

Structure-based Separation of Carbon Nanotubes

Ming Zheng

Polymers Division
National Institute of Standards and Technology
Gaithersburg, Maryland 20899

Carbon nanotubes (CNTs) can be regarded as a special type of polymers with many different structural forms. Obtaining CNTs of well-defined structure has been one of the most challenging issues in the field. To solve the problem, we have created a DNA-CNT hybrid whose structure is dependent on both the DNA sequence and the atomic configuration of the encased CNT. In this talk, I will show the use of conventional liquid chromatography tools to separate DNA-CNT hybrids by nanotube's chirality and length, and illustrate how the sorted CNTs enable fundamental studies and application development.

References

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