

## **LOW ENERGY DEWATERING TECHNOLOGY FOR ALGAE IN A DILUTE SOLUTION**

### **ABSTRACT**

Utilizing surface chemistry; hydrophobic and hydrophilic surfaces are in contact with algae in a dilute solution to take advantage of adhesion and co-adhesion properties allowing for low energy and low pressure differential to separate at a low energy cost. The patent pending technology has been incorporated into an electro-mechanical device which will be described in the presentation along with a video demonstration. The technology shows promise in reducing the major cost obstacles for the commercialization of algae based products for food, feed, fuel, chemicals, polymers, and other advanced materials.

(Abstract text: Times New Roman size 11)

### **BIOGRAPHY, SHORT SKETCH** (Bio Sketch of speaker and/or author, Times New Roman size 11, bold)

<b>Name</b>	<b>Ross O. Youngs</b>
<b>Company</b>	<b>Algaeventure Systems, Inc.</b>
<b>Address</b>	<b>13311 Industrial Parkway</b>
<b>City, State, Postal</b>	<b>Marysville, OH 43040</b>
<b>Country</b>	<b>USA</b>
<b>Phone</b>	<b>937-645-4600</b>
<b>Email</b>	<b>ryoungs@algaevs.com</b>

### **Bio**

Ross O. Youngs, CEO & Founder of Univenture and Algaeventure Systems, Inc., has established himself as a leader in the conservation of both natural and industrial resources. Ross' proficiency with inventing products, systems, processes and technologies, led him to found Univenture in 1988. His inventiveness and creativity has led to the successful invention and commercialization of many products and technologies, including the Safety-sleeve®, U-1000 technology, EnvyPak™, and the UniKeep™ case binder. He holds a number of patents in the US and around the world. Ross' newest breakthrough technology, the Algaeventure Systems Harvest Dewater and Dry (HDD) system, is used to efficiently extract algae out of solution and dewater with minimal energy costs. His harvesting, dewatering and drying technology, HDD, gives a new significance to the production of algae as an economically viable resource for fuel.

In October of 2009, the Department of Energy's ARPA-E (Transformational Energy Research Project) selected Univenture (Algaeventure Systems) to pursue breakthroughs that could fundamentally change the way we use and produce energy.