



# NEWS RELEASE

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## FOR IMMEDIATE RELEASE

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### Researcher honored for work converting wood into ethanol

Madison, Wis.— Dr. Thomas W. Jeffries, a microbiologist whose research focuses on using plant matter to make the fuel ethanol, received the prestigious C.D. Scott Award at the 25th Annual Symposium on Biotechnology for Fuels and Chemicals earlier this month in Breckenridge, Colo. Jeffries is the tenth person to receive the award since it was established in 1995 to recognize distinguished achievement in applying biotechnology to produce fuels and chemicals.

Jeffries directs the Institute for Microbial and Biochemical Technology at the USDA Forest Service Forest Products Laboratory in Madison, Wis., and is a professor in the Bacteriology and Food Science departments at the University of Wisconsin, Madison.

His recent research has aimed at modifying yeast DNA to increase the amount of ethanol produced when the yeast metabolizes certain components of wood.

"Converting material such as wood or plant waste, called 'biomass,' into fuels and chemicals has several important benefits," said Jeffries.

"For example, the plant-based fuels tend to be clean, producing few if any pollutants or by-products. Chemicals made from biomass are usually biodegradable, unlike many petroleum-based chemicals," he said.

"Also, the fermentation processes involved in deriving fuels from biomass trap so-called greenhouse gasses, which would otherwise escape into the atmosphere. And new uses for forest and agricultural products can lead to the creation of business and employment opportunities, especially in rural communities that have fallen on tough economic times. Finally, biomass-based fuels have the potential to help reduce our country's dependency on overseas supplies of petroleum," Jeffries said.

In fact, the energy crisis of the mid-1970s led the namesake of Jeffries' award, Charles D. Scott, a chemical engineer at Oak Ridge National Laboratory, to convene the first Symposium on Biotechnology for Fuels and Chemicals in order to bring together scientists and biochemical engineers from around the world to create environmentally sustainable and economical technologies for converting plant materials and animal waste, into fuels and chemicals. The annual symposium is led by Oak Ridge National Laboratory and National Renewable Energy Laboratory with sponsorship by the U.S. Department of Energy, the Department of Agriculture, and nearly 20 companies engaged in biomass conversion. Some 450 specialists from 23 countries and 78 institutions attended this year's meeting.

Jeffries received his bachelor's and master's degrees in microbiology from California State University at Long Beach in 1969 and 1972 respectively. He received a Ph.D. degree in microbial biochemistry from Rutgers University in 1975.

Jeffries joined the USDA Forest Service Forest Products Laboratory in 1979. The FPL had established a reputation as a leader in research into uses for wood waste and by-products. As early as 1916, the FPL was working to improve the conversion of waste wood into ethanol. This research proved valuable during WWI and again in WWII, when the nation's military effort required increased quantities of ethanol.

A native of Jennings, Louisiana, Jeffries now lives in Madison, Wis., with his wife, Giovanna.

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