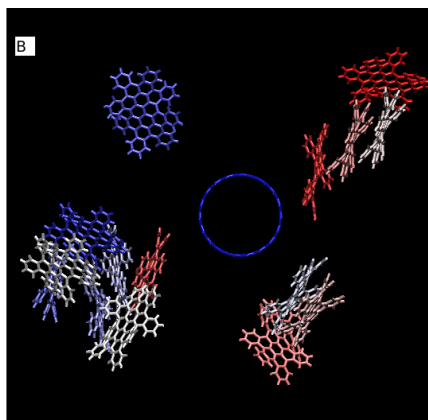
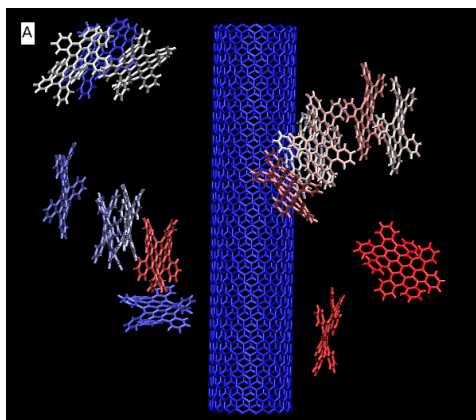


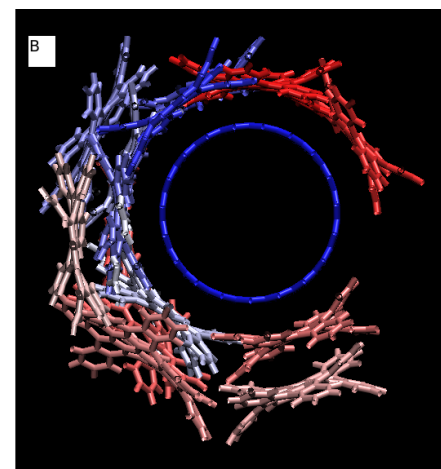
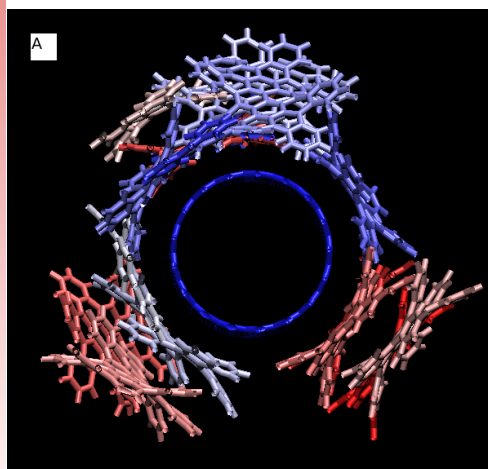
Organic semiconductor project: PhD project #2

2. Shape-Matched All-Organic solar cells



Can we make cheap flexible all-organic electronic devices?

- How do organic semiconductors deposit and grow on carbon nanotubes?
- What is the effect of solvents? Temperature? Diameter of CNT?
- Can we design the best contorted polyaromatic hydrocarbon hole-carrier to maximize mobility w/o compromising our ability to grow?



Enrichment:

- **Collaboration** with Zhenan Bao (Stanford)

Computational Tools:

- **Electronic structure calculations**
- **Molecular Dynamics**
- **Off-lattice Kinetic Monte Carlo**