

ANNUAL REPORT 2009-2010 DSP TC, IEEE CAS SOCIETY

Chairman: Prof. Behrouz Nowrouzian
Secretary: Prof. Yong Lian
Past Chairman: Prof. Yoshikazu Miyanaga
Secretary-Elect: Prof. Moncef Gabbouj

1 DSP TC Meeting:

The 2009 DSP TC Annual Meeting was held at Room 203A, Taipei International Convention Center from 12:10 PM to 14:10 PM on Wednesday May 27, 2009, during the 2009 IEEE International Symposium on Circuits and Systems, Taipei, Taiwan.

2 Conferences or Workshops where the DSP TC or Members of the TC was/were actively involved in 2009-2010 include the followings:

2.1 TC members involved in the 2009 IEEE International Symposium on Circuits and Systems (ISCAS 2009), May 24-27, 2009, Taipei, Taiwan.

- **DSP Track Co-Chairs:** Behrouz Nowrouzian, Yong Lian, and Sergios Theodoridis
- **Review Committee Members of DSP Track:** Oscar Au, Tian-Bo Deng, Moncef Gabbouj, Oscar Gustafsson, Dominic Ho, Xinpeng Huang, Mohsin M. Jamali, Masayuki Kawamata, Ted Kok, H.K. Kwan, Henry Leung, Yong Ching Lim, Yong Lian, Kai-kuang Ma, Yoshikazu Miyanaga, Behrouz Nowrouzian, Tokunbo Ogunfunmi, Soontorn Orintara, Ravi Prakash Ramachandran, Tapio Saramäki, Thanos Stouraitis, David Tay, Wei Xing Zheng.
- **Technical Session Chair:**
 - Adaptive Algorithm: Tokunbo Ogunfunmi and Sergios Theodoridis
 - Adaptive Filtering & Estimation: Kai-Kuang Ma and William Jenkins
 - Digital Filter Design and Implementation: Behrouz Nowrouzian and Oscar Gustafsson
 - Digital Filter Design I: Tapio Saramäki and Andreas Antoniou
 - Digital Filter Design II: Yong Ching Lim and Yong Lian
 - Digital Signal Processing: H.K. Kwan and Mohsin M. Jamali
 - Discrete Transforms and Wavelets: Moncef Gabbouj and P.P. Vaidyanathan
 - DSP and Emerging Topics: Hakan Johansson and Leonard Bruton
 - DSP for Communications: Yoshikazu Miyanaga and Josef Nosssek
 - Image and Video Processing I: M.N.S. Swamy and Thanos Stouraitis
 - Image and Video Processing II: Thanos Stouraitis and M.N.S. Swamy

- M-Dimensional Signal Processing: Panos Agathoklis and Zhiping Lin
- Signal and Image Processing Algorithms: Andreas Antoniou and Paulo Diniz
- Signal and Image Processing Methods and Algorithms: Oscar Au and Magdy Bayoumi
- Signal Processing Algorithms: Wei Xing Zheng and Soontorn Oraintara
- Statistical Signal Processing: Sergios Theodoridis and Yoshikazu Miyanaga

2.2 DSP TC members involved in other conferences

- H. K. Kwan, Co-chair, Technical Program Committee, Signal Processing Symposium, International Conference on Communications, Circuits and Systems (ICCCAS), San Jose, California, 23-25 July, 2009.
- H. K. Kwan, Chair, Biomedical Systems and Applications (Oral session), International Conference on Electro/Information Technology (EIT 2009), Windsor, Ontario, Canada, June 7-9, 2009.
- Ioannis Pitas, 2010 Program Committee, Organic computing workshop at the IEEE Symposium Series on Computational Intelligence (SSCI), Paris, April 2010
- Ioannis Pitas, IAC Committee, IEEE International Conference on Intelligent Human Computer Interaction, 1/2010, (IHCI2010), Allahabad, India.
- Ioannis Pitas, Program committee member, BioID_MultiComm '09: Joint COST 2101 & 2102 International Conference on Biometric ID Management and Multimodal Communication, 16-18/9/2009, Madrid, Spain
- Ioannis Pitas, Program committee member, IEEE International workshop on Machine learning in signal processing, MLSP 2009, Grenoble, France, 2-4/9/2009.
- Ioannis Pitas, Reviewer, IEEE International conference on image processing, ICIP 2009, Cairo, Egypt, 7-11/11/2009
- Ioannis Pitas, Technical Program Committee, 17th European Signal Processing Conference, EUSIPCO 2009, Glasgow 24-28/8/2009
- Ioannis Pitas, Program committee of the Second IEEE Workshop on CVPR for Human Communicative Behaviour Analysis, 25/6/2009, Miami, Florida.
- Ioannis Pitas, Program committee of Pattern Analysis and Recognition (PAR'2009) in High Performance Computing & Simulation Conference (HPCS 2009) Leipzig, Germany, 21-24/6/2009
- Ioannis Pitas, Program Committee, 6th IEEE International Conference on Advanced Video and Signal-Based Surveillance (AVSS), Genoa, Italy, 2-4/9/2009
- Ioannis Pitas, Program Committee, 13th International Workshop on Combinatorial Image Analysis (IWCIA'09), 24-27/11/2009, Cancun, Mexico.
- Ioannis Pitas, Program Committee, 13th Int. Conference on Computer Analysis of Images and Patterns (CAIP'09), 2-4/9/2009, Münster, Germany

- Ioannis Pitas, Program Committee of the Iberian Conference on Pattern Recognition and Image Analysis(IbPRIA 2009), 10-12/6/2009, Povia do Varzim, Portugal.
- Ioannis Pitas, Technical Program Committee of IWDW09, 8th International Workshop on Digital Watermarking, University of Surrey, UK, 24-26/8/2009.
- Ioannis Pitas, Program Committee, 6th Int'l Symposium on Image and Signal Processing and Analysis (ISPA 2009), Salzburg, Austria, 16-18/9/2009.
- Ioannis Pitas, Program Committee, International Conference on Intelligent Information Hiding and Multimedia Signal Processing (IIH-MSP) 2009, Kyoto, Japan, September 14~16, 2009.
- Ioannis Pitas, Scientific Program Committee, HERCMA2009, 9th Hellenic European Research on Computer Mathematics & its Applications Conference, Athens, 24-26/9/2009
- Li Xu, Member of Technical Program Committee of the 2009 Chinese Control and Decision Conference (CCDC'2009), Guilin, Guangxi, China, June 2009.
- Li Xu, Member of Technical Program Committee of the 2009 APSIPA (Asia-Pacific Signal and Information Processing Association) Annual Summit and Conference (APSIPA ASC 2009), Sapporo, Japan, Oct. 5-7, 2009.
- Oscar Au, General Co-Chair, IEEE Workshop on Emerging Multimedia Circuits and Systems Technologies, July 2009, Cancun, Mexico.
- Oscar Au, Demonstration Co-Chairman, ACM International Conference on Multimedia (ACM Multimedia), Oct. 2009, Beijing, China.
- Oscar Au, Technical Program Committee, 10th Int. Sym on Communications and Information Technologies (ISCIT), Tokyo, Japan.
- Oscar Au, Technical Program Committee, IEEE Int. Sym. On Circuits and Systems (ISCAS), Paris, France.
- Oscar Au, Technical Program Committee, 23rd Canadian Conference on Electrical and Computer Engineering (CCECE), May 2010, Calgary, Alberta, Canada.
- Oscar Au, Technical Program Committee, Int. Conf. on Imaging Theory and Applications (IMAGAPP), May 2010, Angers, France.
- Oscar Au, Technical Program Committee, IEEE Int. Conf. on Acoustics, Speech and Signal Processing (ICASSP), Dallas, Texas, USA.
- Oscar Au, Technical Program Committee, Int. Sym. on Pervasive Systems, Algorithms and Networks (I-SPAN), Dec. 2009, Taiwan, China.
- Oscar Au, Technical Program Committee, Pacific-rim Conf. on Multimedia (PCM 2009), Dec 2009, Bangkok, Thailand.
- Oscar Au, Technical Program Committee, The 2nd International Congress on Image and Signal Processing (CISP'09), Oct. 2009, Tianjin, China.
- Oscar Au, Technical Program Committee, IEEE Int. Conf. on Image Processing (ICIP), Oct 2009, Cairo, Egypt.
- Oscar Au, Technical Program Committee, IEEE Int. Workshop on Multimedia Signal Processing (MMSP), Oct 2009, Rio de Janeiro, Brazil.
- Oscar Au, Technical Program Committee, ACM International Conference on Multimedia (ACM MM), Oct. 2009, Beijing, China.

- Oscar Au, Technical Track Chair, APSIPA Annual Summit and Conference (ASC), Oct. 2009, Sapporo, Japan.
- Oscar Au, Technical Program Committee, IEEE Workshop on Signal Processing Systems 2009 (SiPS), Oct 2009, Tampere, Finland.
- Oscar Au, Technical Program Committee, IASTED International Conference on Signal and Image Processing (SIP), Aug. 2009, Honolulu, Hawaii, USA.
- Oscar Au, Technical Program Committee, Int. Conf. on Signal Processing and Multimedia Application (SIGMAP), July 2009, Barcelona, Spain.
- Oscar Au, Technical Program Committee, IEEE Int. Conf. on Multimedia and Expo (ICME), July 2009, Cancun, Mexico.
- Oscar Au, Technical Program Committee, IEEE Int. Sym. On Circuits and Systems (ISCAS), May 2009, Taiwan, China.
- Oscar Au, Technical Program Committee, IEEE Int. Conf. on Acoustics, Speech and Signal Processing (ICASSP), Apr 2009, Taiwan, China.
- Oscar Au, Technical Program Committee, Conference on 3D Television (3DTV-CON), May 2009, Potsdam, Germany.
- Oscar Au, Technical Program Committee, 25th International Conference on Data Engineering (ICDE), Mar. 2009, Shanghai, China.
- Oscar Au, Technical Program Committee, Int. Conf. on Imaging Theory and Applications (IMAGAPP), Feb. 2009, Lisboa, Portugal.
- Oscar Au, Technical Program Committee, IASTED International Conference on Signal Processing, Pattern Recognition and Applications (SPPRA 2009), Feb 2009, Innsbruck, Austria.
- Oscar Au, Technical Program Committee, Pacific-Rim Symposium on Image and Video Technology (PSIVT), Jan 2009, Tokyo, Japan.
- Oscar Gustaffson, TPC members of PATMOS 2009 and PrimeAsia 2009.
- Ted Kok, Member of Technical Committee of 2009 European Conference on Signal Processing, August 24-28, 2009 Glasgow, Scotland
- Ted Kok, Member of Technical Committee of 2009 IEEE Electron Device and Solid State Circuit Conference, November 25 ~ 27, 2009, Xi An, China
- Ted Kok, Member of Technical Committee of 2009 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference, Oct 4 ~ 7, 2009, Sapporo, Japan
- Ted Kok, Review Committee Member of 2009 IEEE International Conference on Image Processing, November 7 ~ 10, 2010, Cairo, Egypt
- Tokunbo Ogunfunmi served as TPC Chair of International Conference on Adaptive Science and Technology, (ICAST) Dec. 14-16, 2009 Sponsored by IEEE Region 8 Sections.
- W. C. Siu, Forum Co-chair, 2009 APSIPA ASC, 2009 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference, October 5 - 7, 2009, Sapporo Convention Center, Sapporo, Japan.
- W.C. Siu, Chairman, 2009 APSIPA Annual Summit and Conference (APSIPA-ASC'2009), October 4-7, 2009, Sapporo Convention Center, Sapporo, Japan.

- W.C. Siu, Member, International Advisory Committee, Third International Conference on Information, Communications and Signal Processing (ICICS2009) 7-10 October 2009, Macau Fisherman's Wharf, Macau.
- W.C. Siu, Member, Program Committee, 5th International Mobile Multimedia Communications Conference (MobiMedia 2009), 7th-9th September, 2009 London, United Kingdom.
- W.C. Siu, Member, International Technical Program Committee, International Conference on Digital Signal Processing (DSP'2009), 5-7 July, 2009, Santorini, Greece.
- W.C. Siu, Member, Paper Review Committee Member (RCM), IEEE International Symposium Conference on Circuits and Systems (ISCAS'09), 24-7 May 2009, Taipei, Taiwan.
- Wei Xing Zheng, International Program Committee Member of the 2009 IEEE International Conference on Networking, Sensing and Control (ICNSC'2009), Okayama City, Japan, March 2009.
- Wei Xing Zheng, Member of Technical Program Committee of the 2009 Chinese Control and Decision Conference (CCDC'2009), Guilin, Guangxi, China, June 2009.
- Wei Xing Zheng, Asia/Pacific Liaison of the 2009 IEEE/INFORMS International Conference on Service Operations, Logistics and Informatics (SOLI'2009), Chicago, Illinois, USA, July 2009.
- Wei Xing Zheng, Member of International Program Committee of the 15th IFAC Symposium on System Identification (SYSID'2009), Saint-Malo, France, July 2009.
- Wei Xing Zheng, Publicity Co-Chair of the 2009 IEEE International Conference on Automation and Logistics (ICAL'2009), Shenyang, China, August 2009.
- Wei Xing Zheng, Member of International Program Committee of the 7th Asian Control Conference (ASCC'2009), Hong Kong, August 2009.
- Wei Xing Zheng, Invited Sessions Co-Chair of the 7th International Conference on Control and Automation (ICCA'2009), Christchurch, New Zealand, December 2009.
- Wei Xing Zheng, Member of Program Committee of the 48th IEEE Conference on Decision and Control (CDC'2009), Shanghai, China, December 2009
- Yong Lian, Member of International Organizing Committee of the 4th International Symposium on Biomedical Engineering (ISBME'2009), December 14 -18, 2009, Bangkok, Thailand.
- Yong Lian, General Co-Chair of the 2009 IEEE Biomedical Circuits and Systems Conference (BioCAS'2009), November 26-28, 2009, Beijing, China.
- Yong Lian, Founder and served as the General Chair of the 2009 Asia Pacific Conference on Postgraduate Research in Microelectronics & Electronics (PrimeAsia'2009), November 19-21, 2009, Shanghai, China.
- Yong Lian, Technical Program Committee Member of the IEEE 8th International Conference on ASIC (ASICON'2009), October 20-23, Changsha, China

- Yong Lian, Track Chair of the 2009 European Conference on Circuit Theory and Design(ECCTD'2009), August 23 – 27, 2009, Antalya, Turkey.
- Tapio Saramäki together with Lars Wanhammar, organizers of the special session entitled “Recent Advances in Designing and Implementing Computationally-Efficient Digital Filters and Filter Banks,”6th International Symposium on Image and Signal Processing and Analysis (ISPA 2009), September 16 - 18, 2009, Salzburg, Austria

3 DSP TC members involved on going Conferences or Workshops

3.1 TC members involved in the 2010 IEEE International Symposium on Circuits and Systems (ISCAS 2010), May 2010, Paris, France:

- **DSP Track Co-Chairs:** Prof. Behrouz Nowrouzian, Prof. Yong Lian, and Shoji Makion.
- **Review Committee Members of DSP Track:** Profs. Chien-Cheng Tseng, David Tay, Gwee Bah Hwee, HK Kwan, Kai-Kuang Ma, Masayuki Kawamata, Moncef Gabbouj, Oscar Gustafsson, Ravi Prakash Ramachandran, Soontorn Oraintara, Tapio Saramäki, Ted Kok, Tokunbo Ogunfunmi, Yajun Yu, Yong Ching Lim, Yoshikazu Miyanaaga, Wei Xing Zheng, Xinping Huang, Zhiping Lin,
- **Technical Session Chairs:**
 - FIR Digital Filters: Paulo Diniz and Yong Ching Lim
 - DSP and Its Implementation: Oscar Gustafsson and David Tay
 - Digital Filter Design: HK Kwan and Yajun Yu
 - M-Dimensional Digital Signal Processing: Masayuki Kawamata and Zhiping Lin
 - Discrete Transforms and Wavelets: Rabinder N. Madan and M. Omair Ahmad
 - Detection & Estimation: Behrouz Nowrouzian and Wei Xing Zheng
 - Multirate & Array Signal Processing: Tapio Saramäki and P.P. Vaidyanathan
 - Biomedical Signal Processing: Wu-Sheng Lu and Yajun Yu
 - Digital Audio & Speech Processing: Gwee Bah Hwee and Mrityunjoy Chakraborty
 - Blind Signal Processing: Shoji Makino and Aurelio Uncini
 - DSP for Communications: Moncef Gabbouj and
 - Digital Video I: M. Omair Ahmad
 - Digital Video II: M.N.S. Swamy and Sergios Theodoridis
 - Digital Audio: Tapio Saramäki and Wan-Chi Siu
 - Digital Signal Processing Implementation: Mrityunjoy Chakraborty and David Tay
 - Digital Filters: M. Omair Ahmad and Oscar Gustafsson
 - Digital Signal Processing for Communications I: Yoshikazu Miyanaaga and M.N.S. Swamy
 - Digital Signal Processing for Communications II: Xinping Huang and Behrouz Nowrouzian

- Adaptive Signal Processing: Paulo Diniz and Wu-Sheng Lu
- Digital Image & Video Processing I: Yoshikazu Miyanaga and Tokunbo Ogunfunmi
- Digital Image & Video Processing II: Wan-Chi Siu and Sergios Theodoridis
- Statistical & Nonlinear Signal Processing: Wei Xing Zheng and Xinping Huang

- **Special Session organized by TC member**
 - Ravi Prakash Ramachandran, Pattern Recognition in Speech Processing

 - Thanos Stouraitis, International Liaison

- **Other on going conferences**
 - Dominic K. Ho, CAMSAP2011 (IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing 2011, San Juan, Puerto Rico)
 - Gwee Bah Hwee, Technical Program Chair of International Symposium of Integrated Circuits 2010, Dec 2010, Singapore
 - H. K. Kwan, Co-chair, Technical Program Committee, Signal Processing Symposium, International Conference on Communications, Circuits and Systems (ICCCAS), Chengdu, China, July 28-30, 2010.
 - H. K. Kwan, Program Committee Member, Fuzzy Neural Networks Track & Bioinformatics Track, Seventh International Symposium on Neural Networks (ISNN), Shanghai, China, June 6-9, 2010.
 - H. K. Kwan and Andreas Antoniou, Co-chairs, Digital Filter Design (Oral session), International Symposium on Circuits and Systems (ISCAS), Paris, France, May 30-June 2, 2010.
 - Håkan Johansson, Technical Program Committee Member of IEEE Global Communications Conference, Globecom 2010, Miami, Florida, USA (Signal Processing for Communications Track)
 - Håkan Johansson, Technical Program Committee Member of IEEE International Conference on Communications, ICC2011, Kyoto, Japan, (Signal Processing for Communications Track)
 - Håkan Johansson, Technical Program Committee Member 10th International Symposium on Communications and Information Technologies, ISCIT 2010, Tokyo, Japan
 - Ioannis Pitas, Technical Program Committee, 2010 International Joint Conference on Neural Networks (IJCNN 2010), Barcelona, Spain, 18-23/7/2010
 - Ioannis Pitas, Program Committee, 3rd IEEE Workshop on CVPR for Human Communicative Behaviour Analysis, 18/6/2010, San Francisco, USA.
 - Ioannis Pitas, Technical Program Committee, Workshop on Pattern Analysis and Recognition (PAR2010, part of the International Conference on High Performance Computing & Simulation HPCS 2010), Caen, France, 28/6-2/7/2010
 - Ioannis Pitas, Technical Program Committee, 20th International Conference on Pattern Recognition (ICPR 2010), Istanbul, 23-26/8/2009

- 2010 Technical Program Committee, BEST Biometrics conference (BIOSIG 2010), Darmstadt, 9-10/9/2010
- Ioannis Pitas, Technical Program Committee, 1st Int. Workshop on Human Behaviour Understanding (co-organized with ICPR2010), Istanbul, Turkey, August 2010
 - Ioannis Pitas, Program Committee, IEEE Workshop on Machine Learning for Signal Processing (MLSP), Kittila, Finland, 2010.
 - Li Xu, Member of Technical Program Committee of the 2010 Chinese Control and Decision Conference (CCDC'2010), Xuzhou, Henan, China, May 2010.
 - Li Xu, Member of Technical Program Committee of the 10th International Symposium on Communications and Information Technologies (ISCIT 2010), Tokyo, Japan, Oct. 25-29, 2010.
 - Li Xu, Member of Technical Program Committee of the 2010 APSIPA Annual Summit and Conference (APSIPA ASC 2010), Singapore, Dec. 14-17, 2010.
 - Oscar Au, General Co-Chair, Int. Packet Video Workshop (PV 2010), 13-14 Dec. 2010, Hong Kong, China.
 - Oscar Au, General Co-Chair, IEEE Int. Conf. on Multimedia and Expo (ICME), 19-23 July 2010, Singapore.
 - Oscar Au, Special Session Chair, IEEE Int. Conf. on Image Processing (ICIP), 12-15 Sept. 2010, Hong Kong, China.
 - Oscar Gustafsson, TPC co-chair of PrimeAsia 2010, Shanghai, China, Sept 22-24, 2010.
 - Oscar Au, Technical Program Committee, IEEE Global Communication Conf. (GLOBECOM). Miami, Florida, USA.
 - Oscar Au, Technical Program Committee, APSIPA Annual Summit and Conference (ASC), Singapore.
 - Oscar Au, Technical Program Committee, IEEE Int. Workshop on Multimedia Signal Processing (MMSP), Oct. 2010, Saint-Malo, France.
 - Oscar Au, Technical Program Committee, 10th Int. Sym on Communications and Information Technologies (ISCIT), Tokyo, Japan.
 - Oscar Au, Technical Program Committee, Asia Pacific Conf. on Postgraduate Research in Microelectronics and Electronics (PrimeAsia), Sept. 2010, Shanghai, China.
 - Oscar Au, Technical Program Committee, 11th Pacific-rim Conf. on Multimedia (PCM), Shanghai, China.
 - Oscar Au, Track Chair/Technical Program Committee, IEEE Int. Conf. on Image Processing (ICIP), Sept. 2010, Hong Kong.
 - Oscar Au, Technical Program Committee, SPIE Conf. on Visual Communications and Image Processing (VCIP), July 2010, Huang Shan, China.
 - Oscar Au, Technical Program Committee, Int. Conf. on Signal Processing and Multimedia Application (SIGMAP), July 2010, Athens, Greece.
 - Oscar Au, Technical Program Committee, IEEE Int. Conf. on Multimedia and Expo (ICME), Singapore.
 - Oscar Au, Technical Program Committee, 3DTV Conference (3DTV-CON), Jun 2010, Tampere, Finland.
 - Oscar Gustafsson, Financial Chair of ECCTD 2011.

- Oscar Gustafsson, Track chair of CrownCom 2010, Eusipco 2010
- Oscar Gustafsson, TPC members of PATMOS 2010, ICGCS 2010.
- Takao Hinamoto, International Technical Program Committee of 2010 10th IEEE International Conference on Signal Processing (ICSP'10) , October 24-28,2010, Beijing, China.
- Ted Kok, Member of Technical Committee of 2010 European Conference on Signal Processing, August 23 ~ 27, 2010, Aalborg, Denmark.
- Ted Kok, Review Committee Member of 2010 IEEE International Conference on Image Processing, Sept. 26 ~ 29, 2010, Hong Kong.
- Ted Kok, Review Committee Member of 2010 IEEE 23rd Canadian Conference on Electrical and Computer Engineering, May 2 ~ 5, 2010, Calgary, Alberta, Canada
- Ted Kok, Member of Technical Committee and Local Arrangement Chair of 2010 IEEE Electron Device and Solid State Circuit Conference, December 15 ~ 17, 2010, Hong Kong
- Thanos Stouraitis, Member, Steering Committee for ICECS (Int. Conference on Electronics, Circuits and Systems)
- Thanos Stouraitis, General Chair, IEEE ICECS (Int. Conference on Electronics, Circuits and Systems), 2010, Athens, Greece
- W.C. Siu, General Chair, (ICIP'2010), IEEE International Conference on Image Processing, IEEE Hong Kong Centre, HK Convention and Exhibition Centre, September 2010, Hong Kong.
- W.C. Siu, Honorary Chair, PCM'2010, Pacific-Rim Conference on Multimedia, 21-24 September 2010, Shanghai China.
- W.C. Siu, Member, Technical Program Committee (TPC), sub-track: Image, video, and multimedia signal processing, APSIPA Annual Summit and Conference 2010, 14-17 December 2010, Singapore.
- W.C. Siu, Member, Technical Committee, 10th International Symposium on Communications and Information Technologies (ISCIT 2010), 26-29 October 2010, Meiji University, Tokyo Japan
- W.C. Siu, Member, Technical Committee, 18th European Signal Processing Conference (EUSIPCO'2010), 23-27 August, 2010, Aalborg Denmark.
- W.C. Siu, Member, International Technical Program Committee, International Conference on Signal Processing (ICSP'2010), 24-28 October, 2010, Beijing, China
- W.C. Siu, Member, Technical Program Committee, Visual Communications and Image Processing 2010 (VCIP 2010) on July 11-14, 2010, Huang Shan, China.
- Wei Xing Zheng, International Program Committee Member of the 2010 IEEE International Conference on Networking, Sensing and Control (ICNSC'2010), Chicago, Illinois, USA, April 2010.

- Wei Xing Zheng, Co-Chair of the 2010 World Congress on Intelligent Control and Automation (WCICA'2010), Jinan, China, July 2010.
- Wei Xing Zheng serves as an International Program Committee Member of the 2010 International Conference on Intelligent Control and Information Processing (ICICIP 2010), Dalian, China, August 2010.
- Wei Xing Zheng serves as an International Program Committee Member of the 2010 IEEE International Conference on Automation and Logistics (ICAL'2010), Hong Kong, August 2010.
- Wei Xing Zheng, International Program Committee Member of the 2010 IEEE International Symposium on Intelligent Control (ISIC'2010), Pacifico Yokohoma, Japan, September 2010.
- Wei Xing Zheng, Technical Program Committee Member of the 2010 International Symposium on Communications and Information Technologies (ISCIT'2010), Tokyo, Japan, October 2010.
- Wei Xing Zheng, Program Committee Member of the 49th IEEE Conference on Decision and Control (CDC'2010), Atlanta, USA, December 2010.
- Yong Ching Lim, General Co-Chair, the First International Conference on Green Circuits and Systems, June 21-23, Shanghai, China.
- Yong Lian, Founder and TPC Co-Chair of the first International Conference on Green Circuits and Systems (ICGCS 2010) in Shanghai, China from June 21-23, 2010.
- Yong Lian, General Chair of the second Asia Pacific Conference on Postgraduate Research in Microelectronics and Electronics (PrimeAsia 2010) in Shanghai, China from Sept. 22-24, 2010.
- Yong Lian, Technical Program Committee Member of the 2010 International Conference on Solid-State and Integrated Circuit Technology, Nov. 2010, Shanghai, China.
- Yong Lian, International Advisory Committee Member of the 2010 IEEE International Conference on Ultra-Wideband(ICUWB'2010), September 20-23, 2010, Nanjing, China.
- Yong Lian, Technical Program Committee Member of the 36th European Solid-State Circuits Conference ESSCIRC'2010, September 13-18, 2010, Seville, Spain.
- Yong Lian, Plenary Session Chair of the International Conference on Body Sensor Networks(BSN'2010), June, 2010, Singapore.
- Yoshikazu Miyanaga, TPC Chair, 2010 International Workshop on Information Communication Technology (ICT 2010), August 24 - 25, 2010, Bangkok, Thailand
- Yoshikazu Miyanaga, General Vice-Chair, 2010 International Symposium on Multimedia and Communication Technology (ISMAC 2010), September 8 - 9, 2010, Diamond Hotel, Manila, Philippines.
- Tapio Saramäki, Steering Committee Member of the International Symposium on Image and Signal Processing and Analysis (ISPA)
- Tapio Saramäki, Publicity Chair, International Conference on Green Circuits and Systems (ICGCS 2010), June 21 - 23, 2010, Shanghai, China

- Tapio Saramäki, Technical Program Co-Chair, European Conference on Circuit Theory and Design 2001 (ECCTD 2011), August 29 - 31, 2011, Linköping, Sweden

4 Books and Book Chapters:

- Chi-Wah Kok, *Precoder-Equalizer Systems in Communications*, Prentice-Hall, 2008.
- H. Li and B.H. Gwee, *Digital Pulse Width Modulator*, ISBN 978-3-639-17876-0, VDM Publishing House Ltd. 2009
- B.H. Gwee and K.S. Chong, "Low Power Asynchronous Circuit Design - An FFT/IFFT Processor," in *CMOS Nanoelectronics*, kris iniewski (Ed.), 2010.
- *Principles of Speech Coding*, by Tokunbo Ogunfunmi and M.J.Narasimha, Taylor and Francis (CRC) Publishers 2010.

5 Short Courses:

- Oscar Gustafsson, Low power LDPC decoding, Beijing Institute of Technology, China, 2009 and Southwest Jiaotong University, Chengdu, China, 2009.

6 Plenary Sessions, Keynote Speakers, Invited Lectures:

- Gwee Bah Hwee, Invited DL Talk to Beijing University of Post and Telecommunications, Beijing, China
- Gwee Bah Hwee, Invited DL Talk to Carleton University, Ottawa, Canada
- Gwee Bah Hwee, Invited DL Talk to Concordia University, Montreal, Canada
- Gwee Bah Hwee, Invited DL Talk to University Putra Malaysia, Kuala Lumpur, Malaysia
- Ioannis Pitas, Invited lecture on Biometric technologies in the RISE workshop 'Biometric data: recent advances and practice', Thessaloniki 10/12/2009
- Paulo S R Diniz, *New Block-Based Transceivers with Minimum Redundancy*, Munich University of Technology, Munich, Germany, June 4th, 2009.
- Paulo S R Diniz, Plenary Talk, First Latin American Symposium on Circuits and Systems (LASCAS-2011)
- Oscar Au, An invited tutorial for Macao Telecommunication Department on "Introduction to 3G Video Streaming Technologies", Macao, China, Jan 2010.
- Oscar Au, An invite seminar for high school teachers on "State-of-the-Art Multimedia Technologies and their Applications", Foshan, Guangdong, China, Apr. 2009.
- Oscar Au, An invite seminar for high school students on "The Wonderful World of Multimedia", HKUST, Jan 2009.

- Oscar Gustafsson, invited talk, Low power and low complexity fixed and flexible DSP, EEDSP Workshop on Biomedical Signal Processing and Electronics, Cork, Ireland, 2009.
- Oscar Gustafsson, invited talk, Reducing complexity of linear transforms for error control coding, Beijing Institute of Technology, China, 2009, Beijing University of Posts and Telecommunications, China, 2009,
- Oscar Gustafsson, invited talk, Multiplication without multipliers - algorithms and applications, University of Westminster, London, United Kingdom, 2009, Imperial College, London, United Kingdom, 2009, National University of Singapore, Singapore, 2009, Nanyang Technological University, Singapore, 2009.
- Ted Kok gave a tutorial in the 2009 IEEE International Symposium on Circuits and Systems, May 2009, Taipei, Taiwan
- Ted Kok gave an invited lecture at the Seoul National University on Precoder-Equalizer Systems in Communications on April 2009 for IEEE Seoul Chapter
- Ted Kok gave an invited lecture at the Tokyo Metropolitan University on Precoder-Equalizer Systems in Communications on Feb 2010 for IEEE CAS Japan Chapter
- W.C. Siu, Keynote Speaker, 2010 Second International Conference on MultiMedia and Information Technology (MMIT 2010), 24-25 April, 2010, Kaifeng, China.
- W.C. Siu, Keynote Speaker, 2009 International Joint Conference on Artificial Intelligence (IJCAI'2009), 25-26 April, 2009, Haikou, China.
- W.C. Siu, Invited Speaker, "New Trend and Challenges in 3D Video Coding", Electronics Fairs of 2010 seminar, 14 April, 2010, Hong Kong Convention and Exhibition Centre, Wan-Chai, Hong Kong.
- W.C. Siu, Invited Speaker, "New Challenges on Video Coding, Super-Resolution Videos and 3-D HDTV", Northeastern University, 29 March, 2010, Shenyang, China.
- W.C. Siu, Invited Speaker, Huawei Annual Meeting on Multimedia Expert Forum, 27-28 November, 2009, Huawei Headquarters, Shenzhen.
- W.C. Siu, Huawei Tech Forum: Topic presented, "Highlight of Some Key Video Technologies for Next Generation Multimedia Applications".
- W.C. Siu, Expert Group Presentation: Topic presented, "Topic presented, "New Challenges from Video Coding to Super-Resolution Videos and 3D HDTV".
- W.C. Siu, Invited Speaker, ASTRI Tech Forum on "Emerging Technologies and Trends in Video Processing", 26 November 2009, Hong Kong. (Topic presented: New Challenges from Video Coding to Super-Resolution Videos.)
- W.C. Siu, Invited Speaker, 'Engineering Education for IT professionals in Hong Kong', HKIE IT Division Annual Conference, HKIE, 24 April 2009, Hong Kong.
- Yoshikazu Miyanaga, invited talk at 2009 International Symposium on Multimedia and Communication Technology (ISMAC 2009), on January 22-23,

2009, in Bangkok, Thailand, titled “Evaluation on Noise Robust Automatic Continuous Speech Recognition using Running Spectrum Analysis”.

- Yoshikazu Miyanaga, plenary invited talk at National Telecommunications Commission (NTC) Symposium on NGN (Next Generation Network) Technology and Applications, on October 12-13, 2009, in Bangkok, Thailand, titled “Next Generation Network – WiMAX, Cognitive Net and Ultra High Speed Wireless”.

7 Editorial Services:

- David Tay served as an Associate Editor for International Journal of Multidimensional Systems and Signal Processing, Kluwer Academic Press.
- Dominic K. Ho, Associate Editor, IEEE Transactions on Signal Processing
- Gwee Bah Hwee, Associate Editor for IEEE Transactions on Circuits and Systems II - Express Briefs
- Gwee Bah Hwee, Associate Editor for Journal of Circuits, Systems and Signal Processing
- H. K. Kwan, Overseas Member, Editorial Committee, Chinese Journal of Scientific Instrument, 1/2007-1/2010.
- H. K. Kwan, Editorial Board Member, International Journal of Imaging Science and Engineering, since 1/2007.
- Håkan Johansson, Associate Editor of IEEE Trans. Circuits and Systems-I
- Li Xu serves as an Associate Editor for the Journal of Multidimensional Systems and Signal Processing.
- Oscar Au, Associate Editor, IEEE Trans. On Circuits & Systems for Video Technology (TCSVT).
- Oscar Au, Associate Editor, IEEE Trans. On Image Processing (TIP)
- Oscar Au, Member of Editorial Board, Journal of Multimedia (JMM)
- Oscar Au, Member of Editorial Board, Journal of Franklin Institute (JFI)
- Oscar Au, Member of Editorial Board, Journal of Signal Processing Systems (JSPS)
- Oscar Gustafsson, Associate Editor for TCAS-II, 2010
- Ravi Prakash Ramachandran, Member of Editorial Board, IEEE Circuits and Systems Magazine
- Ravi Prakash Ramachandran, Member of Editorial Board, Pattern Recognition
- Ravi Prakash Ramachandran, Member of Editorial Board, International Journal of Computer Networks
- Thanos Stouraitis, Regional Editor - Europe, Journal of Circuits, Systems, and Computers
- W.C. Siu, Associate Editor, Journal of Signal Processing Systems for Signal, Image and Video Technology, Since January 1996, Kluwer Academic Publisher.
- Wei Xing Zheng, Associate Editor, IEEE Signal Processing Letters.

- Wei Xing Zheng, Associate Editor, IEEE Transactions on Circuits and Systems-II.
- Wei Xing Zheng serves as a Guest Associate Editor of Special Issue on Blind Signal Processing and Its Applications, IEEE Transactions on Circuits and Systems-I.
- Yong Lian is the Editor-in-Chief of the IEEE Transactions on Circuits and Systems Part II: Express Briefs.
- Yong Lian is the Associate Editor of the IEEE Transactions on Biomedical Circuits and Systems
- Yong Lian was the Associate Editor of the IEEE Transactions on Circuits and Systems Part I: Regular Papers.
- Yong Lian was the Guest Editor for the journal of Circuits Systems and Signal Processing, Special Issue on Low Power Digital Filter Design Techniques and Their Applications, published in Jan. 2010.
- Yoshikazu Miyanaga, Associate Editor for Journal of Signal Processing, Japan
- Zhiping Lin serves as a Co-Editor for the Journal of Multidimensional Systems and Signal Processing.
- Zhiping Lin serves as an Associate Editor for IEEE Transaction on Circuits and Systems Part II.

8 IEEE Services:

- Gwee Bah Hwee, IEEE CAS Singapore Chapter - Deputy Chair 2010
- Gwee Bah Hwee, IEEE CASS Distinguished Lecturer 2009-2010
- Dominic K. Ho, TC Member, Sensor Array and Multichannel Technical Committee, IEEE Signal Processing Society
- Li Xu, Member of the IEEE Sendai Section Executive Committee (2008-2011) .
- Oscar Au, IEEE CAS Distinguished Lecturer, 2009.
- Oscar Au, Past Chairman, IEEE CAS TC on Multimedia Systems and Applications (MSATC)
- Oscar Au, Member, IEEE CAS TC on Visual Signal Processing and Communications (VSPC)
- Oscar Au, Member, IEEE SP TC on Multimedia Signal Processing (MMSP)
- Oscar Au, Member, IEEE SP TC on Image, Video and Multi-dimensional Signal Processing (IVMSP).
- Oscar Au, Member, IEEE COM TC on Multimedia Communications (MMTC).
- Oscar Au, Board of Governor, APSIPA (Asia Pacific Signal and Information Processing Association)
- Oscar Au, Member, SMPTE (Society of Motion Picture and Television Engineers)
- Oscar Au, Member, AES (Audio Engineering Society)
- Oscar Gustafsson, Treasurer IEEE Solid-State Circuits Society Sweden Chapter.
- Paul S R Diniz, IEEE Education Award Committee
- Takao Hinamoto, Steering Committee Member of the IEEE Midwest Symposium on Circuits and Systems (MWSCAS)

- Thanos Stouraitis, IEEE CAS Society VP-Conferences.
- Thanos Stouraitis, Member of the IEEE CASS Long Term Strategy Committee
- Thanos Stouraitis, Chair, IEEE Signal Processing Chapter, Greece
- Tokunbo Ogunfunmi was elected as the 2010 Chair of the IEEE Santa Clara Valley Section PACE committee. Previously, he served as Chair of Signal Processing Society (SPS), Santa Clara Valley Chapter from May 2007 - Dec. 2009.
- Wei Xing Zheng, Web Administrator of Technical Committee on Digital Signal Processing, IEEE Circuits and Systems Society.
- Wei Xing Zheng serves as the Past Chair (2009-2010) of Technical Committee on Neural Systems and Applications, IEEE Circuits and Systems Society.
- Wei Xing Zheng serves on the International Steering Committee of the IEEE Asia Pacific Conference on Circuits and Systems (APCCAS).
- Yong Lian is a member of the IEEE Medal for Innovations in Healthcare Technology Committee.
- Yong Lian is a member of the Steering Committee of the IEEE Transactions on Biomedical Circuits and Systems
- Yong Lian is a Panel Judge for Best Student Paper Awards in the 2010 IEEE International Symposium on Circuits and Systems
- Yong Lian is a member of the Best Paper Selection Committee of the IEEE CAS Society.
- Yong Lian is a member of the Fellow Evaluation Committee of the IEEE CAS Society.
- Yong Lian serves as the Secretary of Past Chair of the Biomedical Circuits and Systems Technical Committee of the IEEE CAS Society.
- Yoshikazu Miyana served as Distinguished Lecturer Program (DLP) speaker in IEEE CAS Society (2010-2011).

9 DSP TC Technically Co-Sponsored Conferences/Symposia/Workshops:

- 2009 International Symposium on Communications and Information Technologies (*ISCIT 2009*), September 28- 30, 2009, Incheon, Korea.
- 2009 International Symposium on Intelligent Signal Processing and Communication Systems (*ISPACS 2009*), December 7-9, 2009, Kanazawa, Japan.
- 2010 International Conference on Green Circuits and Systems (*ICGCS 2010*), June 21-23, 2010, Shanghai, China

10 Other Activities:

- Ted Kok serves on the Review Committee of the Hong Kong Applied Science and Technology Research Institute, Hong Kong

11 Some News from the TC Members are listed below:

- Sankar Basu was elected Fellow of the American Association for the Advancement of Science (AAAS) in 2009.
Citation: "contributions to fundamental techniques in circuits and systems theory and their applications in computational science and engineering including processing of multi-dimensional and statistical data".
The 2009 fellow awards were handed to the recipients at the annual meeting of the AAAS in February 2010 in San Diego, CA by the AAAS president Peter Agre (Nobel Laureate in Chemistry 2003).
- Ioannis Pitas, Best cited scientist of the Aristotle University of Thessaloniki
- Oscar Au, Our L-slice algorithm was accepted into AVS-X standard in China in 2009.
- Oscar Au, 3 technical contributions to MPEG international standard in 2009.
- Oscar Au, 4 technical contributions to China AVS standard.
- Oscar Gustafsson, Elevated to Senior Member of IEEE
- Takao Hinamoto was a recipient of the 2009 Outstanding Achievements Award from IEEE Hiroshima Section on January 25, 2009.
- Ted Kok was a co-recipient of a Best Paper Award from the International Electron Devices and Materials Symposia, 2009, Taiwan.
- A paper co-authored by Ted Kok was the most downloaded paper from EURASIP open library in November 2009.
- Yong Lian's Ph.D student, Liew Wen Sin, is the winner of of 47th DAC/ISSCC Student Design Contest with US\$2000 cash for the paper "A 0.8-V 32-fJ/Conversion-Step Dual-Capacitive-Array Successive Approximation Analog-to-Digital Converter".
- Yong Lian's final year student, Ho Bing Kun, is the First Place Winner with \$300 cash in 2009 IEEE Region 10 Undergraduate Student Paper Contest for the paper "Low Power Design of a 16-Band Non-Uniform Filter Bank for Hearing Aid Application".
- Yong Lian's Ph.D student, Xiaodan Zou, received the 2009 IEEE Circuits and Systems Singapore Chapter Graduate Student Award with a cash prize of S\$200.
- Yong Lian's students, Mahmood Khayatzadeh(Ph.D), Chang Xiaifei(M.Eng), and Li Yongfu(final year), are the winning team in the 2009 Rohde & Schwarz 2nd Engineering Case Study Competition with fully paid trip to Munich.
- Yong Lian's Ph.D student, Deepu Chacko John, is the Finalists with US\$1500 and Kiatnakin Bank 99-Second Pitch Winner with US\$750 in 2009 The mai Bangkok Business Challenge@Sasin.
- Yong Lian's work on wearable wireless mini ECG device was reported by the Singapore News Paper, The Straits Times, on Oct. 22, 2009.