

NOTE: anyone can attend this meeting regardless of their status as an AES member.

AES MEMBERSHIP IS NOT REQUIRED (but is highly recommended).

January 2020 Meeting Notice

Old Problems, New Solutions: Architectural Acoustics in Flux

With

Ron Sauro - NWAA Labs Inc.

Presented by The AES Pacific Northwest Section

Digipen Institute of Technology
Wednesday, January 8th, 2020, 7:30pm

A short, (ha!), review of major changes in the field of architectural acoustics. These changes should be applied to future designs of acoustic spaces both large and small. It seems that many of these changes have been discussed at ASA and INCE meetings for many years but much of it does not get heard at other meetings such as AES and CEDIA. These changes affect ALL of us and need to be disseminated everywhere acoustic spaces are used or designed.

Topics to be discussed

- Major changes in Absorption, Diffusion (diffraction), and Transmission loss measurements.
- How can these changes best be used.
- Directivity measurements of speakers and diffusers and their implementation into computer aided designs.
- A short video tour of NWAA facilities and the research into acoustics performed there.

Please join us at our January meeting for what should be an informative update in the field of architectural acoustics.

Our Presenter

Ron Sauro is the owner and president of NWAA Labs, Inc, in Elma WA. NWAA is engaged in

- Measuring the directivity, sound levels, etc. of speakers, utilizing standard and experimental algorithms
- Extensive experience in acoustic directivity — measuring with a microphone array originally designed while at NASA Ames Research (see below)
- Testing according to American Society for Testing and Materials (ASTM), International Standardization Organization (ISO), Audio Engineering Society (AES), etc. acoustic test standards, such as ASTM C423, ISO 354, ASTM E90, AES156
- Responsible for reviewing, modifying and enforcing these standards by serving on and chairing the ASTM, ISO, AES, etc. standards committees
- Performing research in order to improve testing methodologies
- Have developed and continue to develop new standards for the acoustics industry

- Discovering reasons behind and resolutions to long-standing problems in acoustic testing and usage. For example, the way an "edge effect" can alter test results, and a simple method to solve it
- Presenting papers, writing articles for industry conferences, such as the Acoustic Society of America (ASA), the Institute of Noise Control Engineering (INCE), and AES meetings
- Developing and testing a vast range of noise elimination treatments
- Providing consultation to clients on possible improvements of their products

Prior to founding NWAA Labs, Ron was the owner of Northwest Audio and Acoustics, in Tacoma where he worked in the design, oversight, installation and implementations of new acoustic spaces and sound systems, and modifications of existing spaces in order to enhance acoustic room characteristics, such as speech intelligibility, musical performance, etc. He was part of the development team for EASE (Electro Acoustic Simulation for Engineers), a software package widely regarded as one of the most complete and accurate acoustic design simulation programs in the industry. He originated classes on using EASE, along with EARS, the audible room simulation part of EASE, designed and developed simulators for US fighter jets and the Space Shuttle. Other projects include: Benaroya Hall, Yoida Full Gospel Church in Seoul, South Korea, Carnegie Hall, Las Vegas Motor Speedway, Bremerton Naval Shipyard, among many others

In 1968, while working for, NASA Ames Research Center, he attended a NASA-sponsored intensive Sciences and Mathematics studies program, (taught by Stanford professors, 7 days a week, 12 hours a day, for full year) resulting in Stanford-equivalent degrees in Physics and Electronics Engineering

Alphabet Soup

ASA — Acoustical Society of America

INCE — Institute of Noise Control Engineering

AES — Audio Engineering Society

CEDIA — Custom Electronic Design & Installation Association.

Greg Dixon

AES PNW 2019-2020 Section Chair

n.b. *The material presented at our meetings is the opinion of the presenter and not necessarily that of the Society. You are encouraged to conduct your own research and to form your own opinions before adopting the presented material as Truth.*

Our meetings are open to anyone interested in Audio. AES membership is NOT required for you to attend our meetings.

Last modified 11/25/2019 21:23:41.