METHODS AND DEVICES FOR SYNTHESIS OF CARBON NANOTUBES

ABSTRACT

Provided herein are methods and devices for production of carbon nanotubes (CNTs) which have high structural uniformity and low levels of impurities. The device includes, for example, a module for depositing catalyst on a substrate, a module for forming CNTs, a module for separating CNTs from the substrate, a module for collecting the CNTs and a module for continuously and sequentially advancing the substrate through the above modules. The method includes, for example, the steps of depositing catalyst on a moving substrate, forming carbon nanotubes on the substrate, separating carbon nanotubes from the substrate and collecting the carbon nanotubes from the surface, where the substrate moves sequentially through the depositing, forming, separating and collecting steps.

[Figure 6]