Fabrication, Characterization and Application of Carbon Nanotubes

Message from the Guest Editor

Dear Colleagues,

Carbon nanotubes are rolled up sheets of one-atom-thick carbon and can be single walled or multi-walled as well as metallic or semi-conducting in nature. The chemical bonding of the carbon atoms in nanotubes gives them incredible strength and they also possess excellent electrical and heat conducting properties that have made them the focus of research throughout the worldwide scientific community for over two decades. Their amazing properties have meant that carbon nanotubes have found applications in a wide range of scientific disciplines and fields of study including, for example, energy production and storage, nanotechnology, materials science, scanning probe microscopy, drug delivery, sensing, filtration, and microelectronics. New methods to produce carbon nanotubes in all their various forms are always being sought, and methods to accurately and precisely characterize these nanomaterials are crucial to understanding their properties and allowing them to be applied to the most appropriate areas of academic and industrial scientific research.

Dr. Christopher Gibson
Guest Editor