

## Micropowdered biomass combustion

NYSERDA has recently funded a program of research at Cornell on the combustion of fine powders of biomass as a renewable and economical way of supplying heating needs in the Northeast. A local start-up company, Summerhill Biomass Systems, has demonstrated first-generation micropowdered biomass burners. Experiments at Cornell will investigate the combustion regimes and emissions associated with micropowdered biomass combustion. Undergrads may be able to participate in this project by assisting with experiments (mainly spring 10 and later) or by performing a design project (mainly fall 09). Design projects will involve designing components of the experimental apparatus to be used for the experiments: a laboratory scale burner, a powder feed system, and a portable dilution tunnel for investigating particulate emissions.