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SPEAKER
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Dr. Sungho Jin

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of Materials Science and
Iwama Endowed Chair*

*Materials Science &
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*University of California,
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Control of Nanomaterials for Electronic, Energy and Biotech Applications

Nanomaterials are the building blocks of nanotechnology. The fascination and great technical promises associated with nanoscale materials are based on the significant changes in their fundamental physical and chemical properties. For eventual engineering applications of nanomaterials, an ability to control not only their intrinsic structures and properties but also their configurations, precise placements and reproducibility are essential.

In this talk, Dr. Jin will describe some unique examples of controlling the structure, geometry and properties of nanomaterials such as Ti-oxide nanotubes, carbon nanotubes, magnetic nano-islands and nanoparticles, and semiconductor nanopillars. His discussion topics include solar cells and other energy applications of nanomaterials, nanoelectronics arrays, ultra-high-density lithography, magnetic information storage, stem cell control and therapeutics, bone growth, and cardiovascular applications of nanomaterials.

Sungho Jin received his Ph.D. degree in Materials Science and Engineering from the University of California, Berkeley in 1974. After two years of research at the Lawrence Berkeley Laboratory, he joined Bell Laboratories, where he remained for 26 years until joining UCSD in 2002. Dr. Jin is a member of the National Academy of Engineering, Fellow of American Physical Society, Fellow of American Society for Metals, TMS Fellow and MRS Fellow.

Wednesday, January 19

5 p.m. Reception, Rady Room, 601 NH

6 p.m. Lecture, Auditorium, 100 NH

**Please RSVP by January 14 at
www.uta.edu/engineering/rsvp**