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Poster Title: “A Multidisciplinary Academic Group Dedicated to the Development of Green Alternative Energy in Connecticut- University of Connecticut Biofuel Consortium”.

Poster abstract: Our focus:

1. Primary research in the area of green alternative energy.
2. Application of primary research into commercial scale operations.
3. Development of an undergraduate engineering educational program.

What makes us unique:

Our focus is the development of green alternative energy from commercial waste rather than fresh starting materials.

Specific examples:

- Biodiesel derived from waste cooking oil.
- Comparison of waste oil to virgin oils produced in CT from oilseed crops grown in an integrated pest management program.
- Using micro wave technology to enhance the rapid conversion of the vegetable oils to biodiesel.
- Development of biodegradable polymers from waste glycerol.
- Development of Syngas from Glycerol to produce low molecular weight alcohols.
- Use of biodiesel to produce hydrogen streams for fuel cells.