



# CONTINUING PROFESSIONAL DEVELOPMENT

**Saturday, July 8**

CPD #1

**EFFECTIVE COMMUNICATION, A THREE-PART COURSE**  
**SATURDAY, JULY 8** **12:30PM-4:30PM**  
**CANCELLED**

Learning Objectives: 1) Understand your own personal, moral, and ethical standards and how they relate to the NCEES code of engineering ethics, 2) provide the participant with the appropriate tools and approaches to determining, understanding, and addressing ethical dilemmas, and 3) practice the principles learned through case study analysis of ethical dilemmas, possibly including the levee system around New Orleans.

Audience Benefit: As society changes, "grey" areas become larger because of personal, peer, organizational, environmental, and economic pressures. The responsibilities of engineers, however, do not change. The approach and potential ramifications must be better understood to reduce the potential negative impacts of dealing with ethical dilemmas.

**COST:\$185**

**Sunday, July 9**

CPD #2

**AN INTRODUCTION TO ANSI Z535.6: SAFETY INFORMATION IN PRODUCT MANUALS, INSTRUCTIONS AND OTHER COLLATERAL MATERIALS**

**SUNDAY, JULY 9** **8:00AM-12:00PM**

**Location:** B113

Sponsoring Committee: ESH Division

Instructor: Richard W Job, Richard W. Job & Associates, LLC

**Level of Difficulty:** Entry Level

Credit Hours: 4 Hours

Target Audience: Safety professionals and equipment designers

Audience Benefit: The new requirements of Z535.6 will need to be embraced and incorporated by the agricultural equipment industry.

Having first-hand knowledge of the requirements will benefit attendees as the new generation of manuals and product instructions are developed.

**COST: \$95**

CPD #5

**ENTREPRENEURSHIP**

**SUNDAY, JULY 9**

**8:00AM-12:00PM**

**CANCELLED**

Credit Hours: 4 Hours

CPD #3

**GRID COMPUTING FOR COMPUTATIONALLY INTENSIVE PROBLEMS**

**SUNDAY, JULY 9** **8:00AM-12:00PM**

**CANCELLED**

CPD #4

**ENGINEERING ETHICS**

**SUNDAY, JULY 9** **8:00AM-11:30AM**

**Location:** A107

Sponsoring Committee: P-412 Engineering Ethics

Instructor: Daniel LThomas, Louisiana State Univ

Malcolm E. Wright, Louisiana State Univ

**Level of Difficulty:** Entry Level

Credit Hours: 3.5 Hours

Target Audience: Engineers needing ethics for their professional registration, engineering students, academics looking to incorporate ethical considerations in their curricula, and other professionals interested in approaches to dealing with ethical dilemmas





# CONTINUING PROFESSIONAL DEVELOPMENT

**Sunday, July 9**

CPD #6

## **PRINCIPLES OF NEAR-INFRARED SPECTROSCOPY FOR APPLIED RESEARCH**

**SUNDAY, JULY 9**

**8:00AM-5:00PM**

**Location:** A105

Sponsoring Committee: IET-348

Instructor: David B Funk, USDAGIPSA, TSD

**Level of Difficulty:** Intermediate

Credit Hours: 8 Hours

Target Audience: Preprofessionals, graduate students, academic researchers, and industry engineers and scientists who need to better understand the principles of near-infrared spectroscopy to conduct research and/or develop successful near-infrared applications

Learning Objectives: Overview of molecular spectroscopy as related to NIRS, strengths and limitations of NIRS; understanding of multivariate calibration methods (MLR, PCR, PLS, and ANN).

Audience Benefit: The goal of this CPD is that participants achieve an intuitive grasp of the foundational principles that are critical for successful research and application development using near-infrared spectroscopy (NIRS).

**COST: \$110**

CPD #7

## **SWAPP: A SWAT AND APEX**

**SUNDAY, JULY 9**

**8:00AM-5:00PM**

**Location:** B115

Sponsoring Committee: SW-224, SW-22, T-9

Instructor: Ali Saleh, Texas Institute of Applied Environmental Research (TIAER)

Jeff G. Arnold, USDA-ARS

**Level of Difficulty:** Intermediate

Credit Hours: 8 Hours

Target Audience: Field and watershed modelers, engineers, scientists

Learning Objectives: 1) To review the latest versions of the watershed-scale SWAT (Soil and Water Assessment Tool) and field-level APEX (Agricultural Policy/Environmental eXtender) models, and 2) to introduce the SWAPP program, which was developed to facilitate the simultaneous use of these two models.

Audience Benefit: SWAT and APEX models are used to assess and evaluate various BMPs at field (using APEX) and watershed (SWAT) levels. However, these models are capable of simulating a limited number of scenarios individually. During this CPD, the SWAPP program, which was developed to facilitate the simultaneous use of these two models, will be introduced.

**COST: \$125**

CPD #8

## **BEGINNER WORKSHOP USING ARC VIEW SWAT**

**SUNDAY, JULY 9**

**8:30AM-4:30PM**

**Location:** B114

Instructor: Srinivasan Raghavan, Texas A&M Univ

Balaji Narasimhan, Texas A&M Univ

Jennifer Jacobs, Texas A&M Univ

**Level of Difficulty:** Entry Level - But must have basic level of GIS

Credit Hours: 7 Hours

Target Audience: Graduate students, educators, scientists and professionals in private consulting and government regulatory agencies who want to learn and apply ArcView SWAT for hydrology and non-point source pollution/TMDL assessment

Learning Objectives: 1) To introduce ArcView SWAT and its capabilities, 2) hands-on training in data preparation using ArcView SWAT interface, and 3) to demonstrate the new autocalibration tool.

Audience Benefit: At the conclusion of the workshop, attendees will be able to develop input data sets including delineating watershed boundaries, land use, and soil and water data necessary to set up a SWAT model run. Participants will learn the calibration and validation steps and the new autocalibration tool.

Course Requirement: Laptop computer with Windows 2000 or XP operating system, 5 GB free disk, ArcView 3.2 or above and spatial analyst extension 1.1. It should also have a CD-ROM drive. In addition participants should have administrator privileges on their computer in order to install the software. HOWEVER, participants are welcome to attend the workshop without a computer with the understanding that one will not be provided.

**COST: \$165**

CPD #9

## **DIESEL ENGINE EMISSION CONTROL TECHNOLOGY**

**SUNDAY, JULY 9**

**9:00AM-12:00PM**

**Location:** Oregon Convention Center Room

Instructor: Xinlei Wang, Univ of Illinois at Urbana

Alan C Hansen, Univ of Illinois at Urbana

**Level of Difficulty:** Intermediate

Credit Hours: 3 Hours

Target Audience: Engineers, researchers, students, technical and project managers interested in learning about the latest technologies for reducing emission of pollutants from diesel engines

Learning Objectives: 1) Explain the fundamentals of diesel engine operation and emissions formation processes in diesel engines, and 2) identify and compare the latest diesel emission control technologies and their applications.

Audience Benefit: Attendees will learn about the mechanisms of emission formation in diesel engines. They will gain knowledge about the latest worldwide emissions regulations and emission reduction approaches including diesel exhaust aftertreatment systems. This seminar will provide the background for and an overview of cutting-edge diesel emission control technologies.

**COST: \$135**

*Changes or additions will be specifically noted in the final program and on the ASABE Meetings web site: [www.asabe.org/meetings/aim2006/index.htm](http://www.asabe.org/meetings/aim2006/index.htm)*



# CONTINUING PROFESSIONAL DEVELOPMENT

CPD #10

## MODELING CONTAMINANT TRANSFER DURING AIR SPORING AND VAPOR EXTRACTION REMEDIATION

SUNDAY, JULY 9

9:00AM-4:00PM

CANCELLED

CPD #11

## PREPARING FOR THE AGRICULTURAL ENGINEERING PE EXAM

SUNDAY, JULY 9

12:30PM-5:30PM

Location: C124

Sponsoring Committee: IPE

Contact: Russell Persyn

Subject areas covered:

- Overview of Exam
- Soil and Water
- Power and Machinery
- Processing/Handling of Biological Products
- Structures and Environment
- Biological Systems
- Agricultural Engineering Principles

**Level of Difficulty:** Entry Level

Credit Hours: 5 Hours

Target Audience: Engineering interns preparing to take the PE examination for licensure as an agricultural engineer.

Learning Objectives: 1) Understand the licensure process, 2) learn the makeup of the agricultural engineering PE exam, and 3) acquire test-taking tips to better prepare for the PE exam.

Audience Benefit: Preparation for taking the PE Exam

**COST: \$60**

CPD #12

## FLUORESCENCE IMAGING FOR AGRICULTURAL USES

SUNDAY, JULY 9

1:00PM-5:00PM

Location: Oregon Convention Center Room

Sponsoring Committee: IET-312

Instructor: Moon Kim, USDA-ARS

**Level of Difficulty:** Entry/Intermediate

Credit Hours: 4 Hours

Target Audience: Researchers and practicing engineers, students

Learning Objectives: 1) Learn basic concepts of fluorescence imaging, 2) overview of hardware designs/requirements and calibration procedures, and 3) selected applications of hyperspectral, multispectral and laser-induced fluorescence imaging techniques and application for rapid on-line food safety inspection.

Audience Benefit: The attendees will learn basic concepts and requirements for practical applications in fluorescence imaging.

**COST: \$105**

CPD#13

## HOMOLOGATING MACHINES "FOR SALE" IN EUROPE

SUNDAY, JULY 9

1:00PM-5:00PM

Location: B113

CANCELLED

CPD #14

## PROFESSIONAL DEVELOPMENT SEMINAR

SUNDAY, JULY 9

4:15PM-5:30PM

Location: Oregon Ballroom 201/202

Sponsoring Committee: International Preprofessional Council (IPC)

**Level of Difficulty:** Non Applicable

Credit Hours: 1.25 Hours

Target Audience: Preprofessional/student conference attendees

Learning Objective: The Professional Development Seminar (PDS) will have a theme surround the Professional Engineer (PE). The goal of the PDS is to not only encourage preprofessionals to pursue their PE, but to also allow preprofessionals the opportunity to interact with current engineers as they describe experiences they have had related to being a PE.

4:15PM- Welcome & introduction, Jacob Bolson

4:20PM- Jim Dooley, Forest Concepts, LLC (consulting)

4:35PM- Dr. Joe Glass, California Polytechnic State University (academia)

4:50PM- Chris Nichols, Johnson Controls Battery Group (industry)

5:05PM- Keith Tinsley, Professional Engineering Institute

5:10PM- Open Forum, Q&A session with speakers

5:25PM- Closing remarks, Jacob Bolson

5:30PM- Dismissal

**COST:** No charge to registered Preprofessionals/Students

\$45.00 to Full Meeting Registrants

**Monday, July 10**

CPD #15

## FEMLAB USAGE

MONDAY, JULY 10

1:00PM-5:00PM

CANCELLED



# CONTINUING PROFESSIONAL DEVELOPMENT

**Tuesday, July 11**

CPD #16

## **AGRONOMY BASICS FOR ENGINEERS**

**TUESDAY, JULY 11**

**2:00PM-4:00PM**

**Location:** A106

Sponsoring Committee: PM

Instructor: Chad Yagow, John Deere Harvester Works

**Level of Difficulty:** Entry Level

Target Audience: Individuals unfamiliar with basic plant growth and behavior; individuals wishing to learn about coarse grain, cereal, and oil crop production; individuals who work with machinery and/or processes that interact with these crops.

Learning Objective: Upon completion of this course, the participants of this class should understand and be able to knowledgeably discuss: 1) basic plant processes, 2) crop production techniques, and 3) current, popular uses for common crops such as corn, soybeans, and wheat.

Audience Benefit: Participants will gain insight into food and fiber production and should be able to apply knowledge gained in this class directly to their everyday work.

**COST:\$60**



## *Hot Topic Survey*

*To meet the needs of our members, we ask that you take this opportunity to offer suggestions to ASABE on Continuing Professional Development or web training sessions, stand-alone workshops or hot-topic sessions that would be of interest.*

Our plan is to offer special workshops which meet criteria for Professional Development Hour credits as well as cutting edge technology which would be of great value to your job or perhaps community.

Hot Topic / Current Issue Topic(s): \_\_\_\_\_  
\_\_\_\_\_

Please consider offering this topic as a  
CPD Workshop \_\_\_\_\_ New Session \_\_\_\_\_ Web Training \_\_\_\_\_ Conference Topic \_\_\_\_\_

Name \_\_\_\_\_

Company/Organization \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

Complete fax or mail to: ASABE Meetings & Conferences, 2950 Niles Road, St. Joseph, MI 49085  
or email information to [chesser@asabe.org](mailto:chesser@asabe.org)