# SEMİNER
## Tarih-Saat: 13/10/2011 Perşembe – 10:00
## Yer: Endüstri Mühendisliği Bölümü Konferans Salonu

# INFORMATION CENTRIC FRAMEWORKS FOR EMERGING PROCESS DOMAINS

*Prof. Joe Cecil*
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his presentation will provide an overview on the emergence of Information Centric Engineering (ICE) frameworks for two emerging process domains: micro devices assembly and micro surgical simulation environments. The creation of virtual / physical environments to support these domains will also be elaborated. Information intensive models and virtual assembly environments are vital components within this INBM framework. Micro Assembly requires various heterogeneous resources which are physically distributed among various sites. In this context, the design of an advanced Internet based collaborative approach (supporting the use of such distributed resources) assumes significance; a Semantic Web based approach is proposed as part of the INBM framework. This presentation will also provide an overview of the design of a Virtual Surgical Environment which is a research initiative in its initial stages that seeks to train surgeons virtually in micro surgery techniques.

**Bio:** Dr. Cecil is an Associate Professor in the School of Industrial Engineering and directs Center for Information Based Bioengineering and Manufacturing (CINBM). His research and teaching interests are in Information Centric Engineering including design of cyber physical systems, adoption of virtual prototyping and distributed computing frameworks for collaborative manufacturing. Dr. Cecil's current research projects deal with INCE themes for various process domains including micro / nano assembly, bio cell manipulation and small satellite assembly. Current and past funding sponsors include the National Science Foundation, Sandia National Laboratories, the Missile Defense Agency and the Air Force Research Laboratory. He has a background in Mechanical and Industrial Engineering; he completed his Ph.D in industrial engineering from Texas A&M University.