



Wieslaw Woszczyk Ph.D. CV Brief

Wieslaw Woszczyk is an internationally recognized audio researcher and educator with leading expertise in emerging technology trends in audio. He holds the James McGill Professor Research Chair position and a full professorship at McGill University, and is the founding director of the Graduate Program in Sound Recording (1978), co-founder of McGill Records (with Paul Pedersen and Donald Steven), and founding director of the CIRMMT Centre for Interdisciplinary Research in Music Media and Technology, an inter-university, inter-faculty, interdisciplinary research centre established at McGill University in Montreal, Canada, in 2001.

He was the Director of the Graduate Program in Sound Recording during 1978-1998, Chair of the Department of Theory (1998-2001), Director of CIRMMT Centre (2001-2004), and is currently Director of McGill Recording Studios and of the Laboratory of Virtual Acoustics Technology at the Schulich School of Music of McGill University. He has contributed to the concept, design and realization of the New Music Building containing one of the world's most advanced music recording and research facilities.

Woszczyk is a Fellow of the Audio Engineering Society (1996) and the former Chair of its Technical Council (1996-2006), which provides technical guidance for the Society's 14,000 international members. He served as Governor (twice, in 1991-1993 and 2008-2010) and President (2006-2007), and as Member of the Technical Review Board of the Journal of Audio Engineering Society.

He was the first Visiting Professor at Bang & Olufsen A/S, Research and Development Department, in Denmark (1994), *Holst Fellow* at Philips Research Laboratories (Acoustic and Signal Processing Group) in Eindhoven (2005), *Visiting Scholar* at Stanford University's Center for Computer Research in Music and Acoustics (2006 and 2013), and the first *Visiting Researcher* at NHK Science and Technology Research Laboratories in Tokyo (Acoustics and Audio Signal Processing Division) in 2006. In 2014, Woszczyk was Guest Professor and Theodore von Kármán Fellow in the Exploratory Research Space program at The Institute of Technical Acoustics of RWTH Aachen University in Germany. He was also an invited speaker at The Onassis Graduate Seminar Series on music, acoustics, and ritual at Stanford University 2013-2014 in "Aural Architecture", and was the keynote speaker at the 136th Convention of the Audio Engineering Society in Berlin in May 2014.

His research is centered on multisensory communication of music, implementation of virtual acoustics in three-dimensional multichannel audio environments with height, design of music recording and reproduction tools and techniques, development and measurement of transducers,

evaluation of high-resolution audio, and measurement of cross-modal perceptual interactions. His current work centers on development of Space Builder, Virtual Acoustics Technology, and Open Orchestra systems.

His individual and collaborative research has been supported by grants from government agencies including Canada Foundation for Innovation, Valorisation-Recherche-Québec, Natural Sciences and Engineering Research Council, Social Sciences and Humanities Research Council, CANARIE, and FQRSC, and from the industry (Pioneer Electronic Corporation, Japan; Bang&Olufsen A/S Denmark; TC Electronic, Denmark; Bruel&Kjaer, Denmark; Dolby Laboratories, USA; Yamaha Corp., Japan; Philips Research, The Netherlands; NHK Science and Technology Research Laboratories, Japan; Cisco Systems, Canada).

During 2002-2006 he lead a \$2.2mln research project on real-time communication of high-resolution multisensory content using broadband networks. As a principal investigator he brought together a team of international researchers awarded \$6.5 million by the Canadian Foundation for Innovation. He has been a member of the McGill's Ultra-Videoconferencing Research Group (with Jeremy Cooperstock and John Roston), which won Team Award for *"The Most Innovative Use of a New Technology"* at SC05 SuperComputing 2005 Conference in Seattle, USA (November 2005). With a group of collaborators, he received from the Audio Engineering Society a Citation Award (2001) for pioneering the technology enabling collaborative delivery of high-resolution multichannel music using next generation Internet.

As a recording producer and/or engineer he worked on over 50 Compact Discs and LP records (with such artists as Philip Glass, Brian Eno, Maureen Forrester, and Harry Belafonte). His recordings have won several prizes, including Canada's Grand Prix du Disque. He also worked in the late 1970's as Sound Director for Harry Belafonte Enterprises "World Tour", and as Chief Engineer at The Big Apple Recording Studios in New York. He later developed Acoustic Pressure Equalizers (APE) microphone attachments employing acoustic diffraction to modify microphone response, manufactured by several microphone companies and nominated for the Technical Excellence and Creativity Award (Mix Magazine, USA 1993). In 2009, he co-produced (with Tom Beghin and Martha De Francisco) 'The Virtual Haydn', a highly acclaimed music Blu-ray disc set released by Naxos International label presenting historically authentic instruments and performances in the virtual acoustics of Haydn era rooms, which received a Juno Award nomination in 2010. The set of 13 CD's with a DVD was released by Naxos in late 2011.

Woszczyk authored over 100 publications including book chapters he co-authored with Dr. Albert Bregman, edited conference proceedings, and chaired the 9th International Conference of the Audio Engineering Society in Detroit (1991). He was Papers Program Chair at AES Conventions, and member of scientific review and organizing committees at numerous international conferences and workshops, and a reviewer of books submitted for publication.

He was invited to serve as member of doctoral examination committees, external reviewer of PhD dissertations, professorial and deanship posts in Canada, Germany, Norway, Denmark, Hong Kong, The Netherlands, Sweden, and the United Kingdom.

For over 15 years he has served as Visiting Faculty member at New York University. He also served as specialist consultant for the Government of Ontario, Ministry of Education, *Postsecondary Education Quality Assessment Board*; Expert Assessor for The Research Council of Norway, Division of Science, The Norwegian CoE-scheme, and for the Ministry of Education of the Government of Alberta.

Woszczyk trained over 120 Masters and Ph.D. students many of whom hold important academic and industrial positions and win prestigious artistic awards in recorded music.