

### Carbon nanotube fibers produced by a floating catalyst method

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Carbon nanotubes (CNTs) have very excellent properties such as high tensile strength, high thermal and electrical conductivity. But, as CNTs are short, they are limited in industrial applications. So CNT fibers made by individual CNTs are expected to overcome limitation of length. In this work, we synthesize CNT fibers using liquid source containing carbon and metal catalyst. Acetone is used as carbon source and ferrocene and thiophene are used as catalyst. Double-wall carbon nanotubes (DWCNTs) of CNT bundle are synthesized at reaction zone of vertical furnace by injecting liquid source. Spinning rate and length of CNT fibers are 7.44 m/min and few meter length respectively.