

# Research & Research Training Office

## Faculty Seminar

June 10, 2008

**Professor Evgeny Morozov**

### **Aerospace Structures and Composite Materials**

#### **Abstract:-**

Composite materials have been at the basis of many significant breakthroughs in various industrial applications, particularly in aerospace structures, during the past fifty years. Their high strength-to-weight and stiffness-to-weight ratios are the main material characteristics that attract the attention of structural and design engineers. The presentation covers topics related to the applications of advanced composite materials to aerospace structures design and manufacture and includes discussion on practical implementation of the design methodology based on combined use of advanced mechanics, manufacturing technology, analysis of composites and optimisation of material properties and component performance.