

Business Briefs

The World Health Organization reports that irradiated food is "safe and wholesome." Organizations including the American Medical Association and the Mayo Clinic support irradiation use.

The Association of International Industrial Irradiation has more than 65 members worldwide promoting ionizing radiation to control microbes, modify materials and reduce pollution.

Global partners to develop polymers

Tate & Lyle Citric Acid and DuPont's Bio-Based Materials business have entered an agreement to manufacture advanced polymers from renewable sources.

The two companies have agreed to develop a process that turns a carbohydrate base into 1-3 propanediol (PDO). This substance is used to manufacture DuPont Sorona, a polymer platform with a range of applications including textiles, upholstery fabrics and resins.

Tate & Lyle Citric Acid is a subsidiary of United Kingdom-based Tate & Lyle PLC. The new agreement furthers DuPont's efforts to produce PDO from renewable sources such as corn starch. It also creates an opportunity for Tate & Lyle to add value to carbohydrates.

"We bring the microorganism, market knowledge and process technology to the alliance, while Tate & Lyle brings bio-chemical and fermentation expertise, site infrastructure and access to raw materials," says Ellen J. Kullman, DuPont group vice president and general manager. A manufacturing facility is planned for completion by 2003 she added.

Tate & Lyle operates in roughly 50 countries. DuPont delivers science-based solutions for food and nutrition, health care, apparel, home and construction, electronics and transportation. The company operates in 70 countries and has 94,000 employees.

Companies develop water treatment model

Lyonnaise des Eaux and United Water have combined forces in water services, research and development to create "Virtual Plant," a computer application to model and simulate a water treatment cycle.

The U.S. Environmental Protection Agency (EPA) reports that the utility industry must invest an estimated \$36 billion over the next 20 years to upgrade water treatment facilities and comply with new safe drinking water regulations. Lyonnaise and United Water say Virtual Plant can help utilities meet requirements and achieve up to 40 percent savings in plant development and operation costs while enhancing water quality and process reliability.

Virtual Plant generates 3-D images of interacting substances such as water

and a disinfectant. A full-scale plant operation can be reproduced so plant designers can see how changes in water flow or water quality will affect water treatment.

United Water will use Virtual Plant to design a \$7 million upgrade at its Haworth Water Treatment Plant in New Jersey.

The companies say Virtual Plant replaces longer more expensive studies, guarantees efficiency and allows for innovative and adaptable designs. United Water is a U.S. water services provider and subsidiary of Lyonnaise des Eaux.

PET pickle container hits the market

Vlasic Foods International is test-marketing a food product pasteurized in a polyethylene terephthalate (PET) container.

The Cherry Hill, N.J., company is testing three pickle varieties in 24-

NEW ON THE NET

National Academies — www.nationalacademies.org/webextra/crops/

Transgenic Plants and World Agriculture is a new white paper from an international working group of seven science academies including five from developing nations. It details ways agricultural biotechnology can help alleviate hunger and poverty in the Third World.

Advanced Engineered Wood Composites Center — www.aewc.umaine.edu/

This newly-designed University of Maine site offers resources for prospective students and companies and includes a list of construction projects, photos, research presentations, publications and links.

MSU biotechnology — www.biotech.msu.edu

This site offers a synopsis of biotechnological research at Michigan State University involving plants, animals and microbes. Contains summaries of research plus links to scientists' home pages and other sites.

Council for Biotechnology Information — www.whybiotech.com

Features information about biotechnology including data from a variety of sources, a discussion of benefits, links to academic, government and scientific organization sites and third party opinions and referrals.