Protecting Worker Health
Florida Local Section AIHA

PDC1: *50 Ways to Lose Your Hearing: What Industrial Hygienists Need to Know about Acoustics*

(8hr)

Thursday, October 17th, 2019
8:00 AM – 5:00PM

Description:

This PDC is broken into 2 parts: the 1st part will provide occupational health and safety practitioners with an overview of sound, how it relates to industrial type projects with case studies, and the 2nd part will include a tutorial on how to take sound level measurements according to national/international standards.

The first session will be a basic introduction to sound and noise. The presentation will then cover community noise, entertainment noise, firing ranges, central plants and other equipment and how noise mitigation design is a critical part to the success of the projects.

During the second session, PDC participants will be immersed in a Sound Level Measurements Training Session. They will learn proper protocol for taking acoustic measurements in accordance with international standards, how to field calibrate the meter, and how to correct for background noise.

Outline – Session 1:

1. Intro to Sound and Noise
2. Community Noise and Entertainment Noise: Issues and Case Studies
3. Firing Ranges: Issues and Case Studies
4. Central Plants/Chillers and Outdoor HVAC Equipment. Issues and Case Studies
5. Practical Applications. Examples and lessons learned

Outline – Session 2

1. Sound Level Measurement Training Session
2. Intro to the Meter. How to operate
3. Measurement How to
4. Background Noise Correction

5. Downloading the meter

Instructor

Keely M. Siebein, ASA, INCE, LEED AP BD+C. Senior Consultant at Siebein Acoustic

Keely Siebein has over 18 years' experience in architectural and environmental acoustics and has worked on over 275 projects worldwide. She has performed extensive research in urban, historic, architectural and natural soundscapes; restaurants and dining spaces; classroom acoustics; and performance space, healthcare and religious space acoustical design. She received the Robert Bradford Newman award for excellence in architectural acoustical research in graduate school.

Ms. Siebein has authored and coauthored invited papers on performance spaces, restaurant acoustics, sustainability and acoustics and environmental soundscapes at regional, national and international acoustics meetings. Keely is a member of the Acoustical Society of America (ASA), Institute of Noise Control Engineers, (INCE) and currently serves as President of the Florida chapter of the ASA.

Keely has developed and presented lectures on topics including introduction to acoustics, healthcare acoustics, industrial noise, community noise, multi-family housing acoustic criteria, firing ranges, and acoustic measurement training sessions for architects, planners, administrators, healthcare professionals, and other professional groups. Keely has been involved in interdisciplinary, research-based projects that seek to solve practical acoustic problems across disciplines, including contractors, architects, interior designers, engineers, planners, owners, developers, and school administrators.

Keely is passionate about sustainability and green buildings, and is actively involved in acoustical professional societies, technical committees, working groups and development of acoustic standards.