

# Emily Ferner, Chemical Engineering

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## **Acetol: A green solvent**

Emily Ferner & Galen Suppes

The biodiesel industry has burgeoned as renewable fuel sources have come to the forefront of the efforts to reduce pollution. As the production of biodiesel grows, the byproduct, glycerol, becomes a disadvantage that must be dealt with. An additional one billion pounds of glycerol are expected to be introduced into a market that currently demands only six-hundred million pounds per year. The conversion of glycerol to acetol by means of a copper-chromite catalyst paired with reactive distillation seems to be one attractive solution as it produces acetol for only \$0.50 per pound as acetol's use is currently limited by its \$5.00 per pound price tag. This attractive price reduction opens up use for acetol in a variety of applications. Acetol's application as a green solvent in an everyday role such as white board cleaner will be thoroughly evaluated in this project.