Name	**Timothy A. Taylor**
Academic rank	Associate Professor (1999 – present)
Specialization area	Biological Engineering: Bioprocessing
Education	Ph.D. in Biological and Agricultural Engineering, University of California, Davis (1993)
	M.S. in Food Science, University of California, Davis (1987)
	B.S. in Biological Science, Minor in Chemistry, California State University, Stanislaus (1982)
Languages	English (native language)
Professional membership	Institute of Biological Engineering
	American Society of Agricultural Engineers (ASAE)
	American Institute of Chemical Engineers
	Institute of Food Technologists
Professional registration	None
Experience highlights	Associate Professor, Bioprocess Engineering, Department of Biological & Irrigation Engineering, USU (Aug 1999 - present)
	Assistant Professor, Bioprocess Engineering, Joint appointment in Food Science and Human Nutrition, Department of Biological & Agricultural Engineering, University of Missouri - Columbia (Aug 1994 - Aug 1999)
	Post-Doctoral Fellow, Department of Agricultural Engineering, University of Missouri - Columbia (Feb 1994 - Aug 1994). Responsible for applications of mathematical modeling of physical properties of biological materials.
	Process Team Leader/Research Engineer, The Pillsbury Company, Minneapolis, Minnesota (Oct 1991 - Jan 1994)
Teaching & research	*Teaching:* Engineering quantification of biological processes; Engineering properties of biological materials; Introduction to unit operations in biological engineering; Biological engineering design.
	Research: Research activities are focused primarily on cellular level changes that occur during the processing of biological materials. Recent research has focused on cellular physical property changes to plant cells grown in suspension culture with processing.
	Selected Research Grants: Taylor, T.A. *United States Department of Agriculture, National Research Initiative.* Changes in Cellular Structure and Physical Properties During the Freezing of Food (1996-1999).
Publications	Refereed publications: 10. Reports & technical papers: 20.
Principal publications of last five years	Chen, W., Taylor, T.A., and Tahani, H. 1999. Plant cell volume and surface area measurement utilizing confocal laser scanning microscopy and three-dimensional reconstruction methods. Proceedings of the Institute of Biological Engineering. 2, A1-A9.
	Hwang, C.H., Heldman, D.R., Chao, R.R., and Taylor, T. A. 1999. Changes in specific heat of starch due to gelatinization. Journal of Food Science. Volume 64: 141-144
	Sanders, D.A., Belyea, R.L., and Taylor, T.A. 1999. Degradation of spent casings with commercial cellulases. Bioresource Technology. 71, 125 –131.
	Roy, S., Taylor, T.A., and Kramer, H.L. 1999. Heat inactivation of Lipoxigenase and changes in cell wall Galacturonic acid in carrots during blanching and freezing. Lebensmittel-Wissenschaft und Technologie. Submitted.
	Roy, S., Taylor, T.A., and Kramer, H.L. 1999. Textural and ultrastructural

	changes in carrot tissue as affected by blanching and freezing. Journal of Food Science. (submitted).
	Taylor, T.A., Heldman, D.R., Chao, R.R., and Kramer, H.L. 1998. Simulation of the evaporative cooling process for tortillas. J. Food Process Engineering. 21, 5; 407- 425.
	Heldman, D.R. and Taylor, T.A. 1997. Modeling of Food Freezing. In: Quality of Frozen Foods. Erickson, M.C. and Hung, Y-C. Editors. pp. 51-64. Chapman Hall, New York, NY.
Awards	Outstanding Teacher Award, College of Engineering, University of Missouri (Dec 1997, May 1998 & Dec 1998)
	B.S. Schweigert Award for Outstanding Leadership and Academic Achievement, Department of Food Science, University of California, Davis (1990)
	Clorox Award for Outstanding Academic Achievement by a Graduate Student, University of California, Davis (1986)
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