ZnO Nanoparticles Based on An Amide Precursor
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NNIN Facility utilized: Characterization Facility

- ZnO nanoparticles are synthesized for use in projects related to solar cells.
- The synthesis is based on the reactions of [Zn(NiBu₂)₂]₂ with hexylamine in diethylether followed by hydrolysis in a wet air flow (see the figure below).

**MAJOR OBSERVATIONS**
- ZnO nanoparticles range from 2.8 to 5.3 nm. The particles are relatively mono-dispersed and dispersible in a variety of organic solvents.
- The sizes are controlled by control over the humidity used in the hydrolysis.