graphing calculators, or Palm OS handhelds. The award-winning Logger Pro data acquisition software will be used to display, graph, and analyze data. Data will be collected using sensors—such as the Vernier Drop Counter, Temperature, Pressure, pH, Conductivity, and Colorimeters. You will also have an opportunity to use—the Ocean-Optics powered Vernier Spectrometer. All experiments in the workshop are excerpts from our popular Chemistry with Computers or—Advanced Chemistry with Vernier lab books. Walter Rohr, Vernier Software

Session VII – Presentations

9:00 - 11:30 AM

Science Education, Civic Engagement, and the SENCER Project; Talks to include the general introduction on SENCER and the need for such an initiative, individual SENCER-related chemistry work of each speaker, a brief summary of other SENCER Chemistry models, and a final interactive session where we will ask participants to work in groups and create a skeleton SENCER-based chemistry curriculum at their school.

<u>Steve Bachofer</u>: Professor of Chemistry, Saint Mary's College of California, Moraga, CA

Ralph Bain:

Professor of Chemistry, Montgomery College, Rockville, MD
Theo KoupelisProfessor of Physics and

Astronomy, Univ. of Wisconsin-Marathon, Wausau, WI

<u>Dennis Lehman</u>: Professor and Chair of Chemistry, Harold Washington College, Chicago, IL

12:00 – 12:55 PM

Lunch and Exhibit Break

Session VIII - Presentation	ons
1:00 – 1:35 PM	CASPiE at the College of DuPage; Susan Shih, Professor of Chemistry, College of Dupage, Glen Ellyn, IL
1:35 – 2:10 PM	Creating a Research Environment at a Two-Year College, Tom Dowd, Associate Professor, Harper College, Palatine, IL
2:10 – 2:45 PM	Demystifying Organic Chemistry; Salim Diab, Professor of Chemistry, University of Saint Francis, Joliet, IL
2:45 – 3:20 PM	Classroom Performance Systems: Do they improve student performance, perceptions or performance, or just student satisfaction? Michele Turner, Associate Professor of Chemistry, The University of Akron Wayne College, Orrville, OH
3:20 – 3:55 PM	Collaboration in Community College Chemistry Research; Bal Barot, Lake Michigan College, Benton Harbor, MI
4:00 – 4:30	Conference Closing

For program updates please go to the $@YC_3$ webpage: http://2yc3.org

LODGING

Hampton Inn (Approximately 0.5 miles from the conference)

1521 Riverboat Center Dr

Joliet, IL 60431

For Reservations: 815-725-2424 - Group Code JJG

10 King Rooms at \$75.00 per night (plus 13% hotel tax)

15 Double Rooms at \$75.00 per night (plus 13% hotel tax)

Block of rooms will be active until 12:00 pm on 2/22/2007. Additional rooms reserved beyond the cut off date will be subject to availability and will be charged rack rate of the day.

For more information go to: www.hamptoninnjoliet80.com

Wingate Inn (Approximately 2 miles from the conference)

101 McDonald Joliet, IL 60431

For Reservation: 815-741-2100 – Group Code JJC2YC3

30 Rooms at \$72.00 per night (plus 13% hotel tax)

Block of rooms will be active until 3/3/07. Additional rooms reserved beyond the cut off date will be

subject to availability and will be charged rack rate of the day.

For more information go to: www.wingateinns.com

Joliet Junior College

Joliet Junior College is a comprehensive community college. The college offers pre-baccalaureate programs for students planning to transfer to a four-year university, occupational education leading directly to employment, adult education and literacy programs, work force and workplace development services, and support services to help students succeed.

JJC, America's oldest public community college, began in 1901 as an experimental postgraduate high school program. It was the "brain child" of J. Stanley Brown, Superintendent of Joliet Township High School, and William Rainey Harper, President of the University of Chicago. The college's initial enrollment was six students. Today, JJC serves more than 10,000 students in credit classes and 21,000 students in noncredit courses.

For directions go to: www.jjc.edu/Maps/MainCampus.html

Park in East Lot 2

Banquet Menu

Mixed Spring Greens with Kalamata Olives, Plum Tomatoes, Cucumbers and Crumbled Feta Cheese with a Greek Style Vinaigrette

Choice of one of the following three Entrée options

Grilled Filet Minion with a Wild Mushroom Demi Glaze, Garlic Mashed Potatoes and French Beans with Herb Shallot Butter.

Crab and Shrimp Stuffed Breast of Chicken with White Wine, Basil Butter Sauce Garlic Mashed Potatoes and French Beans with Roasted Tomato Concasse

Vegetarian Option

Grilled Portobello Mushroom stack with Roasted Peppers, Grilled Plum Tomato and Fresh Mozzarella on a bed of Mediterranean Angel Hair Pasta.

Dessert - Flourless Chocolate Cake with Fresh Berry Coulis and Ginger Crème Anglaise

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Name	Institution		
Institution Address			
City	State	Zip Code	
Phone Number			
Email Address(es)			
I teach at a High School 2-Year College	4-Year Coll	ege or University	
Conference Fees: Registration (current 2YC ₃ members) @ \$25.00*	\$		
Registration (includes 2YC ₃ membership) @ \$40.00	\$		
Friday Evening Banquet @ \$30.00	\$		
Friday Lunch @ \$10.00	\$		
Saturday Box Lunch @ \$10.00	\$		
Total	\$		
* There is no conference fee for high school teacher	s and students		
Meals A continental breakfast will be provided for both Fr	iday and Saturd	ay mornings.	
Friday's lunch will be a "buffet" including vegetaria	an options		
Saturday Box Lunch (Choose 1) vegetarian	non-veget	arian	
Friday Banquet (Choose 1) vegetarian	beef	chicken	

Workshops

1215 Houblot Joliet, IL 60431

Participants who would like to attend the POGIL workshop <u>MUST</u> pre-register through the POGIL website at <u>www.pogil.org</u>, click on "see list of upcoming events" link. If you are registering for the POGIL workshop do not order a box lunch for Saturday. The POGIL workshop organizers will provide lunch for the participants. (Limit 40 participants)

that you are

All other workshops To insure that sufficient materials and supplies are available please check the workshops likely to attend during the conference.
Prentice Hall MasteringGeneralChemistry
Polymer FUNdamentals
Foundations for Excellence; Using the ACS Chem Tech Standards database for curriculum development
ACS GenChem Textbook Workshop
Vernier Software
Please send your registration form and check to: Marie Wolff
Natural Science Department
Joliet Junior College

Make Checks Payable To: Joliet Junior College (2YC3 on memo line)