

Recycling and Mechanics of Composites

Instructor: Autar Kaw

1

Recycling of Composites

- What types of process are used for recycling of composites?
- Why is recycling of composites complex?
- What can one do if one cannot separate different types of composites?

2

Recycling Continued

- What are the various steps in mechanical recycling of short fiber-reinforced composites?
- Where are mechanically recycled short fiber composites used?

3

Chemical Recycling

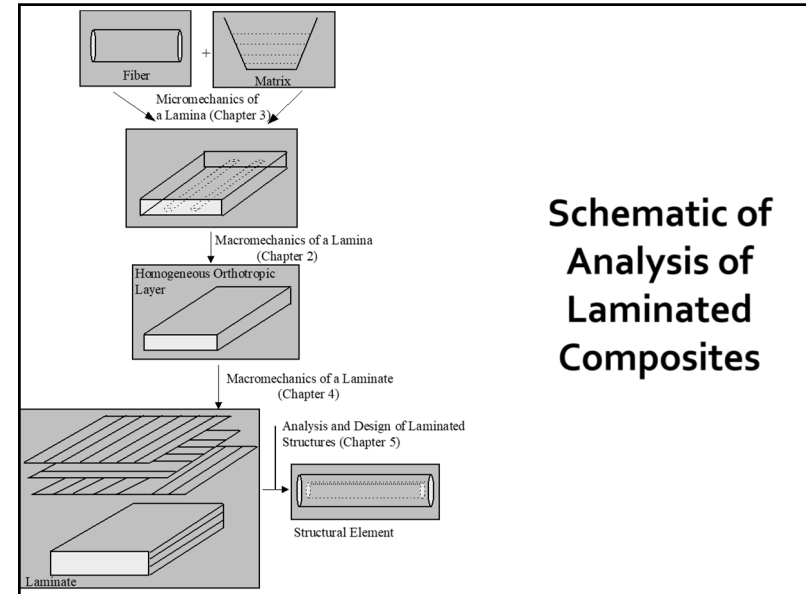
- Why is chemical recycling not as popular as mechanical recycling?
- Which chemical process shows the most promise?

4

Definitions

- Isotropic body
- Homogeneous body
- Anisotropic body
- Nonhomogeneous body
- Lamina
- Laminate

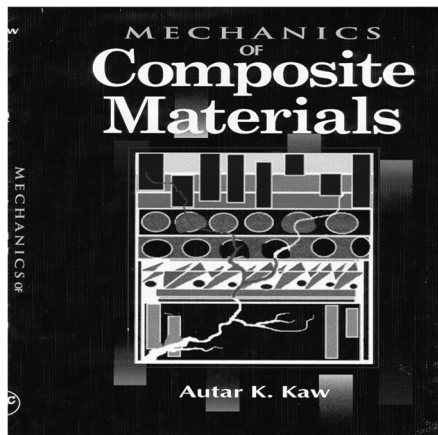
5



Schematic of Analysis of Laminated Composites

6

An Artist's Rendition of a Composite Material



7