FSU Research Network

Biomass  Solar  Electric energy & power
Biomass to Biofuels Research

- **Objective:** To develop a biorefinery concept to produce biofuels and value added chemicals in an economic, efficient and continuous manner.

- S. Ramakrishnan, J. Telotte and J. Collier (Chem. Eng.)
Electric and Solar Energy Research

• Battery research (AME)
  – Materials synthesis, characterization, modeling, and packaging
• Power grids (CAPS)
  – Control systems, hardware-in-the-loop
• Solar energy (Chem./Physics/Eng.)
  – Photonic materials research
Wind Energy and Flow Control

- **Steven Cook & Shawn Smith (COAPS), Mark Powell (NOAA)**
- Physical based models predict loss (on average) of 2 turbines vs. prior prediction of 24 turbines
- **Rajan Kumar and Farrukh Alvi (Mech. Eng.)**
- Polysonic Wind Tunnel:
  - Large Mach number range (0.2 to 5), 12-in. test section and advanced diagnostics is a unique, shared resource
  - NSF MRI ($3.3M) & FSU AME $25M facility