



# Physics Colloquium



Thursday, Feb 2<sup>nd</sup> at 3:30 pm in SC 234

**Dr. Golden Kumar**  
*Texas Tech University*

***Metallic glasses:  
metals which shape like plastics***

Metallic glasses are a new class of metals that can easily bypass crystallization to form amorphous structure. This unique combination of metallic bonding and non-crystalline structure results in unusual properties such as: very high strength and elasticity, good wear resistance, isotropic behavior down to nanoscale, smooth surface finish, and plastic-like processing capability. In this talk, I will discuss the brief history of metallic glasses and why they are the most actively studied metallic materials. I will talk about the current focus and future challenges in metallic glass research and applications. Our group at TTU is actively involved in thermoplastic processing, surface engineering, nanomechanical testing, and optical and mechanical behavior of metallic glasses. I will show some recent results from our lab.

Refreshments at 3:00 pm in SC 103