

Nanostructured fibers

Formation of fibers from carbon nanotubes or graphene platelets is a very challenging but rewarding problem. As a one-dimensional structure, the fiber in general is considered as a building block for various materials . Flexibility, toughness, as well as electrical and thermal conductivity make nanotube/graphene -based fiber attractive as an ideal composite material.

This research aims to develop new industrially viable method of wet spinning of polymeric fibers with high concentration of carbon nanotubes and graphene platelets.

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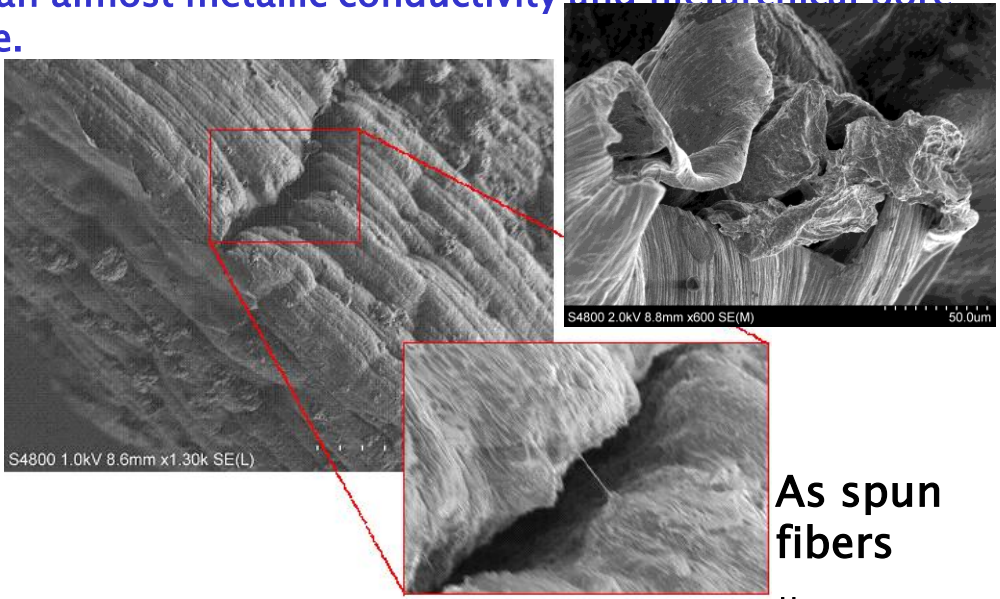


❑ **Strategic goal:** development of economically viable methods to produce fibers with desired morphology and pore structure

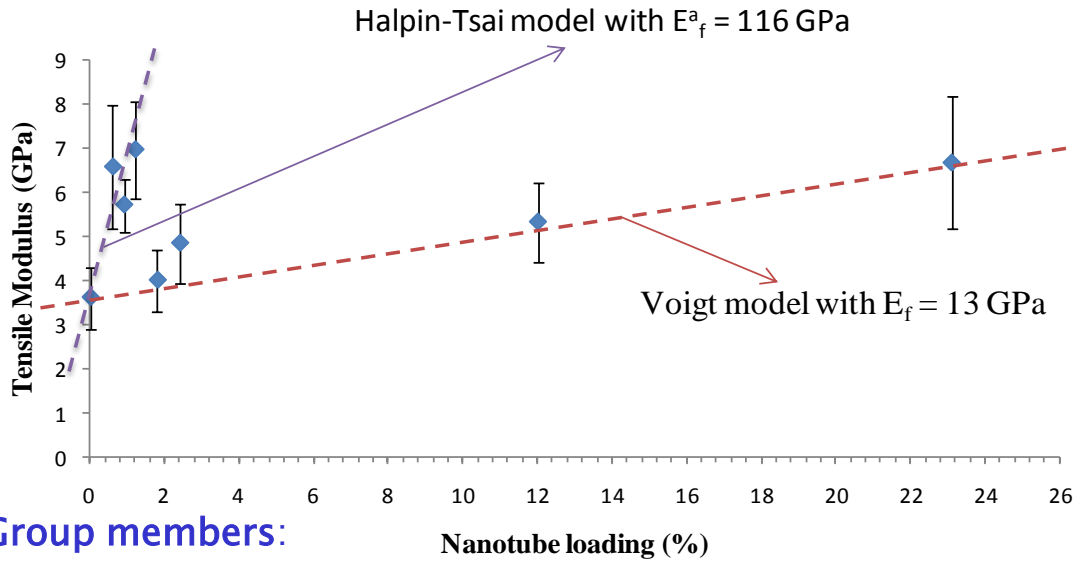
Current focus on

❑ wet spinning of fibers from single wall carbon nanotubes to produce conductive and strong flexible materials

SEM micrographs of wet spun fibers from single walled carbon nanotubes. Highly loaded with carbon nanotubes, these fibers provide an almost metallic conductivity and hierarchical pore structure.



As spun fibers



Group members:

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