



**Biological and  
Agricultural  
Engineering  
Department**

Disclosure Ag-0912

## **Rapid Lipid-Oil Extraction for Biofuels**

**Inventors:** Dorin Boldor, Sundar Balasubramanian, Cristina Sabliov

### **Description:**

LSU AgCenter scientists have developed a method to extract oil from various lipid-containing sources such as seeds, soybeans, or algae that can be turned into biofuel. The process uses microwave energy to break down the cell walls of materials to release the oil with a lesser need for solvents and a lower overall use of energy than mechanical methods such as grinding or pressing. This integrated, continuous process allows for faster oil extraction by using rapid heating and pressurization.

### **Advantage:**

- Extracts greater amounts of oil
- Faster oil extraction
- Uses lower amounts of solvents
- Less energy intensive

### **Commercial Uses:**

- Biofuel production

Find Intellectual Property on the Web @ [www.lsuagcenter.com/intellectual](http://www.lsuagcenter.com/intellectual)

**For more information, contact:**  
**Wade Baumgartner**

**225.578.7742**  
**wbaumgartner@agcenter.lsu.edu**