



190TH CONFERENCE OF THE 2YC₃

November 12-13, 2010 - Raleigh, North Carolina

SCHEDULE

Friday November 12

8:00 – 9:00 *Registration & Continental Breakfast*

10:45 – 5:00 *Exhibits*

9:00 – 9:15 Welcome and Opening Remarks

9:15 – 10:45 Keynote Address

Debunking the Kermit myth: It IS easy being green

Deborah Exton, University of Oregon, Eugene, OR

10:45 – 11:15 Refreshment Break and Exhibits

11:15 – 12:30 Presentation Session 1

A. Addressing the Challenges of an Online Lab Course

Riham Mahfouz, Thomas Nelson Community College, Hampton, VA

B. Resistance (to Active Student Learning) Is Futile

Margaret (Peggy) Geiger, Gaston College, Dallas, NC

C. The Green Chemistry Blues Support Group

Nancy Thorpe, Hagerstown Community College, Hagerstown, MD

12:30 – 1:30 Lunch Break and Exhibits

1:30 – 2:00 2YC3 General Membership Meeting

2:00 – 3:00 Presentation Session 2

A. Development of a Chemical Inventory Database Using Microsoft Office Access 2007©

Sybil K. Burgess, Brunswick Community College, Supply, NC

B. Forensic Chemistry at WCC – Reflections on My First Year

Ashton T. Griffin, Wayne Community College, Goldsboro, NC

C. Facile Microwave-Assisted Green Syntheses of Au and Ag Nanoparticles

Marc N. Muniz and Dr. Maria T. Oliver-Hoyo,

North Carolina State University, Raleigh, NC

D. Making the Most of Your Opportunities – Leveraging Key Resources and Connections

(2 Hour Workshop)

Tom Higgins, Candice McCloskey, and Dolores Aquino

3:00 – 3:15 Refreshment Break and Exhibits

Friday Schedule Continued...



Schedule: Day 1 Continued...

Friday, November 12

3:15 – 4:15 Presentation Session 3

A. *Teaching General Chemistry (CHM 110) to a Diverse Student Body – What are the Challenges and Realistic Expectations for Success?*

Stuart C. Cohen, Horry-Georgetown Technical College, Myrtle Beach, SC

B. *ACS Lab Exams – Test Your Students' Lab Skills Online*

Jimmy Reeves, UNC-Wilmington, Wilmington, NC &

Deborah Exton, U. of Oregon, Eugene, OR

C. *A Green Synthesis of Silver Nanoparticles and its Use as Chemical Sensors – An Undergraduate Chemistry Lab Experiment*

Kazi M Rahman, Mont Olive College, Mount Olive, NC and Maria T. Oliver-Hoyo, North Carolina State University, Raleigh, NC

4:15 – 5:15 Presentation Session 4

A. *Meeting the Needs of Health Professions Students by Integrating Chemical Topics and Guided Inquiry*

Laura Frost, Georgia Southern University, Statesboro, GA

B. *MasteringChemistry by Pearson-Prentice Hall –*

The Next Generation of Online Assessment

Jordan Enzor, Pearson Education

C. *Modernizing the Chemistry Lab Experience using Hi-Tech Instrumentation*

Bettie Obi Johnson and Fernanda Burke,

University of South Carolina Lancaster, Lancaster, SC

7:00 – 9:00 Dinner Banquet and Address

Should We Treat Chemophobia With Medication?

Professor Siddhartha Mitra, East Carolina University, Greenville, NC



Schedule: Day 2

Saturday, November 13

8:00 – 1:00 Exhibits

8:00 – 9:00 Registration and Refreshments

9:00 – 10:00 Presentation Session 5

A. *DIM DIM and SoftChalk – A Demonstration*

DeeDee Allen and Tracy Cheatham, Wake Technical CC, Raleigh, NC

B. *Teaching Analytical Chemistry Techniques to High School Freshman*

Lin Coker and Bethany C. Starnes, Campbell University, Buies Creek, NC

C. *Going Green – How to Modify Your Current Labs* (2 hour workshop)

Deborah Exton, University of Oregon, Eugene, OR

10:00 – 10:15 Refreshment Break and Exhibits

10:15 – 11:15 Presentation Session 6

A. *Constructing A Math Skills Questionnaire*

Angela Allen, Lenoir Community College, Kinston, NC

B. *Fostering Higher-order Thinking Using Excelets*

Scott Sinex, Prince George's Community College and Melinda Box, Duke University

C. *Developing a Hybrid Chemistry Course Using Panopto CourseCast*

Kenneth Capps, College of Central Florida, Ocala, FL

11:15 – 12:15 Presentation Session 7

A. *Biodiesel and POGIL for non-STEM majors – Making Science Real for Students*

John Muench, Heartland Community College, Normal, IL

B. *Citizen Science*

Lawrence Williams, Ajit Dixit, William Kappler and Stephen Scheidig,
Wake Technical Community College, Raleigh, NC

C. *Improving Retention and Increasing the Number of Minority STEM
Scholars Transferring to Four Year Institutions*

Abe A. Ojo and Bryan Mitchell, Atlanta Metropolitan College, Atlanta, GA

12:15 – 1:00 Lunch Break and Exhibits

1:00 – 2:00 Panel Discussion I and Workshop

A. *Lab Solutions for Online Classes*

Led by Mark Matthews, Durham Technical Community College, Durham, NC

B. *Open Your Bag of Tricks and Share Your Best Lecture Activity*

Led by (TBA)

C. *Explore the ChemEd Digital Library* (2 hour workshop)

Linda Fanis, ChemEd Digital Library, Madison, WI

2:00 – 3:00 Panel Discussion II

A. *Technology Swap – Share What You Use and How You Use It*

Led by DeeDee Allen, Wake Technical Community College, Raleigh, NC

B. *Lab Safety and Inventory Challenges*

Sybil K. Burgess, Brunswick Community College, Supply, NC

3:00 – 3:30 Closing Session



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Presentation Abstracts

Keynote Address

Debunking the Kermit myth: It IS easy being green.

Deborah Exton, University of Oregon, Eugene, OR

President Obama has made a commitment to create a sustainable America and has asked all Americans to participate in this effort. Achieving this goal will require rethinking subject areas from physics to economics to architecture, presenting significant challenges and opportunities for science, technology, engineering and mathematics (STEM) educators. Moreover, issues related to sustainable energy and the environment cut across the STEM disciplines and can serve as a focal point to excite and encourage a greater interest in these fields.

Green chemistry directly addresses the issues of sustainability by encouraging the design of products and processes that increase energy efficiency, reduce or eliminate the use and generation of hazardous substances, and utilize renewable feedstocks. In other words, this is chemistry that is "benign by design." This talk will address the challenges and provide suggestions for raising awareness and teaching green chemistry concepts in the undergraduate classrooms and laboratories with a particular emphasis on general chemistry.

Presentation Session 1

Addressing the Challenges of an Online Lab Course

Riham Mahfouz, Thomas Nelson Community College, Hampton, VA

In a recent Sloan Consortium report, it was reported that more than 1 in 4 higher education students in the US, or 4.6 million students, took at least one online course in 2008. The number of students taking at least one online class is growing quickly, with a growth rate of 17% in 2008. Online classes have obvious advantages in terms of cost, convenience, and accessibility. However courses involving a laboratory component remain a challenge to offer fully online. This challenge is even more pronounced in online Chemistry courses. This is due to many reasons including, the need for expensive equipment, problems in setting up the experiments, difficulty in submitting non-numerical experimental results such as the successful preparation of a certain compound, and safety concerns. These challenges have been addressed in an online chemistry class offered at Thomas Nelson Community College that uses a combination of virtual online experiments, and a do-it-yourself at home Chemistry kit. Students submit pictures of their main experimental steps to show qualitative work, and they submit the numerical results of physical measurements to demonstrate their understanding of the quantitative aspects of the experiments. This presentation discusses the lessons learned from this novel method of teaching chemistry fully online and gives insight about how this approach can be adopted and improved upon.



Presentation Session 1 Continued...

Resistance (to Active Student Learning) Is Futile

Margaret (Peggy) Geiger, Gaston College, Dallas, NC

This presentation examines the benefits and drawbacks of POGIL (Process Oriented Guided Inquiry Learning) implementation in allied health (General, Organic, & Biochemistry or GOB) courses at Gaston College. Students resisted active student centered learning due to a lack of readiness for a more challenging learning environment. Models predict that students must have sufficient cognitive, affective and team skills to succeed in team based learning at a higher cognitive level. A majority of introductory chemistry students function at Piaget's concrete operational stage, as measured by the Group Assessment of Logical Thinking (GALT) survey and have difficulty thinking abstractly, a key skill for chemistry. Approaches to reducing student resistance to active student learning include establishing rapport, improved planning, ongoing frequent assessment, and promoting student reflection on learning.

The Green Chemistry Blues Support Group

Nancy Thorpe, Hagerstown Community College, Hagerstown, MD

Do you feel alone, wondering how to find good, reliable information and laboratories regarding Green Chemistry? Or, do you feel overwhelmed at the amount of information out there and not know how to make sense of it all? While attending a recent workshop on Green Chemistry at the University of Oregon, I was introduced to several very valuable online databases for Green Chemistry. During this session I will introduce you to these databases so you can explore the information available to use, as well as become a member of a rapidly growing network of Green Chemistry educators. These databases will help you find information to use in your classrooms and laboratories, learn about successes and ways to overcome problems, learn how to share your own materials, and connect with new colleagues. You never need to feel alone again! Go from being blue to green!

Presentation Session 2

Development of a Chemical Inventory Database Using Microsoft Office Access 2007©

Dr. Sybil K. Burgess, Brunswick Community College, Supply, NC

As with many of the tasks in the community college science environment, chemical safety and inventory management are often the responsibility of one science faculty member. This faculty member often has a range of additional duties. However, it is still crucial for community college science departments to have their chemical inventories arranged in a safe manner which is consistent with OSHA guidelines. In addition community college science faculty members need to have chemicals readily available to them for their classroom laboratory experiments. Commercial chemical inventory software packages as well as on-line chemical inventory management systems are available. Unfortunately many of these software packages and on-line systems are expensive and have limited functionality and flexibility. Because of this we, at Brunswick Community College, have designed our own chemical inventory database using Microsoft Office Access 2007©, the database component of the commonly used office management system, Microsoft Office©. Characteristics and functionalities of our chemical inventory database will be described in this presentation. Some of these functionalities include the ability to (1) place MSDS sheets directly into the on-line chemical inventory, (2) group chemicals by hazard ratings and (3) indicate when chemical reorders are required.



Presentation Session 2 Continued...

Forensic Chemistry at WCC – Reflections on My First Year

Ashton T. Griffin, Wayne Community College, Goldsboro, NC

In February of 2009, I was informed that I would be teaching Forensic Chemistry at Wayne Community College in the fall semester. I am a trained analytical chemist, but I had no job experience in forensic chemistry or the world of CSI. Amazingly, I did teach a course in Forensic Chemistry - despite some unexpected physical challenges, my own personal misconceptions about my students' abilities in chemistry, as well as the quandary of developing laboratory experiments that teach desired chemical concepts with a forensic twist. Come discover the teaching choices that I made and utilize my first year experiences in teaching forensic chemistry to make your own forensic chemistry course even better.

Facile Microwave-Assisted Green Syntheses of Au and Ag Nanoparticles

Marc N. Muniz and Dr. Maria T. Oliver-Hoyo, North Carolina State University, Raleigh, NC

Here we report two simple, green synthetic routes to obtain Au and Ag nanoparticles using only household microwave irradiation as a source of heat. In the case of Ag, β -D-Glucose is the reducing agent and potato starch is employed as the capping and stabilizing specie; with Au, β -D-Glucose acts as both a reducer and stabilizer. The use of these environmentally benign reagents coupled with the simplicity of the syntheses makes this an ideal experiment or demonstration for undergraduate chemistry courses.

Making the Most of Your Opportunities: Leveraging Key Resources and Connections

Tom Higgins, Candice McCloskey, and Dolores Aquino

The landscape at two-year colleges continues to change in response to economic, educational, and political factors. Along with the challenges these changes bring, come opportunities. Workshop participants will consider their goals, share resources and connections, and develop strategies for engaging colleagues and garnering support for professional and program development.

Presentation Session 3

Teaching General Chemistry (CHM 110) to a Diverse Student Body – What are the Challenges and Realistic Expectations for Success?

Dr. Stuart C. Cohen, Horry-Georgetown Technical College, Myrtle Beach, SC

The students who take CHM 110 at HGTC come from very diverse social, economic and academic backgrounds and are taking CHM 110 for a variety of different reasons. For some, this will be their first and only chemistry course. For others, it is a prerequisite to a graduate degree in a field that differs from their previously earned undergraduate degree. This paper will describe some of the challenges that I have encountered during the past 5 years that I have taught this course and how I have attempted to meet the expectations of these students. It will include statistical data and examples of the type of test questions that I have used in order to challenge the students to achieve their maximum potential.



Presentation Session 3 Continued...

ACS Lab Exams – Test Your Students’ Lab Skills Online

Jimmy Reeves, U. of North Carolina-Wilmington & Deborah Exton, U. of Oregon

For many decades the Examinations Institute of the American Chemical Society has developed standardized exams for all areas of chemistry lecture, and these have had a profound influence on the topics covered in these course and the depth of coverage they provided. Although the Institute has received multiple requests for an exam that assesses laboratory skills, only recently have the tools and resources been available to create an online exam that incorporates media and multiple question formats. This presentation will discuss the process of creating this exam, some examples of question types, and a discussion of the expected timeline for implementation.

A Green Synthesis of Silver Nanoparticles and its Use as Chemical Sensors -

An Undergraduate Chemistry Lab Experiment

Kazi M Rahman, Mount Olive College, Mount Olive, NC and Maria T. Oliver-Hoyo, North Carolina State University, Raleigh, NC

Silver nanoparticles synthesized by environmentally benign method can be used as chemical sensors to detect Pb+2 and NH3 in aqueous solution at μ molar (ppm) level. The use of gold nanoparticles synthesized by traditional method was compared with these detections. The significance of these findings will be discussed. Also these experiments have the potential to be incorporated in the undergraduate chemistry laboratory experiments.

Presentation Session 4

Meeting the Needs of Health Professions Students

by Integrating Chemical Topics and Guided Inquiry

Laura Frost, Georgia Southern University, Statesboro, GA

Chemistry courses for health professions are often billed as introductions to General, Organic, and Biological chemistry (GOB). Many of these courses spend the majority of the instructional time focused on the concepts of general chemistry with as much organic chemistry jammed in as possible. Biochemistry, the topics of which are most relevant to allied health students, is often covered minimally. We will discuss strategies for integrating the topics of General, Organic, and Biochemistry throughout the course to facilitate coverage of topics relevant to allied health students. Quite often this course is populated heavily by female students who learn well through collaboration. This presentation will also introduce you to some guided inquiry group activities that have a positive effect on student learning in this course.

MasteringChemistry by Pearson-Prentice Hall: The Next Generation of Online Assessment

Jordan Enzor, Pearson Education

For years, online homework systems have done an adequate job of testing students, but they have never done a good job of tutoring students. MasteringChemistry is the first adaptive-learning online tutorial and assessment system for general chemistry. 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 sub-problems and hints when students get stuck. The result is targeted tutorial help that optimizes student study time, and maximizes student learning. This session will discuss online assessment, demonstrate the MasteringChemistry program and show how instructors can use the program to save time and identify student problems.



Presentation Session 4 Continued...

Modernizing the Chemistry Lab Experience using Hi-Tech Instrumentation

Bettie Obi Johnson and Fernanda Burke, University of South Carolina Lancaster, Lancaster, SC

Most of the laboratory experiments in general chemistry, organic chemistry, and introductory forensic science use standard laboratory glassware and basic equipment to make measurements. Consequently, science majors outside of chemistry are not typically exposed to the instrumentation that is so routinely used in industry and in research. To provide exposure to these techniques and to modernize the laboratory experience for these students, we have developed some novel experiments utilizing GC-MS and other instrumental techniques. One such experiment involves the use of SPME-GC-MS (Solid Phase Micro-Extraction Gas Chromatography Mass Spectrometry) to measure the amount of Bisphenol-A released from plastic and resin-lined consumer packaging. Another experiment employs refractive index measurements to determine ethylene glycol concentration in engine coolant samples. A forensic science mystery experiment was developed using GC-MS to identify whether or not pseudoephedrine was present in a series of residues obtained from “suspects” accused of stealing the material to illegally manufacture methamphetamine. With each experiment, the students are given an overview of the instrumentation and they are trained on its operation so that they can run their own samples and process their own data. Student feedback has been positive, indicating that the experience was both interesting and beneficial to the students in these courses.

Evening Address

Should We Treat Chemophobia With Medication?

Professor Siddhartha Mitra, East Carolina University, Greenville, NC

Dr. Siddartha Mitra, Organic Chemistry at East Carolina University

Presentation Session 5

DIM DIM and SoftChalk – A Demonstration

Tracy Cheatham and DeeDee Allen, Wake Technical Community College, Raleigh, NC

DIM DIM is a virtual meeting software available online. Low use accounts are free. Presenters will give a live demonstration and discuss how it has been used successfully for online office hours. Student feedback will also be presented.

SoftChalk is a program that allows instructors to create interactive web-like lessons without knowledge of html or flash. It works like a word processing program and creates lessons that can be packaged and uploaded to a course management system like Blackboard or Moodle. The software, as well as lessons created using the software, will be presented.



Presentation Session 5 Continued...

Teaching Analytical Chemistry Techniques to High School Freshman

Dr. Lin Coker and Bethany C. Starnes, Campbell University, Buies Creek, NC

Two high school freshmen participated in a summer research internship, HISS, at Campbell University for two weeks in June of 2010. The purpose of the internship was to introduce high school students, who had an interest in science, to scientific research in a professional laboratory setting. The students were provided this opportunity by assisting with collecting and measuring water samples from the Harnett County area to assist with a research project involving the analysis of fluoride in drinking water. In order for the students to become confident with the methods involved in the analysis of fluoride in drinking water, they were first led through hands-on exercises aimed at allowing them to become familiar with basic technique used in the laboratory, such as use of the pH/mV meter and volumetric pipet. The exercises ensured both an understanding of the technique involved, as well as accuracy in the use of the instrument. After completing the exercises, students were able to prepare standards and samples for measurement, as well as record and interpret the data using an Excel spreadsheet. By the end of the first week, students were self-sufficient, required little assistance, and had accurate results. Through the experience, students gained not only a valuable experience in a research laboratory setting, but also further confidence in the use of analytical technique, such as quantitative transfer, preparation of standards, and use of a fluoride ion selective electrode. Additionally, the data collected by the students was accurate, and made a significant contribution to the analysis of fluoride in drinking water in Harnett County, NC.

Going Green: How to Modify Your Current Labs

Deborah Exton, University of Oregon, Eugene, OR

This workshop will focus on strategies for revising the chemistry laboratory curriculum in a manner that maintains the pedagogical goals while introducing green chemistry principles and minimizing the waste generated. These revisions range from minor modifications of traditional experiments to development of new, greener labs. While revision of an entire curriculum can seem like a daunting undertaking, when approached one experiment at a time, the task becomes manageable. Participants should bring copies of existing experiments and lab manuals for assessment and revision. While the techniques apply across the chemistry curriculum, the focus of this workshop will be on introductory and general chemistry labs.

Presentation Session 6

Constructing a Math Skills Questionnaire

Dr. Angela Allen, Lenoir Community College, Kinston, NC

Basic mathematical skills are commonly used in science, more than ever in chemistry. It is important for students to have some basic mathematical skills, such as rearranging equations and deciphering word problems. Without these proficiencies, chemistry will seem extremely difficult. Constructing a math skill questionnaire allows an instructor to assess the skills of the students and determine the best way to approach those students with weak skills.



Presentation Session 6 Continued...

Fostering Higher-order Thinking Using Excelets

Scott Sinex, Prince George's Community College and Melinda Box, Duke University

Encouraging higher-order thinking, such as trend generalization and result categorization, is a shared goal of science and math courses. Excelets, interactive Excel spreadsheets, facilitate numerical experimentation without the usual restrictions of lab experimentation. Guided by “what if” questions, students can modify parameters and repeat experiments many times, observing output graphically, numerically, and/or symbolically. In many cases, a more multivariable approach can be developed. Most significantly, Excelets are easy to create with off-the-shelf software, and thus also easy for students to access and use. Come learn about the amazing power of Excelets, how to create (all done computationally with no programming), use, and share them. Bring your computer and make one in the seminar. For over 150 pre-built examples in general chemistry and materials science and the resources to develop these interactive spreadsheets see: <http://academic.pgcc.edu/~ssinex/excelets>.

Developing a Hybrid Chemistry Course Using Panopto CourseCast

Kenneth Capps, College of Central Florida, Ocala, FL

This presentation will focus on how the College of Central Florida utilized Panopto CourseCast to develop a section of Introductory Chemistry into a hybrid course. A hybrid course is defined as one in which more than 25 percent of the course is conducted on campus and the remainder conducted at a distance. All lectures were recorded using Panopto, a flexible and easy-to-use presentation capture platform that lets users capture, edit, stream, archive and share recordings of PowerPoint, whiteboard and/or desktop. Panopto was used in conjunction with a Wacom Bamboo tablet with SmoothDraw software. Students came to campus once a week for an hour long problem-solving/review session, followed by a three hour laboratory experiment. All other components of the course were completed online. The challenges, results and student feedback will be discussed during this presentation.

Presentation Session 7

Biodiesel and POGIL for non-STEM majors: Making Science Real for Students

John Muench, Heartland Community College, Normal, IL

Utilizing the conversion of waste fryer oil into Biodiesel as a tool to create interest in science, this collaborative NSF sponsored CCLI initiative seeks to improve student understanding of the process of science. The Biodiesel activity has been adapted by three different institutions (large public, small private and two-year college) to be used in both a lecture and laboratory experience. The study includes the use of POGIL questions during the activity and pre- and post surveys to examine both knowledge and inquiry gains for these students.



Presentation Session 7 Continued...

Citizen Science

**Larry Williams, Ajit Dixit, William Kappler and Stephen Scheidig,
Wake Technical Community College, Raleigh, NC**

Citizen Science, also called Group Science, is a concept where scientists, software developers, educators and volunteers from the general public cooperate to develop, gather and analyze data to further science and the public understanding of science and the scientific process. One such project is "World Water Monitoring Day (WWMD)", a project that uses citizens to conduct basic analyses of local water bodies to heighten the awareness of the need to protect water resources around the world.

As part of an Honors Program assignment, Mr. Kappler was assigned to research, identify and select a test method and develop a laboratory scheme for water analysis to be performed in conjunction with WWMD as part of the Honors program at Wake Tech Community College. The project could be expanded with future analyses of air/water/soil samples to build and maintain a database. The exercise exposes the student to research, data analysis and communication of results and has the added benefit of being a relevant and timely "real-world" practical problem.

A brief outline of the honors program, the resources used and the results obtained will be presented. Possible extensions of the project will be suggested.

Improving Retention and Increasing the Number of Minority STEM Scholars Transferring to Four-year Institutions

Abe A. Ojo and Bryan Mitchell, Atlanta Metropolitan College, Atlanta, GA

At Atlanta Metropolitan College (AMC) we have established the Mathematics, Engineering, Science Achievement Consortium California - MESA model to retain STEM majors and to assist in increasing the number of under-represented minorities majoring in STEM areas that are transferring to four year institutions in Georgia and across the United States. One major cornerstone of the MESA model is the Academic Excellence Workshop. At AMC MESA, we select students from STEM through applications submitted by educationally and financially disadvantaged minorities who otherwise have low eligibility rates of going to four year universities. These students are then registered in a leadership and research course, Topics in Science (CHEM/BIO/PHYS 2246) and are made to sign an undertaking contract to attend the AEW. The AEW utilize peer facilitators or upper division/graduate students to lead workshops on identified STEM courses which are considered difficult for students. We have obtained results documenting our successes and challenges. Recommendations are made concerning the MESA model based on our data acquired between 2007 and 2009.



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Panel Discussion and Workshop Material

Panel Discussion I and Workshop

Lab Solutions for Online Classes

Led by Mark Matthews, Durham Technical Community College, Durham, NC

What is available in the area of online labs? Come and hear what others are doing and share what you are doing to provide a meaningful lab experience for your online students. Share your best practices, resources, and other ideas for virtual, wet, kit, or kitchen chemistry labs. A list of resources and ideas will be collected for distribution after the conference.

Open Your Bag of Tricks and Share Your Best Lecture Activity

Led by (TBA)

We all have our favorite real world applications, paper activities, chemical demonstrations, and you tube videos that we like to use to introduce or teach a specific topic. Come and share and glean from others. All tips and tricks will be collected for distribution after the conference.

Explore the ChemEd Digital Library

Linda Fanis, ChemEd Digital Library, Madison, WI

What is available in the area of online labs? Come and hear what others are doing and share what Interested in using digital resources in your classroom or online course? Explore the multitude of resources found at the Chemical Education Digital Library (ChemEd DL), a Pathway project of the National Science Digital Library (NSDL). This hands-on guided-inquiry workshop will give you the opportunity to explore ChemEd DL's innovative collection of educational resources including Molecules 360, Chemistry Comes Alive! video, Moodle courses, the Periodic Table Live! and so much more. In one session you will find new resources and learn how to integrate it into your classroom curriculum. Ultimately, the ChemEd DL will be the place on the Web to find or share digital content for chemical sciences education. Learn about how you can use, contribute, share, and organize chemistry education materials through ChemEd DL.

Panel Discussion II

Technology Swap – Share What You Use and How You Use It

Led by DeeDee Allen, Wake Technical Community College, Raleigh, NC

There are lots of resources available. However, no one knows them all and some keep changing. Come and share your favorite technology resources and briefly describe how you use it. A list of all resources will be collected for distribution after the conference.

Lab Safety and Inventory Challenges

Sybil K. Burgess, Brunswick Community College, Supply, NC

Lab safety and inventory are a constant challenge for many small colleges, especially those that may not have resources for lab technicians. How do you organize your stockroom, track your inventory and dispose of waste? Do you need a better system? Let's share and learn from each other. Methods and ideas will be collected for distribution after the conference.