

## **Inventions to Innovations in Deeptech with Materials Engineering and Open Innovation**

Om Nalamasu  
Applied Materials

Material engineering, the ability to manipulate materials with atomic control on an industrial scale and it has been the foundation of the Semiconductor industry and is the backbone of the modern industrial society. Open innovation is the methodology that combines an organization's internal capabilities with external resources to drive a cost and time effective approach to enter new markets with high success rate. Investing in start-ups through Corporate Venture Capital (CVC) groups is one such effective open innovation tool. Applied Ventures (AV) is the corporate venture arm of Applied Materials and has invested nearly half a billion dollars in 90 start-ups in 19 countries. AV has established a number of successful public-private partnerships, pioneering joint investment funds with Korea, Taiwan, and NY Empire State Development organizations.

In this presentation, I will detail the role of CVC to be an effective open innovation collaboration and partnership tool to turn the promise of Materials Engineering to build a better future by addressing the pressing challenges of our times with innovative technologies, products and services.