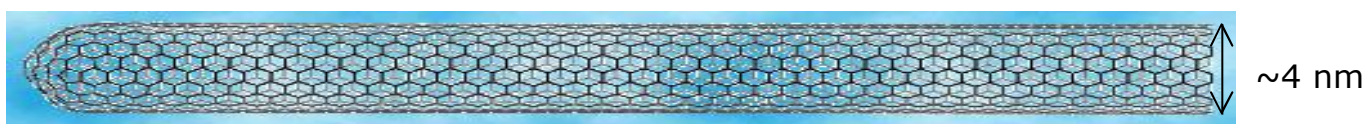


## How Small Are Nanotubes?

### Abbreviations and Size

meter	m	1	$1 \times 10^0$
decimeter	dm	1/10	$1 \times 10^{-1}$
centimeter	cm	1/100	$1 \times 10^{-2}$
millimeter	mm	1/1000	$1 \times 10^{-3}$
micrometer	$\mu\text{m}$	1/1000000	$1 \times 10^{-6}$
nanometer	nm	1/1000000000	$1 \times 10^{-9}$
angstrom	Å	1/10000000000	$1 \times 10^{-10}$

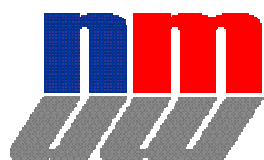
Carbon nanotubes often have a diameter of about 4 nm



Let's compare

Item	Diameter	Factor
Wrist	40 mm = $40 \times 10^{-3}$ m	1000
Hair	40 $\mu\text{m}$ = $40 \times 10^{-6}$ m	

Item	Diameter	Factor
Hair	40 $\mu\text{m}$ = $4 \times 10^{-5}$ m	10,000
Nanotube	4 nm = $4 \times 10^{-9}$ m	



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