

Institute of Materials Science

Distinguished Lecture

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Date: Thursday, November 20, 2008

Time: 4:00PM

Location: Institute of Materials Science, Room 20

“Polymer Blends: Science and Technology”

Long chain polymers differ from other materials in several fundamental respects. They are broadly divisible into two classes: naturally occurring (biological) polymers, and synthetic polymers. Synthetic polymers in particular show unusual miscibility behavior. This means that most synthetic polymers do not mix on a molecular or segmental scale. Nevertheless, so called polymer blends or alloys constitute some of the most important formulations for applications such as engineering thermoplastics.

Some of the basic science involved in the miscibility (or immiscibility) of synthetic polymers will be discussed along with applications. The latter will focus on the use of polymer blends in the automotive industry and their role in the recyclability of used cars.