# THE FALL 2002 NORTHEAST REGIONAL CONFERENCE OF THE 2YC<sub>3</sub> DIVISION OF THE AMERICAN CHEMICAL SOCIETY TUNXIS COMMUNITY COLLEGE FARMINGTON CT

# OCTOBER 4TH AND 5TH

## INDUSTRY DRIVEN CURRICULUM AND INQUIRY BASED LEARNING

#### CEU's PROVIDED

## FRIDAY October 4<sup>th</sup> 2002

- 8:30 to 9:00am. Registration: TXCC Farmington Room
- 9:00am. Welcome: President Addy from TXCC

Colleen Keyes, Academic Dean at TXCC

• 9:15am. Keynote Address: Solving Crimes Using Forensic Science

Elaine Pagliaro, MS, JD

Attorney Pagliaro is a Forensic Scientist who currently is the Assistant Director of the Connecticut State Forensic Labs and a member of the Editorial Board of "*Today's Chemist*".

Ms. Pagliaro has been involved in most of the major criminal investigations in Connecticut and in several cases of national prominence. She has qualified as an expert witness in the areas of Biochemistry, DNA, Hair Analysis, and Crime Scene Reconstruction in Federal courts and in Connecticut, New York, Rhode Island, Vermont and Lousiana. Elaine has worked with various hospitals and sexual assault crisis-training personnel in the collection and preservation of physical evidence related to sexual assault cases and serves as a member of the Commission on the Standardization of the Collection of Evidence in Sexual Assault Investigations.

A recent graduate of Quinnipiac College School of Law, Ms. Pagliaro is a member of the bar in Connecticut and New Hampshire. She serves as adjunct faculty at several local colleges including University of New Haven, Forensic Sciences Department and Quinnipiac University, Department of Nursing.

Elaine will present actual crime scene evidence collected from nationally renowned cases, including the recently publicized Skakel/ Dorothy Moxel murder case.

- 10:15am. Break
- 10:30 to 11:30am. Panel Presentation. Industry Externships for Faculty

Moderator: Karen Wosczyna-Birch; Lauren Kaufman, VP CBIA

This presentation will include faculty from both two-year colleges and high schools who have completed industry externships and have used the experience to develop classroom and lab materials. These industry externships have been funded in part by National Science Foundation ATE grant (# 0101654), the State Department of Education, and the Connecticut Business and Industry Association (CBIA).

- 11:30 to 12:15pm. Papers: Final call for Presentations (Deadline September 6 2002)
- 1:00 to 4:00pm. Workshops.
- **➢** Workshop One (Friday)

#### Dr. Samuel Stevenson

American Chemical Society

Description:

A workshop will be provided based on the recent ACS publication entitled, "A Guide to Classroom Instruction for Adjunct Faculty" (John Reed, 2002; ISBN 0-8412-3820-0). This publication is fully crossed disciplinary and is a useful reference for full-time 2YC/4YC faculty as well. During this session we will cover the following topics: (1) Fundamentals of Classroom Instruction, (2) Fundamentals of Learning, (3) Methods of Delivering Instruction, and (4) Administration, Evaluation and Feedback. We will also have a discussion in each of these areas.

### ➤ Workshop Two (Friday and Saturday)

#### Dr. Gerald DeMenna

FUN-SCI and BUCK Scientific

Real World Hands-on Experiments: Spectroscopy

Description:

Just a few "fun" and "interesting" experiments that you will be involved with in this session for advanced High School level, Collegiate Undergraduate and Basic Research Teaching of Analytical Instrumentation. The list of laboratory tools includes the following: Infra-Red Spectrometry, Gas Chromatography, and Liquid Chromatography. All systems will be set up with Data-Stations and individual "FUN-SCI" experiments for presentation to all educators to work with during the workshop, or for demonstrations if the numbers are too high for actual hands-on.

The concept of the "FUN-SCI" program is to focus on topics that the students deal with or are concerned with everyday, and thus inspire them to remember what they did during the experiment. A brief ecture on the Fundamentals of Analytical Spectroscopy &

Chromatography; followed by a Hands-On Workshop to show the Teachers examples of the Primary tools for analytical measurements:

- Atomic Absorption Spectroscopy: Determination of Minerals in Vitamin Tablets
- Infrared Spectrometry: Oils Well that Ends Well, Natural or "Fake" Engine Oil?
- Ultraviolet- Visible Spectrophotometry: Examination of Sun-Screen Lotions SPF
- Gas Chromatography: Measurement of Alcohols from Consumer Products
- Liquid Chromatography: Sodas & Drinks, How much caffeine can be seen?
- Fluorometry: The Chemical "highlights" of Fluorescent Markers
- Colorimetry: Check your M&M Candies for "True Colors"!

#### BANQUET 6:00 UNTIL???? LOCATION TO BE ANNOUNCED

### SATURDAY October 5<sup>th</sup> 2002

- 8:30 to 9:00am. Registration: TXCC Farmington Room
- 9:00am. Welcome: Dr. Karen Wosczyna-Birch.
- 10:00 to 12:00pm. Keynote Address and Demo: Dr. Babu George.

Dr. Babu George is the Chair of the Science, Math and Computer Science Dept at Sacred Heart University and a nationally renowned educator. He will be addressing the 2YC3 participants and present his famous chemistry demonstrations.

- 12:00 to 1:00pm. Lunch
- 1:00 to 4:00pm. Workshops.
- **Workshop One.**

#### Dr. Gerald DeMenna

FUN-SCI and BUCK Scientific

Real World Hands-on Experiments: Spectroscopy

Jerry DeMenna will provide another interactive workshop using real world applications and instrumentation available for the conference. See Friday's workshop description for a sample of the activities

## **Workshop Two.**

**Analyzing Crime Scenes Using Blood Splattering Patterns and other Forensic Techniques** 

Attorney and Scientist Elaine Pagliaro, Asst. Director, CT State Forensic Labs Elaine will conduct a hands-on workshop that analyzed blood splattering patterns and other forensic techniques used at crime scenes. This workshop will provide participants with activities that they can take back to their classroom/labs.

For an update on the final agenda and registration form, please access the website for the conference by clicking on the link to the  $2YC_3$  Fall Northeast Conference:

http://www.commnet.edu/co/academic/cot/

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