Short Biographical Note

Wilman Tsai is currently Senior Program Manager of Technology Manufacturing Group, Intel Corporation, Santa Clara, CA. He manages Strategic Research Group at Intel, focused in the front end device science, and is responsible for research programs in advanced logics and memory devices for 22 nm node and beyond; include universities, SRC/MARCO and industrial consortia of Sematech and IMEC.

He chairs the Emerging Research Device forum in Intel's Semiconductor Technology Committee (STC) where he manages over 40 university research programs in charged-based scaling of CMOS logic and memory devices with an annual research budget of 3M$. His device research team at Intel is currently focused on emerging research logic device using non-Si channels as Ge and InGaAs, high k dielectrics, exploratory memory devices such as phase change materials and tunnel barrier technology.

Dr. Tsai serves on senior advisory committee of SRC, Sematech and IMEC research consortia. Prior to assuming his current responsibilities, Dr. Tsai is responsible for Intel front end programs at Sematech and IMEC from 2000-2003, focus on device research on metal-gated high k dielectrics, addressing 45 nm node technologies. He is also responsible for developing novel plasma etch processes for enchancing poly gate CD control, and alternating phase shift mask technology for Intel's advanced mask engineering group in Santa Clara.
He obtained his PhD in Chemical Engineering from California Institute of Technology in 1987. Prior to joining Intel in 1997, Dr Tsai hold various engineering development and research positions in the semiconductor industries for over 10 years in the areas of thin film metallization, plasma etch and photolithography.
He is currently a visiting faculty at Stanford University Center of Integrated Systems, and senior member of IEEE, Material Research Society and Electrochemical Society. He holds 6 US Patents and over 80 journal/conference publications, his e-mail address is wilman.tsai@intel.com