

AES 20th INTERNATIONAL CONFERENCE

ARCHIVING, RESTORATION, AND NEW METHODS OF RECORDING

Budapest, Hungary, “the Paris of Central Europe,” is the locale for *Archiving, Restoration, and New Methods of Recording*, the AES 20th International Conference, October 5-7. This topic is increasingly important as the life cycles of audio formats grow shorter and shorter with the accelerating proliferation of new digital formats. How do we preserve and, when necessary, restore our musical heritage so that it is accessible to future generations? The 20th Conference will offer numerous ideas for constructing a blueprint for preservation.

FORWARD-LOOKING TECHNICAL PROGRAM

UNESCO representative Joie Springer will open the conference on Friday morning with an expansive keynote address entitled “Promoting Global Access to the Audiovisual Memory of the World.” UNESCO has been actively involved since 1980 in preserving the fragile audio-visual heritage of humanity by focusing on the need for urgent action in member states and by exploring the use of information and communication technologies.

The first session on Friday morning will address carrier degradation. Paper topics include the life expectancy of magnetic tapes, long-term CD-R archiving, optical disk ag-

ing and degradation, the effects of sunlight on CD-R carriers, and the effects of polluting gases on CDs.

Friday afternoon’s session will begin with the invited tutorial “Toward Nanotechnology in Data Recording.” Speakers will be Arpad Csurgay, Budapest University of Technology, and Wolfgang Porod, University of Notre Dame. Csurgay and Porod will evaluate the potential role of emerging nanoelectronic devices and circuits in future data-recording systems.

The session on metadata and files has papers scheduled on the metadata system of the National Audiovisual Archive in Hungary, metadata requirements identified at the National Library of Australia, metadata as a basis for asset management, a subject-description method for sound effects, and a protective nonlinear file structure.

Saturday morning’s session will look at broadcasting systems, such as those in Finland, Germany, Norway, England, and Japan. The session in the afternoon is devoted to four mass transfer methodologies: methods being used at the BBC Radio 1 Archive to transfer over 40,000 tapes and DATs to CD and DVD-R; Otari’s DAS system, designed for multichannel high-speed transfer; an audio workstation with the potential to eliminate latent sources of error during transfer; and an analysis of the best way to

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express the holding efficiency of a storage system.

The first group of papers on restoration will start in a late afternoon session on Saturday. The first concept to be discussed will be a low-cost system for transcribing wax cylinders. Mechanical contact during replay can cause extensive damage to the fragile shellacs on many early disks. The next paper in this session looks at a method for taking a picture of each side of a disk and processing the image to extract the original audio recording. The final paper on Saturday discusses the distinctions between direct optical reading of the grooves on a disk and the optical detection of the stylus movement during replay.

The final session on Sunday morning will complete the papers on restoration. In the first paper, authors from the Austrian Academy of Sciences and the Technical University of Vienna will present a method to reduce modulation noise during the playback of magnetic recordings. Next a preservation specialist from Denmark will stress the mechanisms of noise generation that may prevent archivists from removing the intended audio content when using noise-reduction signal processing. The third paper of the session will review an operator-assisted pitch-correction system. Another paper discusses the restoration of nonlinearly distorted audio tracks of old motion pic-

tures. The final two papers will take a look at the resynchronization of multiple audio sources and a declacking algorithm based on the wavelet transform and self-organizing maps.

A calendar, complete list of papers with abstracts, and a registration form follow on pages 550-556.

A WORLD-CLASS CONFERENCE CENTER

The newly renovated four-star Hotel Novotel, located in a beautiful park adjacent to the Budapest Congress Center, offers a superb conference venue. It is situated in the Buda hills to the west of the Danube River, very near the historical Castle District and the most important monuments and museums in the city.

One of the loveliest capitals in Europe, Budapest blends Art Nouveau architecture from the end of the nineteenth century with a dynamic outlook on new businesses and technologies. The city has an modern public transportation network of taxis, buses, trams, and underground trains. And Budapest is famous for its thermal baths, more than 100, with some dating to the Turkish occupation.

Those attending the conference should plan to arrive by Thursday evening for a welcome reception. For more details see the AES website at www.aes.org.