

## Genencor shows how industrial biotech breakthroughs

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**Palo Alto, CA** - Yesterday, Genencor, a division of Danisco A/S, hosted a private tour of its Bay Area Research and Development headquarters to a group of industry influencers and media. The tour showcased recently announced collaborations for developing sustainable fuels, chemicals, and other products that will reduce greenhouse gas emissions and contribute to energy independence by using renewable raw materials.

The event profiled three Genencor initiatives launched in the past 10 months - its joint venture, DuPont Danisco Cellulosic Ethanol (DDCE); collaboration with The Goodyear Tire & Rubber Company to make Biolsoprene™ (a synthetic rubber alternative); and collaboration with Huntsman Textile Effects on a biobased bleaching process.

"We're joining forces with major industry players to tackle today's most pressing global challenges - how to use renewable raw materials to make the fuels and materials advanced societies need," Genencor CEO Tjerk de Ruiter says. "In doing this, we are pointing to exciting new opportunities for growing American, and global, prosperity in the green economy."

"The initiatives with DuPont and Goodyear are pointing the way to a new economy," says Genencor's Executive Vice President of Business Development Philippe Lavielle. "This includes delivering a reliable supply of fuel made from biomass and a renewable biobased alternative to a key petrochemical in synthetic rubber production. We're meeting the technical milestones to get these projects to demonstration scale for fast-track commercialization. They represent the vast potential for biorefineries."

"DDCE's Vonore, Tennessee, demo plant is on track for completion in 2010," said DDCE CEO Joseph Skurla. "Within two to three years people will be fueling their tanks with ethanol made from corn cobs and switchgrass."

Today's event, co-hosted by BayBio, Northern California's life sciences association, brought together top executives at Genencor and its collaborators, including Skurla and The Goodyear Tire & Rubber Co.'s Director, Global Materials Science, Jesse Roeck, as well as representatives of the Bay Area's biotech activities.

"Northern California's cluster of life sciences companies is the biggest in the U.S. Genencor is one on of the pioneers in the area that are tackling critical industrial challenges through biotechnology." says Matthew Gardner, President and CEO of BayBio, who moderated an executive panel. "They represent a shift toward applying science to building the green economy, which will help spur economic growth in California and nationally."

### **Showcase highlights interactive biorefinery demo**

A highlight of the event was an interactive demo that gave participants a firsthand look at how cellulosic biomass, such as sugarcane bagasse, and corn cobs, is converted into many useful products. Like oil refineries, biorefineries will produce many different end-products, but with renewable feedstocks that reduce dependence on fossil fuels, increase national security, and reduce natural resource consumption and greenhouse gas emissions. The demo illustrated that these technologies are in advanced stages. Cellulosic ethanol will supply commercial volumes in the next two to three years, and Genencor made its first delivery of Biolsoprene to The Goodyear Tire and Rubber Co. on March 9.

During a tour of the R&D facility, participants got a look at how Genencor scientists and technicians engineer molecules and enzymes and scale them up quickly for mass production. "Our cell factories are our core competence," says de Ruiter. "Every day we are supplying industries with enzymes to run their processes, while at the same time pushing boundaries to make better industries and more sustainable societies."