

Danielle D. Bellmer

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Biosystems and Agricultural Engineering Department
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Education

Ph.D, Purdue University, West Lafayette, IN, September, 1996
Department of Agricultural and Biological Engineering
Dissertation: Use of MRI and ³¹P NMR for detection of bone within meat

B.S., Michigan State University, East Lansing, MI, December, 1992
Food Engineering, Department of Agricultural Engineering

Experience

Associate Professor, Biosystems and Agricultural Engineering, Oklahoma State University, Stillwater, OK. June 2003 – present.

Assistant Professor, Biosystems and Agricultural Engineering, Oklahoma State University, Stillwater, OK. June 1997 – 2003.

Assistant Professor, Food Science Department, Delaware Valley College, Doylestown, PA. August, 1996 - May, 1997.

Graduate Research Assistant, Agricultural and Biological Engineering, Purdue University, West Lafayette, IN, January 1993 – August 1996.

Research and Development Intern, McNeil Consumer Products Company, Fort Washington, PA, June 1991 – December 1991.

Honors and Awards

Haliburton Outstanding Young Faculty Member Award, CEAT, OSU, 2003.

Magoon Award for Outstanding Teaching Assistants, Purdue University, 1996.

USDA National Needs Fellow, Purdue University, 1993-1995.

Major Areas of Research Interest

Alternative Energy Resources
Value-Added Food Processing
Waste Utilization
Enzymatic Hydrolysis
Biomass Conversion
Rheological Property Characterization

Teaching Experience

BAE 2012 Engr. Analysis of Biological Systems
BAE 3113 Quantitative Biology for Engineers
BAE 4423 Food Engineering
BAE 4283 Bioprocessing
BAE 5501 Graduate Seminar
BAE 6580 Food Rheology

Selected Grants and Contracts

D. Bellmer, R. Huhnke, R. Whiteley, C. Godsey. Critical Processing Issues for On-Farm Production of Ethanol from Sweet Sorghum Oklahoma Bioenergy Center, \$350,000, 2008-2010.

R. Huhnke, D. Bellmer, T. Bowser, F. Epplin, A. Johannes, R. Lewis, C. Taliaferro. Special Research Grants Program, USDA Cooperative State Research, Education, and Extension Service, Washington, D.C. - *Biomass-Based Energy Research*- \$955,563. 2004-2006.

D. Bellmer, S. Patel, S. Reilly. Food and Agricultural Products Research Initiative Program – *Use of Microbubbles and Perfluorocarbons for Enhancement of Oxygen Transfer in Xanthan Gum Fermentation Systems* - \$38,500. 2001-2003.

R. Huhnke, D. Bellmer, T. Bowser, F. Epplin, A. Johannes, R. Lewis, C. Taliaferro, Initiative for Future Agriculture and Food Systems (IFAFS) Program, USDA Cooperative State Research, Education, and Extension Service - *Conversion of Low-Cost Biomass to Ethanol*- \$848,000. 2000-2004.

J. Lalman, D. Bellmer, R. Roduner. Food and Agricultural Products Research Initiative Program- *Bioconversion of Products Derived from Food Processing into Value-added Commodities*- \$19,500. 2001-2002.

R. Huhnke, D. Bellmer, T. Bowser, F. Epplin, A. Johannes, R. Lewis, C. Taliaferro. Western Regional Biomass Energy Program - *Production of Ethanol from Low-Cost Biomass- A Holistic Approach* - \$75,000, 1998-1999.

Selected Publications and Presentations

Suryawati, L., M.R. Wilkins, D.D. Bellmer, R.L. Huhnke, N.O. Maness, I.M. Banat. 2008. Simultaneous saccharification and fermentation of Kanlow switchgrass pretreated by hydrothermolysis using *Kluveromyces marxianus* IMB4. *Biotechnol. Bioeng.* 101:894-902.

Bellmer, D., R. Huhnke, and D. Kundiyana. 2008. Issues with in-field fermentation of sweet sorghum juice. ASABE 084828. American Society of Agricultural and Biological Engineers, St. Joseph, MI.

Patil, K.N., R. L. Huhnke, and D. D. Bellmer. 2007. Influence of Internal Baffles on Mixing Characteristics of Biomass in a Fluidized Sand Bed. *Agricultural Engineering International: the CIGR Ejournal.* EE 06 016. Vol. IX.

Bangalore, D and D. Bellmer. 2006. Utilization of microbubbles for enhancement of oxygen transfer in xanthan gum fermentation. *Chemical Engineering Communications* 193:1232-1252.

Patil, K., T.J. Bowser, D.D. Bellmer, and R.L. Huhnke. 2005. Fluidization characteristics of sand and chopped switchgrass-sand mixtures. *Agricultural Engineering International: the CIGR Ejournal.* EE 04 005 Vol VII.

Ulmer, J.D., R.L. Huhnke, D.D. Bellmer, and D.D. Cartmell. 2004. Acceptance of ethanol blended gasoline in Oklahoma. *Biomass & Bioenergy.* 27(5):437-444.

Cumba, H. and D. Bellmer. 2004. Biodegradation of Cellulosic Waste from the Food Industry. Presentation at World Congress on Industrial Biotechnology and Bioprocessing, Orlando, Florida, April 21- 23.