Prevention through Design—a new way of doing business: report on the National Initiative

Omni Shoreham, Washington, DC

Day 1 – Monday August 22, 2011
1:00 – 5:20 pm

1:00 – 1:10 pm  Welcome  Margaret Kitt, M.D., MPH, Deputy Director for Program, NIOSH
1:10—1:45 pm  PtD: State of the National Initiative  Paul A. Schulte, PhD, Director, Education and Information Division, NIOSH
1:45—2:30 pm  Keynote Address  Kelvin Genn, General Manager Safety and Wellness, Sinclair Knight Merz, Australia
2:30—5:20 pm  Plenary Session

2:30 – 3:00  Michael Acott, President National Asphalt Pavement Association
3:00 – 3:30  William (Bill) Horsford, PhD, Project General Manager, Environmental and Safety Engineering, Toyota
3:30 – 3:45  Break
3:45 – 4:15  John Borowski, Director, Health Safety Security & Environment, WorleyParsons
4:15 – 4:45  Wayne S. Maynard, CSP, CPE, ALCM, Manager, Technical Services & Product Development, Liberty Mutual
4:45 – 5:15  Scott P. Schneider, CIH, Division Director, Laborers’ Health and Safety Fund of North America
5:15 – 5:20  Overview of Day 2
Donna S. Heidel, PtD Coordinator, NIOSH

Opening Session

Reception/Poster Session  5:30—7:00 pm

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Day 2—Tuesday, August 23, 2011

Session A: Research Issues in PtD

8 am – 3:45 pm

**Research Issues**

8:00 – 8:30  
Effects of construction design and management regulations in the UK; PtD survey of UK and the UK experience  
*Alistair Gibb, PhD, Loughborough University*

8:30 – 9:00  
Findings from the overall PtD in the UK study and their application to the US  
*John Gambatese, PhD, Oregon State University*

9:00 – 9:30  
*Mohammad Ayub, P.E., S.E., Directorate of Construction, USDOL-OSHA*

9:30 – 10:00  
Design risk analysis and quantification  
*Matthew Hallowell, PhD, University of Colorado*

10:00 – 10:15  
Break

10:15 – 10:45  
Benchmarking management practices related to PtD in the US  
*Steve Newell, Consultant, Mercer*

10:45 – 11:15  
Incorporating PtD methods in the design and re-design process  
*Frank Renshaw, PhD, CIH*

11:15 – 12:00  
Variability in business case methods associated with adopting PtD design solutions  
*Elyce Biddle, PhD, NIOSH*

**Lunch and Student Contest**

12 noon – 1:30  
Student PtD project competition presentations and awards

**Research Issues (continued)**

1:30 – 2:00  
Improving the work life of workers in wine grape harvesting industry through PtD  
*Amy Wolfe, Executive Director at AgSafe*

2:00 – 2:30  
Including occupational H&S considerations in alternatives assessment to identify chemical substitutes  
*Joel Tickner, PhD, University of Massachusetts Lowell  
Cal Baier-Anderson, PhD, U.S. Environmental Protection Agency*

2:30 – 3:00  
Implementing PtD to promote health and safety in hospitals  
*Margaret Quinn, ScD, CIH, University of Massachusetts Lowell*

3:00 – 3:15  
Break

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## Day 2—Tuesday, August 23, 2011
### Session B: Education Issues in PtD

1:30 – 5 pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30–2:00</td>
<td>Inclusion of PtD into engineering textbooks</td>
<td>Atila Ertas, PhD, Texas Tech University</td>
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<tr>
<td>2:00–2:30</td>
<td>Inclusion of PtD into engineering education</td>
<td>Deborah Young-Corbett, PhD CIH CSP CHMM, Virginia Tech</td>
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<td>2:30–3:00</td>
<td>Engineer 2020: Prevention through Design</td>
<td>James McGlothlin, PhD, Purdue University</td>
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<td>Peter H. Meckl, PhD, Purdue University</td>
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<td>3:00–3:15</td>
<td>Break</td>
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<td>3:15–3:45</td>
<td>Including PtD into the education of safety engineers</td>
<td>Martha Bidez, PhD, University of Alabama at Birmingham</td>
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<td>3:45–4:15</td>
<td>Including PtD into the accreditation of civil/construction engineering curricula</td>
<td>Joseph Fradella, MS, Oregon State University</td>
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<td>4:15–4:45</td>
<td>Educating health and safety professionals in PtD</td>
<td>Georgi Popov, PhD, University of Central Missouri</td>
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<td>4:45–5:00</td>
<td>Including PtD into undergraduate engineering courses</td>
<td>Donna S. Heidel, CIH, NIOSH</td>
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## Day 2—Tuesday, August 23, 2011

### Session C: Practice Issues in PtD

**8 am – 5 pm**

<table>
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<th>Activity</th>
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<tr>
<td>8:00 – 8:30</td>
<td>Owner involvement in PtD</td>
<td>Michael Toole, PhD, Bucknell University</td>
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<tr>
<td>8:30 – 9:00</td>
<td>PtD as a part of capital project design and execution from the project manager’s perspective</td>
<td>John Weaver, Birck Nanotechnology Center, Purdue University</td>
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<td>9:00 – 9:30</td>
<td>PtD from the project and contractor’s perspective</td>
<td>Jimmie Hinze, PhD, University of Florida</td>
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<td>9:30 – 10:00</td>
<td>Life cycle approaches to project design</td>
<td>Peter Furst, MBA, Registered Architect</td>
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<td>10:00 – 10:15</td>
<td>Break</td>
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<tr>
<td>10:15 – 10:45</td>
<td>Costs/benefits of ergonomic interventions for small business</td>
<td>Dan MacLeod, CPE, Ergonomics Consultant</td>
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<td>10:45 – 11:30</td>
<td>Buy Quiet/Quiet by Design</td>
<td>Beth Cooper, NASA</td>
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<td>11:30 – 12 noon</td>
<td>Ambulance re-design to reduce EMS injuries</td>
<td>Paul Moore, Division of Safety Research, NIOSH</td>
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<td>12 noon – 1:30</td>
<td>Lunch and Student Contest</td>
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<td>1:30 – 2:00</td>
<td>PtD current and future activities and challenges</td>
<td>Danezza Quintero, USDOL-OSHA, Gopal Menon, P.E., USDOL-OSHA</td>
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<td>2:00 – 5:00</td>
<td>Making buildings safe to construct, operate and maintain</td>
<td>John Gambatese, PhD, Oregon State University, Moderator</td>
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<td>including break at 3:00 – 3:15</td>
<td>• Spray polyurethane foam (SPF)-EPA considerations</td>
<td>Anjali Lamba, MPH, CIH, USEPA</td>
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<td>• Vegetative roofs</td>
<td>Mike Behm, PhD, East Carolina University</td>
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<td>• Designing out the use of ladders</td>
<td>Thomas J. Lyons, Innovative Technical Solutions, Inc.</td>
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<td>• Sustainable construction safety and health rating system</td>
<td>Sathy Rajendran, PhD</td>
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<td>• Incorporating OSH of preventive maintenance workers into green building design and operation</td>
<td>Mohamed Omar, ScD, Harvard University</td>
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<td>• A review of safety on four LEED projects</td>
<td>Nicholas Tymvios, Oregon State University</td>
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<td>• PtD construction case studies</td>
<td>Nicholas Tymvios, Oregon State University</td>
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# Day 3—Wednesday, August 24, 2011

**8 am – 12 noon**

## Policy Issues

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
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| 8:00 – 8:30 | ASSE PtD technical report and standard  

*Fred Manuele, President, Hazards, Limited*

| 8:30 – 8:45 | ASSE PtD-related activities  

*Dave Heidorn, JD, American Society of Safety Engineers*

| 8:45 – 9:00 | AIHA PtD-related activities: Z-10  

*Kyle B. Dotson, CIH, CSP, BCEE, Dotson Group, LLC  
Representing the AIHA ANSI Z-10 committee*

| 9:00 – 9:20 | AIHA PtD-related activities: business value and control banding  

*Mary Ann Latko, AIHA*

| 9:20 – 9:50 | Progress in impacting policy in workplace electrical safety  

*H. Landis (Lanny) Floyd II, PE, CSP, CMRP, Fellow IEEE, DuPont*

| 9:50 – 10:00 | Break |

## What's next?

**Challenges and Opportunities for the Future**

<table>
<thead>
<tr>
<th>Time</th>
<th>Panel Discussion</th>
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</table>
| 10:00 – 12:00 | • Workplace violence prevention  

*Daniel Hartley, PhD, NIOSH*

|  | • Changing organization of work and the effect on safety and health of working people  

*Nancy Lessin, United Steelworkers - Tony Mazzocchi Center for Health, Safety and Environmental Education*  

|  | • Worker involvement  

*Stephen Gauthier, GE, IUE/CWA, Vice Chair, Region I VPP*

|  | • New technology integration: nanotechnology  

*Charles Geraci, PhD, NIOSH*

|  | • Small business  

*Georgi Popov, PhD, University of Central Missouri*

|  | • AIHA perspective on challenges and opportunities  

*Daniel H. Anna, PhD, CIH, CSP AIHA Secretary*

|  | • Leveraging technology to design for safety in construction  

*Jochen Teizer, PhD, Georgia Institute of Technology*

## Closing Remarks

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<tr>
<th>Time</th>
<th>Donna S. Heidel, NIOSH, PtD Coordinator</th>
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