

Three Winning Poster Sessions Chosen at Safety 2011

Poster sessions at ASSE's Safety 2011 in Chicago, IL covered a wide range of topics, including respiratory protection, system safety in the poultry industry and chemical exposure among childbearing-aged women.

Like last year, a panel of ASSE and Academics Practice Specialty members selected a winner from each of the three poster categories: students, graduates and other (including faculty and government).

The three winners were:

Students

Measuring Ambient Air Concentrations in a Research and Development (R&D) Clean Room Environment

Samantha L. Connell, Burton R. Ogle, Ph.D., CIH, CSP, Tracy L. Zontek, Ph.D., CIH, CSP (Western Carolina University), Scott Hollenbeck, CIH, John Jankovic, CIH (Oak Ridge National Laboratory)

Graduate Students

A Study of NIOSH Highway Work Zones Fatality Assessment and Control Evaluation (FACE) Program Based on Gibb-Haslam Model of Accident Causation

Hootan Tabar, Michael Behm, Ph.D., CSP
East Carolina University

Other

NIOSH Development of a Multifunctional Guardrail System

E.A. McKenzie, Jr., Thomas G. Bobick, Douglas M. Cantis
NIOSH

During her internship at Oak Ridge National Laboratory (ORNL) last summer, Samantha L. Connell, a member of the winning student team, characterized the cleanroom at the Center for Nanophase Materials Sciences using a condensation particle counter. "The ability to monitor for nanoscale materials allows for the prevention of exposure," says Connell. "Since the health effects of nanomaterials are unknown, it is important to ensure that all researchers at the laboratory are safe. Our research also confirmed that the ventilation system in the cleanroom is working properly."

For Connell, her team's win means "being able to give back to ORNL and to my mentors who aided me in this project. I have experienced many life-changing opportunities in the last two years, and it is great to be able to represent those who taught me everything I know."

Hootan Tabar of the winning graduate student team used the Haslam Model to identify the top significant contributing factors in highway work zones accidents. "This model is a diagnostic investigation technique to identify multiple causes and influences that contribute to accident occurrence," says Tabar.

According to the Bureau of Labor Statistics, most workplace fatalities are transportation-related incidents. "Highway work zones are also responsible for 9% of construction deaths," adds Tabar. "In fact, work zones are a hotspot for road crashes too."

This summer, Connell is back at ORNL doing more SH&E work and nanomonitoring. "The lab is continuously developing a new protocol for nanoscale materials monitoring, so there will be more projects and posters to come!" she says.

Tabar's future research plans include "studying the root causes of road crashes, preparing a framework for hazard identification, risk assessment and proposing proper corrective actions for a transportation/transit system."

Tony McKenzie of the NIOSH team says, “The NIOSH roof bracket design team has worked for more than six years in developing this roof guarding system, and we have recently signed an exclusive licensing agreement with a manufacturer from Kansas City, MO to sell the system. Our partners at West Virginia University are in the process of training local Morgantown, WV contractors in its use. The success of the poster was a surprise, and we are grateful for the recognition.”

For information on last year’s poster session winners, click [here](#).