Title of the Talk: Design of a Current Reference Circuit for Ultra-Low Power CMOS Analog Design

Abstract: In battery operated electronics system design for IoT applications and others, ultra-low power design is the most critical requirement. The transistors to be used in ultra-low power design often needs to work with bias current as low as few nA. Therefore, it is very important to design a stable reference circuit which can deliver nA order of current. The transistors operate in the weak inversion mode, where they are susceptible to several non-ideal effects like process variations effect. The current source should also have good temperature stability. This talk will discuss the methodology of designing a current reference circuit for ultra-low power analog design.