

SEMINAR ANNOUNCEMENT

A BRIEF HISTORY OF MICROGRAVITY SCIENCE

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Abstract: The launch of the first Space Shuttle on April 12, 1981 initiated a new era in access to space for microgravity science. During the early days of the program, there was an optimistic expectation that space would become a routine (although somewhat exotic) venue for industrial processing. New products that were unobtainable on earth would be developed, such as huge, perfectly homogeneous semiconductor crystals and unusually structured protein crystals. Along the way, we discovered that the near-absence of gravitational forces is not the same as zero gravity. More interestingly, we discovered that drastic reductions in gravitational acceleration allowed other, more subtle forces to govern the key aspects of fluid behavior. In this talk, we will discuss the sources of accelerations in the microgravity environment and the means by which they interact with other, less familiar driving forces to produce a broad spectrum of response in basic fluid physics, cell biology, and human physiology.

Wednesday, March 2, 2011

12:00 – 1:00 pm

Room SI 117

Pizza and refreshments will be served before the seminar.