

MSE-Colloquium@NTU

18 November 2022, 2:00 pm
Lecture Theatre 3 ([NS4-02-32](#))



Beyond CMOS Scaling: Semiconductor Materials and Applications

Dr Siah Soh Yun

VP Technology Development, GlobalFoundries.

Abstract

Semiconductors are pervasive in every aspect of our lives. The industry has proliferated into a rich collection of electronic devices and systems surrounding us. The innovation in semiconductor technologies and materials have pushed the envelope of CMOS scaling limits. Many semiconductor applications are enabled with the creative solutions from technology innovations and material discoveries. Great discoveries and innovations form the basis of / continue to flourish the semiconductor industry for our future generation.

Biography

Soh Yun Siah is a Technology Development Vice President at GLOBALFOUNDRIES with more than 25 years of semiconductor experience. She has served multiple leadership positions in Chartered Semiconductor Manufacturing and GLOBALFOUNDRIES Singapore since 1996, after completing her Ph.D. degree with National University of Singapore.

She is currently in charge of GLOBALFOUNDRIES Singapore's Technology Development department. She oversees the technology roadmap execution and drives differentiation to enrich the foundry technology portfolio. Over the years, her contributions span over multiple CMOS technology node generations and More-than-Moore specialty technologies (non-volatile memories, high voltage, power-analog applications, RF etc). She has published over 30 technical papers and holds over 20 granted patents.