



PD567

Design, Analysis, and Fabrication of Composite Structure, Energy, and Machine Applications

Day One

- Introduction
- Basic Characteristics of Composite Materials
- Reinforcements
- Overview of Properties and Test Methods
- Properties of Polymer Matrix Composites
- Properties of Metal Matrix Composites
- Properties of Ceramic Matrix Composites
- Properties of Carbon Matrix Composites, Including Carbon/Carbon Composites
- Current applications
- Overview of Advanced Thermal Management Materials and Applications

Day Two

- Manufacturing Methods for Composites (emphasis on polymer matrix composites)
- Design of Composite Structures and Machine Components
- Analysis of Composite Structures and Machine Components
- Bonded and Mechanical Joints
- Nondestructive Evaluation
- Lessons Learned
- Future Developments, Including Nanotechnology