

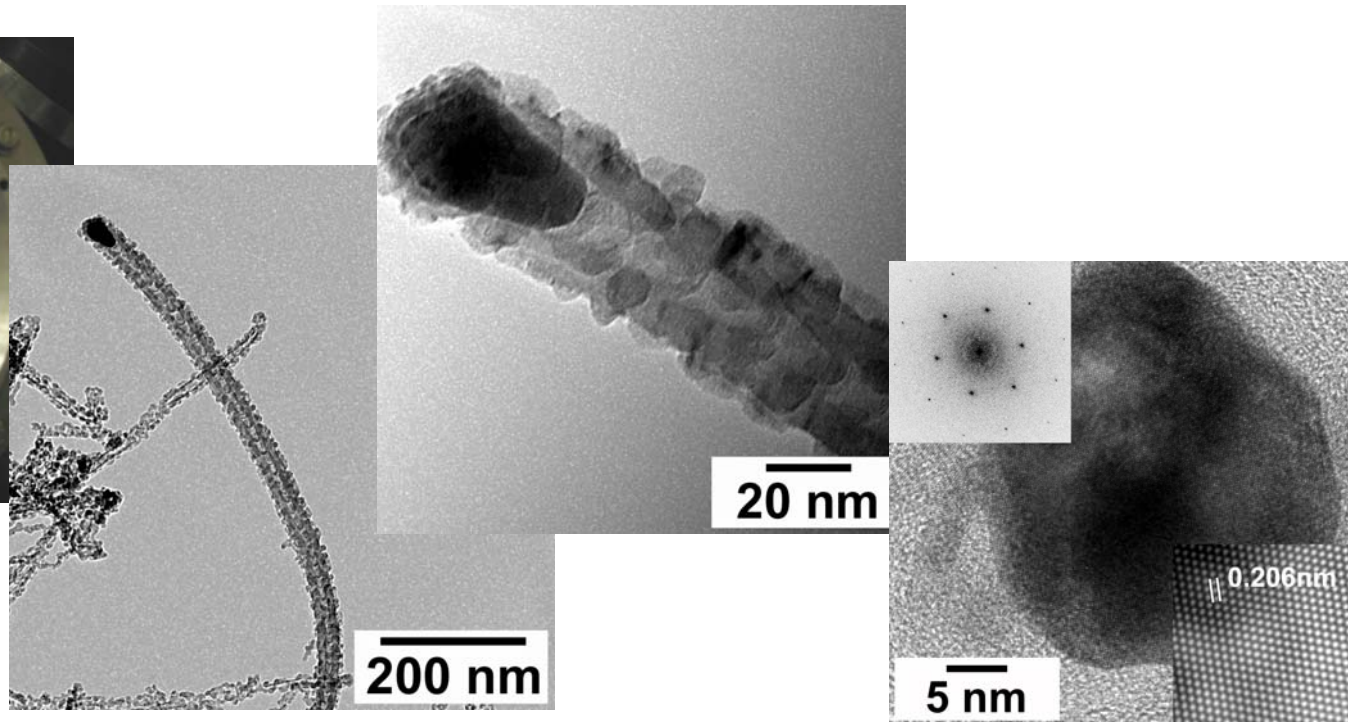
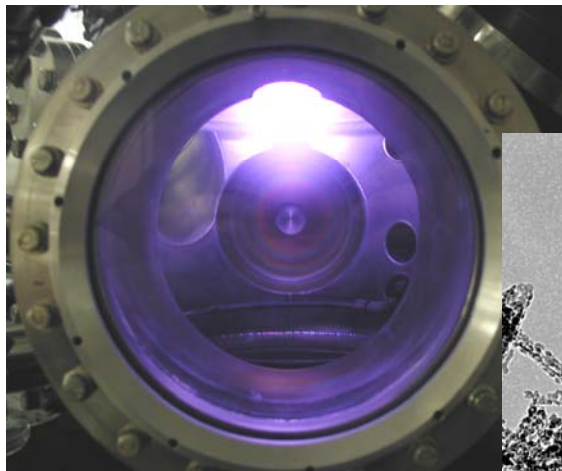
Diamonds from Carbon Nanotubes at Room Temperature

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NNIN Facilities utilized: Characterization Facility & Nanofabrication Center

- We have synthesized cubic and hexagonal diamond by exposing multiwalled carbon nanotubes to H from an H₂ plasma at room temperature and in vacuum.
- Diamond crystals appear where the nanotube walls used to be and are formed by H induced sp^2 -to- sp^3 bonding transformations between concentric walls.
- CharFac was used to characterize the diamonds.



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