

Minutes of AES TC-4 Acoustics and Sound Reinforcement

The open meeting of the AES TC-4 took place on Thursday, 11 November 1994, 16:45-17:30, at Moscone Convention Center, San Francisco, immediately following the Acoustics session. Due to tape recorder malfunction these minutes have been severely edited.

Present:

Mendel Kleiner (chairperson)
Paul D. Bauman (AES TC-4 member)
Kurt Graffy (AES TC-4 member)
Joel Lewitz (AES TC-4 member)
Neil A. Shaw (AES TC-4 member)
Wolfgang Ahnert
Fred Ampel
Jim Brown
Ron Freiheit
Richard Galbraith
Aleece B. Landis
David McGrath
Mikhail Malkovitch
Kirby Miller
Mohamed Ngasi Dimon
Martin Procunier
Henrik Staffeld
Bob Thurmond
Mark Valenti

Not present:

Ken Jacob (AESTC-4 vice chair)
Søren Bech (AES TC-4 member)
David Klepper (AES TC-4 member)

The chair opened the meeting and introduced the members of the technical committee to the attendants. Then followed a presentation of the scope of the technical committee. The chair then thanked Fred Ampel for his successful organization of the very well attended papers session on multivchannel presentation rooms.

The minutes from the meetings in New York 1993 and Amsterdam 1994 were reported on.

The discussion then focused on the difficulties the committee has had in working in an "anechoic environment", in the sense that it is often difficult to obtain response, in time, from the local convention organizing committees regarding the number of allowed TC organized sessions at a convention. In order for sessions to be arranged effectively, a two year planning period is necessary. It was decided that the committee should try to obtain clear guidelines from the AES which allowed the TCs to organize at least one session of invited papers at a convention. In order to function correctly in its efforts to educate and inform of new developments within its field this is a minimum if the work of the TCs is to be beneficial to AES members.

A debate then followed on what type of sessions or workshops the committee should work for. Some favored a popularizing approach, whereas others wanted more scientific/technical activities. Based on the attendance at the session on multimedia presentation rooms, one person argued that the TC should try to mark itself out by arranging sessions on popular and timely subjects. It is however also necessary to be realistic and arrange sessions where there are possibilities to find good contributions.

The meeting then concentrated on discussing possible activities for the 1995 AES conventions in New York (99th).

The discussion concentrated on three subjects, multimedia listening room acoustics problems, computer prediction of acoustics and sound reinforcement, subjective and objective rating of sound reinforcement systems. The chair will contact those interested in arranging sessions on these subjects provided at least one session gets approved by the New York convention committee, or other authoritative body within AES..

A questionnaire was circulated in trying to obtain a wider response from the participants. The following answers were obtained (11 sheets out of 20 handed out):

Which new things are underway and need to be addressed by the TC for AES? Audio for multimedia (2), audio for virtual reality (2), modeling reliability for small rooms, characterization of surface absorption in models, diffusers in models, angle of incidence effects, loudspeaker cluster performance, relationship between what we measure and what we hear, room deconvolution, smart speakers, sound reinforcement systems being used for virtual reality and reverberation enhancement (2), acoustics and the personal computer, multimedia machines, enhanced acoustic experience, digital signal processing and virtual rooms, auralization.

In which areas of interest to you, do you believe that we are in most urgent need of more knowledge? Multiple loudspeaker array factors, validity of modeling programs, success factor, how to design and evaluate reverberation enhancement, loudspeaker cluster performance, relationship between what we measure and what we hear, vertical plane localization, STI vs sound quality for different languages, practical limitations of multichannel sound systems in theatres and homes, computer control of sound reinforcement, computer control of testing and adjustment, coupling of speech reinforcement with teleconferencing, computer modeling of loudspeaker systems, digital signal processing for sound

reinforcement, room modeling (2), verification of computer modeling.

Suggested activities for New York 1995: Computer program results, sound field simulations, distortion (sound quality) in controlled directivity loudspeakers, dsp for speakers, smart walls, guidelines for home theatres do's and don'ts, tutorial, posters session on loudspeaker modeling, practical implementation of modeled systems.

Respectfully submitted,

Mendel Kleiner