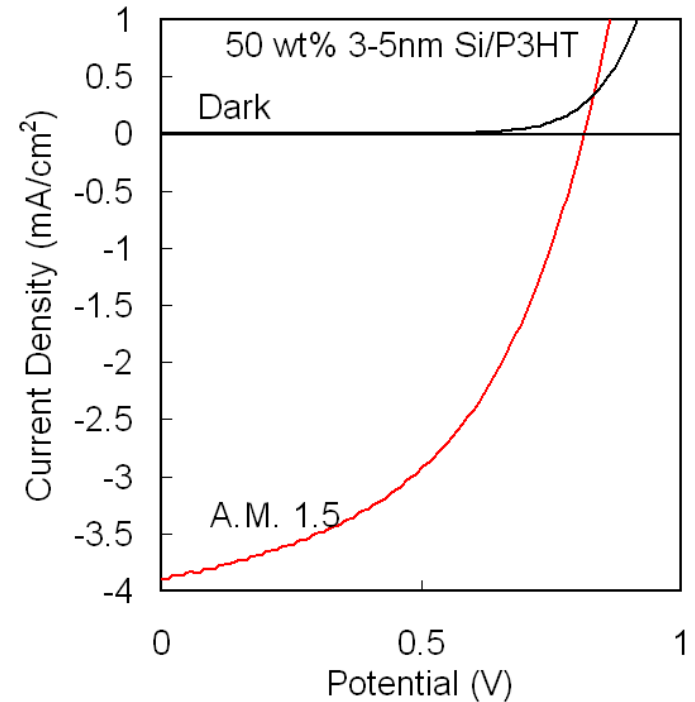
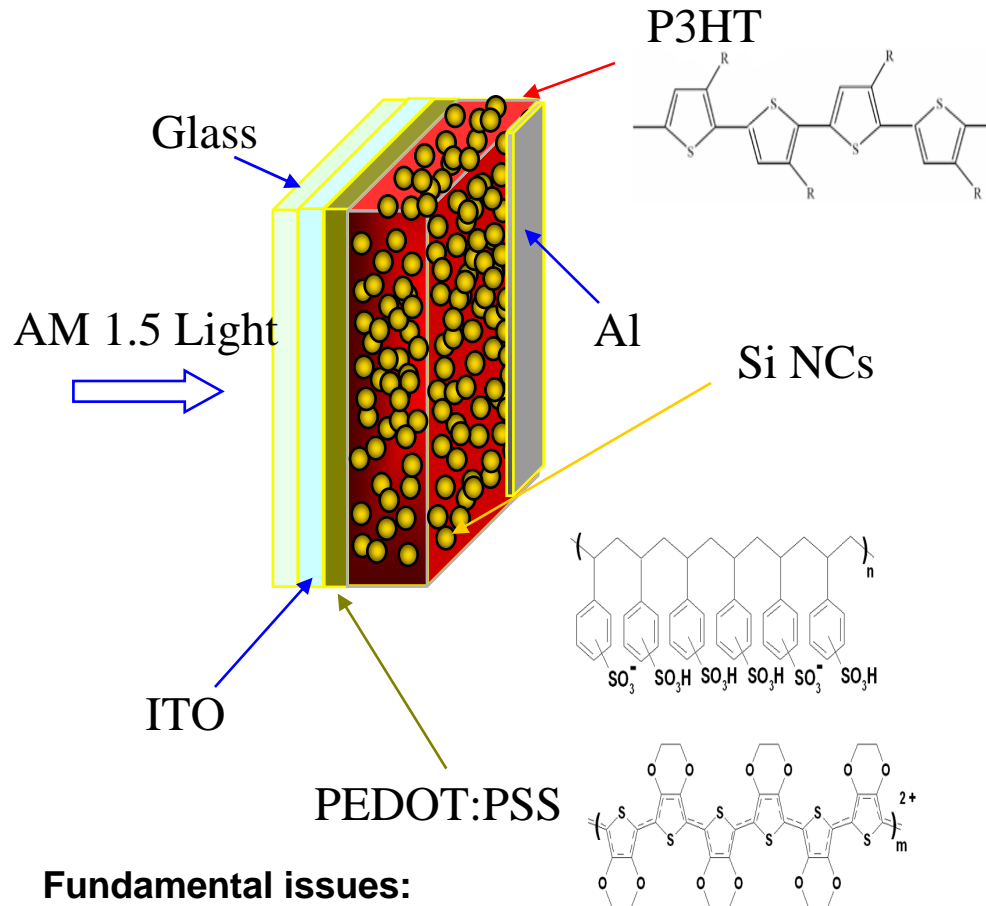


Hybrid Solar Cells from P3HT and Silicon Nanocrystals

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NNIN Facilities utilized: Characterization Facility & Nanofabrication Center



Fundamental issues:

- P3HT are good light absorbers and Si NCs are good electron conductors
- Exciton dissociation at the interface of the polymer and the nanocrystals.

Achievements:

- 1.4% power conversion efficiency under AM 1.5D one sun condition

C.Y. Liu, et. al., *Nano Lett.*, **9**, 449 (2009).