

School of Engineering Seminar

Transiting from Silicon to non-Silicon: Prospects and Challenges

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Synopsis: *As conventional silicon technology is approaching its limit and several emerging devices such as nanowire and carbon nanotube FETs are being extensively studied as possible alternatives, it is now time to take an introspective look; what do we inherit and what new challenges to expect while transiting from "Si" to "non-Si". In this talk, the technological prospects and challenges of nanowire and carbon nanotube FETs will be presented. An overview of opportunities and challenges to technologists and circuit designers towards realizing these emerging devices will be discussed. Several analyses and experimental results will also be presented to demonstrate the recent progresses in these technologies.*

Speaker Bio: Dr. Paul is a senior research scientist at Toshiba America Research, Inc. His research interest includes device and circuit design for emerging nanotechnology, 3D nanoarchitecture, ROM based design for high-performance logic and ultra-low power design.

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Refreshments will be served – come join us!