USF Biomass Fuel Project Places Fourth in the World at the Global Venture Challenge 2010

TAMPA, Fla. (April 1, 2010) – A process developed by a team of USF researchers which converts common organic materials such as sawdust, yard clippings and even horse manure into jet fuel placed fourth in the prestigious Global Venture Challenge 2010, second among U.S. teams.

The team comprised of chemical engineering professor John T. Wolan; chemical engineering graduate student Syed Ali Gardezi and Jaideep Rajput, a manager in USF’s Division of Patents and Licensing and a graduate student from the College of Business competed against 44 teams from eight countries to win a semi-finalist spot, enabling them to compete March 24-26 at Oak Ridge National Laboratory in a semi-finalist round that included 22 teams from five countries.

Their project, a biomass fuel reactor, can convert common organic materials into fuel used for airplanes, jets, trucks or cars. In lab experiments, the group has been able to make jet fuel from sawdust. Almost any kind of organic waste material can be converted through their patent-pending catalytic process. The venture is incorporated under the name COSI Catalysts, Inc.

Wolan and Gardezi have spent four years developing and refining the process to produce clean, sustainable fuels. Creating fuel using the COSI Catalyst technology produces 30 times less sulfur than typical refining methods, decreasing the amount of sulfur dioxide that ends up in the atmosphere – the precursor to acid rain.

In fact, the “green” production process devised by COSI also produces heat which can be used to power turbines for electricity and the most abundant waste the process produces is water, which can be purified and reused. For now, the group is concentrating on producing jet fuel. The largest use of fossil fuel is for air transportation and it is a significant source of man’s carbon footprint.

Read an article in the Tampa Bay Business Journal: http://tampabay.bizjournals.com/tampabay/stories/2010/04/05/story6.html?surround=etf&ana=e_article&b=1270440000%5e3124771
The University of South Florida is one of the nation’s top 63 public research universities and one of only 25 public research universities nationwide with very high research activity that is designated as community engaged by the Carnegie Foundation for the Advancement of Teaching. USF was awarded $380.4 million in research contracts and grants in FY 2008/2009. The university offers 232 degree programs at the undergraduate, graduate, specialist and doctoral levels, including the doctor of medicine. The USF System has a $1.8 billion annual budget, an annual economic impact of $3.2 billion, and serves more than 47,000 students on institutions/campuses in Tampa, St. Petersburg, Sarasota-Manatee and Lakeland. USF is a member of the Big East Athletic Conference.