

biomass

PRODUCTS & TECHNOLOGY

INSIDE:



Products. Processes. Ideas.

Bio-feedback Process Controller optimizes algae growth and daily harvesting rates

• OriginOil Inc., the developer of a breakthrough technology to transform algae, the most promising source of renewable oil, into a true competitor to petroleum, announced a Dynamic Control System designed to respond continuously to algae's behavior. This invention improves energy efficiency and growth rates by ensuring the right types and amounts of light are used at all times as the algae grows to maturity.

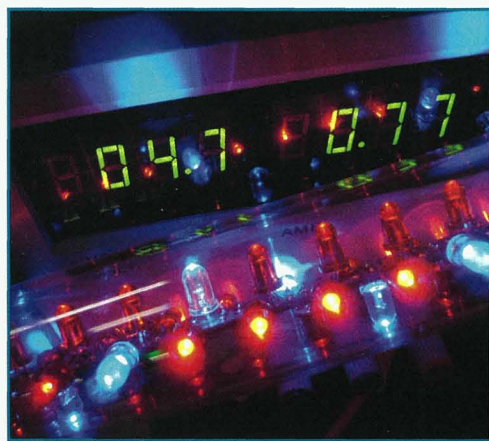
As a true biofeedback system, the



algae let the controller know what it needs as it needs it, creating a self-adjusting growth system. At the heart of the system is a programmable controller that receives information from multiple sensor types reading the algae culture. The controller, which can be programmed for specific algae strains, responds by sending out commands to change lighting parameters such as intensity, pulsing frequency, and duty cycle. OriginOil's existing automation of the nutrient delivery process will be integrated in the final version of the Dynamic Control System.

OriginOil is currently using the new Dynamic Control System to test many lighting variations such as concentration, angles, distribution and pulsing intervals. The company expects this study to yield a wealth of data about what works best in algae lighting.

www.originoil.com



September 2009

