



University of Hawai'i at Mānoa

## **Hawai'i Natural Energy Institute**

School of Ocean & Earth Science & Technology

### **Microalgae Biotechnology Activities at the IGV**

The cultivation of microalgae is being used for the recovery of valuable substances for use in pharmaceuticals, cosmetics, and health or diet foods. Such cultivation is the focus of microalgal biotechnology.

The Institut fuer Getreideverarbeitung (IGV) GmbH, in cooperation with B. Braun Biotech International, has build up a serial production of photobioreactors ranging in capacity from 30 liters up to 10 m<sup>3</sup>, and available in sterilisable configuration. Moreover, IGV is renowned through the development and construction of a 700 m<sup>3</sup> photobioreactor facility in Kloetze, Germany. Some photobioreactors are producing cell densities up to 10 E<sup>9</sup> ml<sup>-1</sup> plus high biomass concentrations, and have been used for production of coloring agents, polyunsaturated fatty acids, and algal polysaccharides with potential for usefulness in the pharmaceutical and cosmetic industries.

In addition to interests within the fields of pharmaceuticals and cosmetics, IGV is also active in the areas of functional food and feed additives from microalgae and other sources. Another important arena includes the recent developments in the field of bioenergy, such as biofuel or biohydrogen.

**Otto Pulz**

Institut fuer Getreideverarbeitung (IGV),  
Germany

**Tuesday, September 12, 2006**

**3:15 – 4:15 PM**

**HIG Auditorium, Room 110**

**Sponsored by**

**Hawai'i Natural Energy Institute**