



## Martin Okos

Ph.D. Ohio State University - 1975

### Professor

Ag. & Biological Engineering Department Outstanding Counselor Award –  
2001, 2003, 2005, 2007  
AIChE Fellow Award – 2008

### Research Areas:

Food & Bioprocess Engineering. Heat & mass transfer in foods. Computer-aided process design. Continuous fermentors. Experimental & computer-aided research in optimization of food & bioprocesses.

### Classes Taught:

ABE 555 – Biological and Food Processing Unit Operations  
ABE 556 – Biological and Food Process Design

### Selected Publications (last 5 years):

- Penner, A., Hailemariam, L., Okos, M., and Campanella, O., "Lateral growth of a wheat dough disk under various growth conditions." *Journal of Cereal Science*, Volume 49, Issue 1, January 2009, Pages 65-72
- Boushey, B., Kelkar, S., Stella, S., and Okos, M., "Imaging techniques for dietary assessment: Strengths and limitations of nutrient databases for food density determination", *Journal of Food Composition and Analysis*, 2010
- Slininger, P., Dien, B., Lomont, J., Bothast, R., Ladisch, M., Okos, M., 2013 "Evaluation of a Kinetic Model for Computer Simulation of Growth and Fermentation by *Scheffersomyces (Pichia) stipitis* Fed D-Xylose" *Biotechnology and Bioengineering* Manuscript ID: 13-898
- Dhananjay A. Pai and Martin R. Okos 2013 "Predicting the density and tensile strength of viscoelastic soy powder compacts" *Journal of Food Engineering*.
- Dhananjay A. Pai, Anna Alsmann Hayes and Martin R. Okos. 2013. 'Modeling pharmaceutical compacts tensile strength based on viscoelastic properties'. *Powder Technology*
- Hartono, D., G. Joglekar, and M. Okos. 2013. Use of Computers in the Design of Food Manufacturing Facilities Chapter 9, *Handbook of Food Factory Design* (in press).

### Selected Technical Presentations (last 5 years):

- Sustainability of the US Food System –from field to table and beyond Martin Okos, Plenary Talks: Sustainability of Food Systems ,Conference of Food Engineering COFE09 April 5-8 2009 Columbus, Ohio 43215 USA
- Extruder scale down parameters for multipurpose use Amy Penner, Martin Okos, Osvaldo Campanella, Abstract: 170, Conference of Food Engineering COFE09 April 5-8 2009 Columbus, Ohio 43215 USA
- Simplified mathematical model of calcium absorption WangHee Lee, Martin R. Okos, David Umulis, and Connie Weaver, Abstract: 171 Conference of Food Engineering COFE09 April 5-8 2009 Columbus, Ohio 43215 USA

Granulation of food and pharmaceutical powders Laura Ann Zimmer Rozzi, Anna Alsmann Hayes, Dhananjay Pai, Martin Okos, Abstract: 172, Conference of Food Engineering COFE09 April 5-8 2009 Columbus, Ohio 43215 USA

Project centered Biological and Food Process Engineering curriculum Amy Penner, Alice Robinson , and Martin Okos Abstract: 173 Conference of Food Engineering COFE09 April 5-8 2009 Columbus, Ohio 43215 USA

Scott Stella, and Martin Okos, "DEVELOPMENT OF DENSITY PREDICTION METHODOLOGY," 34th National Nutrient Databank Conference, July 2010.

Shivangi Kelkar, Scott Stella, and Martin Okos, "DETERMINATION OF FOOD VOLUME AND POROSITY USING IMAGING METHODS", 34th National Nutrient Databank Conference, July 2010.

Martin Okos, "REVIEW OF MEASURING AND PREDICTING DENSITY OF FOODS", 34th National Nutrient Databank Conference, July 2010

D.A. Pai and M.R. Okos. 2010. Role of viscoelastic properties in modeling the density of pharmaceutical compacts. American Institute of Chemical Engineers Annual Conference, Salt Lake City, UT.

Shivangi Kelkar and Martin Okos 2012, "Direct Density Measurement of Porous Foods using X-rays", 11th Conference of Food Engineering, April 1st-4th, Leesburg, VA

Shivangi Kelkar<sup>1</sup>, Martin Okos<sup>1</sup>, Carol J Boushey, 2012. Determination of Food Density using X-Ray Imaging". Presented at ICDAM12, June 14-18, Rome Italy.