Center for Chemical Technology

Mission

The Center for Chemical Technology utilizes a variety of advanced technologies to study natural resources and assist Utah businesses in developing new products. Employing a multidisciplinary approach, the Center assembles teams of faculty, students, and corporate partners to identify and develop these new products.

The Center

The Center for Chemical Technology at Weber State University, under the direction of Dr. Edward B. Walker, was organized in 1990. The Center's research fosters the development and commercialization of Utah's natural resources, generates technological advances in medicine, and provides technical assistance to Utah's manufacturing business and inventors. To date, the Center has established partnerships with 44 Utah businesses and 3 firms from outside the State.

NATURAL RESOURCES

Significant research in the development of natural resources from plants is currently being performed at the Center for Chemical Technology. For example, certain naturally occurring bacterial anti-adherence factors from plants may offer a new class of infection preventing drugs. *New enzymes from coffee and soybeans offer the potential to convert various blood types into universal donor, O-type blood.* Also, new technologies under development at the center will allow harvesting of b-carotene, an important nutritional supplement, from algae found in the Great Salt Lake.

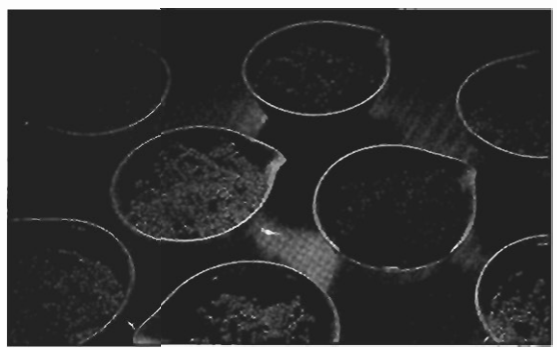
HEAVY-OIL

The processes for extracting heavy-oils (bitumen) found in tar sands has the potential to become a profitable industry. In the past, the extraction of bitumen from these tar sands for the production of asphalt has been difficult due to the high cost and inefficiency of the extraction processes. *The Center for Chemical Technology has developed an innovative and profitable method for extracting bitumen from tar sands.* Efforts in bitumen extraction have also lead to new applications in reclaiming soils contaminated by oil or fuel spills. The Center's partnership with BVRC and Crown Energy has resulted in the construction of a demonstration plant in Asphalt Ridge, Utah. The design of a larger, $12 million, 3,000-barrel-per-day facility is in progress.

Center Highlights

- Attracted Eastman Chemical's interest in building a $34 million facility on the Great Salt Lake as a result of the Center's b-carotene research.
- Established a cooperative research association with Agridyne Technologies of Salt Lake City.
- Developed patented methods for extraction of heavy-oils from tar sands.
- Established partnerships with 44 Utah business and 3 out-of-state firms.

Oil sample.



Tar sand samples.

For more information, please contact:

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