



A nighttime view of Detroit's skyline from Canada.

# 25th Annual SMPTE Television Conference

February 1–2, 1991, Detroit, Michigan

The 25th Annual SMPTE Television Conference, to be held at Detroit, Michigan's Westin Hotel on Friday, February 1, and Saturday, February 2, is just around the corner. Members are urged to attend this special event, which will focus on the evolution of television and offer predictions of its future, as well as celebrate the conference's Silver Anniversary.

According to Program Chairman Rudy Kryger, CBC, 30 technical papers, focusing on the conference theme "A Television Continuum — 1967 to 2017," have been selected for presentation at the conference. The program will be divided into four sessions:

- Friday morning: A Path to the Future
- Friday afternoon: Forward to the Present
- Saturday morning: Back to the Future
- Saturday afternoon: Crossroads to the 21st Century

The final session will be a joint venture with the Audio Engineering Society (AES) and will include four AES papers. As an added conference bonus, those attending the SMPTE conference will be welcome at the concurrent AES conference at no additional charge.

## Technical Sessions

### Friday Morning, February 1

#### *A Path to the Future*

Session Chairman: Fred Remley  
 Session Co-Chairman: Stan Nalski  
*The Changing Role of the Television Engineer*, Irv Rosner, Rosner TV  
*Potholes on the Path to the Future*, Charles Anderson, Cat Works  
*Past 35 Years and Future 10 Years of Videotape Recording*, Hiroshi Sugaya, Kyushu Institute of Design  
*The Economic Reality of Television Technology and Production (The*

*more things change, the more they remain the same)*, Charles H. Jablonski, NBC

*The Television Revolution in Great Britain*, Gary Tonge, I.T.C.

*Fiber Optic Circuit Transportation of Video Signals: A Solution Without an Urgently Perceived Need*, C. Robert Paulson, AVP Communication  
*Fiber to the Studio — A Metropolitan Area Network*, W. Wallace Murray, Michigan Bell

### Friday Afternoon

#### *Forward to the Present*

Session Chairman: John Browne  
 Session Co-Chairman: Chris Hill  
*Progress Report from Ad Hoc Group for ES-Net*, Marc S. Walker, BTS  
*HDTV & Film — Digitization and Extended Dynamic Range*, Laurence J. Thorpe, Sony  
*Techniques for High Accuracy Measurement in HDTV Systems*, Ed Wardzala, Tektronix, Inc.  
*Integrating Video Graphics and Im-*

*aging in a Workstation Environment*, Michael Horne, Tektronix  
*New Technology in Still Stores — What are the Implications?*, Peter Owens and Robert Pank, Quantel  
*A Study of the Most Suitable Level and Width of DTL for CCD Cameras*, Hiroshi Kouchi, NHK  
*Development of the Super-Harp Camera, A Rival to the Human Eye for the Next Generation of Broadcasting*, Tetso Suzuki and Junichi Yamazaki, NHK  
*A 1/2-inch High Definition VCR with a Single Channel Analog Baseband Recording Method*, Takashi Furu-hata, Hiroshi Takahashi, Kichizae-mon Okazaki, Michiyori Miura, Hitachi Ltd.

### **Saturday Morning, February 2**

#### **Back to the Future**

Session Chairman: Keith Neff  
Session Co-Chairman: Harold L. Miller

*Plotting a Course to an All Digital Television Facility*, Patrick Whittingham, Sony Canada Ltd.

*Serial Digital Routing and Interfacing for the TV Studio of the Future*, Kevin J. Prince, Alpha Image Inc.

*Proposal for Error Detection and Handling in Studio Equipment*, Bob Elkind and David Fibush, Tektronix, Inc.

*Transform/Subband Coding for Video Compression*, David Baylon and Jae S. Lim, M.I.T.

*Clock Rate Conversion for Digital Video*, Jukka Hamalainen, J. Shields, and K. Stec, Matsushita Research Labs

*Image Compression in Television Post Production*, John P. Watney, Ampex Corp.

*An Experimental Digital VCR with New DCT-Based Bit-Rate Reduction and Channel Coding Methods*, Naoki Endoh, Toshiba Research and Development

*Note: A 30-min panel discussion with the authors will follow the presentations.*

### **Saturday Afternoon**

#### **Crossroads to the 21st Century**

Session Chairman: Esio Marzotto  
Session Co-Chairman: Gene Wilczak  
*Format Choices for the Future*, Kenneth Shaw, Ampex

*Characteristics of the Magnetic Recording System of the Next Century*, Koichi Sadashige, Consultant

*\*Matching the Sound to the Picture*, Ioan Allen, Dolby Laboratories, Inc.

*\*High-Definition Sound for High-Definition Television*, D. J. Meares, BBC

*\*HDTV Sound Systems: How Many Channels?*, Günther Theile, Institut für Rundfunktechnik GmbH

*\*Distance Control System for a Sound Image*, Setsu Komiyama, NHK

*Open Architecture Television*, Michael Bove and Andrew Lippman, M.I.T.

*Plasma Addressed Liquid Crystal (PALC) — A New Flat Panel Technology for Full-Color Video*, Tom Buzak, Tektronix, Inc.

*\* Paper presented by the AES.*

### **Digital Recording Tutorial**

An all-day seminar on digital recording will precede the television conference on Thursday, January 31, at the Westin Hotel. Prepared by SMPTE Engineering Director of Television Ken Davies, CBC, the tutorial will provide attendees with the information and skills needed for the introduction, application, and system-level maintenance and operation of digital recording.

The program will be divided into several sessions. John Watkinson, a noted technical expert and author of *The Art of Digital Video*, will present "Fundamentals of Digital Recording — Part A." John P. Watney, Ampex Corp., will then present "Fundamentals of Digital Recording — Part B."

During "Putting Video and Audio on Tape," Watkinson and Watney will make a presentation on video and audio recording. Koichi Sadashige, Consultant, will conclude the session with a talk on specialized recorders, touching on magnetic discs, optical, and RAM.

"Recorder Characteristics" will feature Jurgen Heitmann, BTS, and Hugo Gaggioni, Sony, who will discuss the D-1 4:2:2 component and HDTV. Eric F. Morrison, Ampex Corp., and Yoshinobu Oba, NHK, will then provide information about the D-2 and D-X NTSC composite formats.

"Video and Audio Applications in Production," will include a presentation by François Michaud, CBC, on interfaces, video, audio, and data control; a discussion on D-1 applications by Marcos Obadia, Lime Lite Video; and information on D-2 applications, provided by Tom Cavanagh, CBC. Koichi Sadashige will discuss the future of digital recording, focusing on

bit-rate reduction, new media, and innovative formats.

A wrap-up session will include summaries of the presentations, demonstrations of recent production elements from digital recorders, and an opportunity to interview speakers and discuss the specifics of digital recording. The fee for the all-day tutorial is \$75 for both SMPTE members and nonmembers.

### **Special Activities**

Several social events have been planned in conjunction with the television conference. On Thursday, January 31, a Welcoming Reception touting the conference's 25th year will take place in the Riverfront Ballroom of the Westin Hotel. Friday afternoon will offer a Get-Together Luncheon at the Westin Hotel's Cartier Room. Fred Remley, winner of the 1990 SMPTE Progress Award, will be the guest speaker. Remley is the chairman of the SMPTE Working Group on Advanced Television Production (T14.39) and the staff video specialist for the University of Michigan's Information Technology Division.

A special banquet celebrating the conference's anniversary and the Society's 75th birthday will take place at the International Banquet and Conference Center on Friday evening. Housed in the middle of Detroit's Greektown, the Center will offer a sit-down Greek-style dinner as well as ethnic music and dancers. An additional fee of \$30 will be required in order to attend this event.

### **Spouses Program**

Spouses Program Chairwoman Judi Stefani, FilmCraft Video, plans to get spouses well-acquainted with the Motor City. On Friday the group will visit an automotive factory, dine at the Rhinoceros Club, and tour several auto barons' mansions. Saturday's venue includes visits to several art galleries, a luncheon at Cranbrook Academy of Art Museum, and a late-afternoon tea. Each program participant will receive a decorative silver-and-black pin commemorating the 25th television conference. In addition, spouses will be provided with a packet of helpful tourist information so they may further explore the Detroit area, including nearby Windsor, Ont., Canada. The Spouses Program is \$50 for advance registration and \$60 for on-site registration.