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# Seminar

## *Materials Science & Engineering*

Presents:

**Dr. Ashok Khandkar**

**Vice Chairman and Chief Science Officer, Amedica  
Corp, Salt Lake City, UT**

### **“Silicon Nitride: A New Bio-Material”**

Implantable grade silicon nitride ( $\text{Si}_3\text{N}_4$ ) is an attractive alternative to the common materials used today for spinal and orthopedic applications. Extensive studies on the mechanical, imaging, and tribological characteristics of medical grade  $\text{Si}_3\text{N}_4$  for spinal implants have been conducted. This talk will:

1. Review the motivation for developing new bio-materials
2. Place the developments in the context of changing demands of today's patients
3. Highlight the limitations of current materials used in the surgical treatment of back pain and joint pain
4. Summarize the important results from the various studies conducted in the course of developing implantable grade silicon nitride.

This talk will also present and discuss recent clinical follow-up of patients with spinal inter-body spacers.

**Wednesday October 28, 2009**

**4:10-5:00 p.m.**

**1230 WEB**