University of Southern California USC

USC Viterbi School of Engineering

C.C. Jay Kuo Takes Reins at SIPI

Veteran researcher to lead signature Viterbi Institute for three-year term

September 05, 2006 — Jay Kuo, who joined the USC faculty in 1989 and is one of the creators of the widely used MPEG video compression system, is the newest director of the Viterbi Schools Signal and Image Processing Institute, Viterbi School Department of Electrical Engineering Systems chair Alexander A. Sawchuk announced Sept. 5.

C.C. Jay Kuo

Established in 1971 under the deanship of the legendary Zohrab Kaprielian by William K. Pratt and Harry C. Andrews with support from the Defense Advanced, SIPI was the first academic unit in its speciality, and has become internationally known as a center for its discipline. SIPI research created the now universally used JPEG and MPEG systems

Kuo will also assume directorship of the allied USC Signal Image Processing Group (SIPG). Sawchuk commended the outgoing director, Antonio Ortega, for "outstanding previous service" at SIPI. Ortega, like Kuo, is a specialist in image and video compression.

Kuo is a professor in the Viterbi School Depatment of Elecrical Engineering, and member of SIAM, ACM, a Fellow of IEEE and SPIE. He is Editor-in-Chief for the *Journal of Visual Communication and Image Representation*, Associate Editor for *IEEE Transactions on Speech and Audio Processing* and Editor for the *Journal of Information Science and Engineering* and the RURASIP *Journal of Applied Signal Processing.*

He served as Associate Editor for IEEE Transactions on Image Processing in 1995-98 and IEEE Transactions on Circuits and Systems for Video Technology in 1995-1997. Kuo received the National Science Foundation Young Investigator Award and Presidential Faculty Fellow Award in 1992 and 1993, respectively. He has guided 35 students to their Ph.D. degrees and is the author or co-author of more than 500 technical publications in international conferences and journals as well as three books. He holds a Ph.D. in Electrical Engineering from MIT.

SIPI's website offers details on SIPI's history and current work: "Research in SIPI has been at the forefront of signal processing with fundamental work on the development of signal processing theory based on higher-order statistics, fuzzy logic and artificial neural networks. SIPI researchers are also active in the design of VLSI, optical and opto-electronic systems for fast implementation of signal processing algorithms.

"Faculty in SIPI are involved in applying state of the art signal processing techniques to a wide range of real world problems. Recent applications include medical imaging, array signal processing, immersive audio, video image compression and other multimedia related technologies. Faculty and students in SIPI have access to a number of world class facilities including image compression, immersive audio, and optical computing labs. Facilities for fabrication of microelectronic and electro-optical devices and a network of workstations and computers provide a rich infrastructure for research in signal and image processing."