

## Academic and Government Research

Round 4

9/26/2006

Item Designation	Title	Author	School/Area	Date
<b>Bath &amp; Tile Cleaners</b>	Biobased Products Alternative Agricultural Research and Commercialization Corporation	Armstrong, R.E	Purdue University	1999
	Life cycle assessment of a biobased process for producing 1, 3-propanediol	Ogletree, A.L.	Iowa State University	2004
	Bio Based Alternative Solvents: How Well Do They Work	Marshall, J. and H. Wilcox	University of Massachusetts	2003
<b>Clothing</b>	Evaluation of performance characteristics of hemp fabrics when home-dyed with fiber reactive dyes	Armitage, C.P.	California State University	2004
	The production of textile fibers from soy proteins	Huang, H.-C.	Iowa State University	1994
	Antibacterial finishing of cellulosic clothing materials	Xu, X.	University of California	2002
	Composite Nonwoven Materials Based on Kenaf and Other Natural Fibers, in International Development of Kenaf and Allied Fibers	Negulescu, I.I., Y. Chen, O.I. Chiparus, and D.V. Parikh	Louisiana State University	2004
	Activated carbon nonwoven, development of biobased composite products using agricultural resources	Jiang, N.	Louisiana State University	
	DuPont Textiles and Interiors Targets Nylon Intermediates for Sustained Growth	Hoffman, J.	Chemical Market Reporter	2002
	Polyactides: Plastics from Corn	Dorgan, J.	Colorado School of Mines	2003
	Biobased Fiber Production: Enzyme Retting for Flax/Linen Fibers	Akin, D.E., D.S. Himmelsbach, and W.H. Morrison	Russell Research Center	2000
<b>Concrete &amp; Asphalt Form Release</b>	New and Expanded Uses of Oilseed Products and By-Products	Wan, P., M. Dowd, I. Lima, M. Kuk, and O. Dailey	USDA ARS	2009
			Forest Products Laboratory	
		McDonald, A.	University of Idaho	
		Lippke, B.	University of Washington	
	General research	Agriculture-Based Industrial Lubricant Research Program	University of Northern Iowa	
<b>Cutting, Drilling, and Tapping Oils</b>	Temperature and surface damage under lubricated sliding rolling contacts (tribology, fatigue, wear)	Hsue, E.Y.	University of Wisconsin	1984
	General research	Agriculture-Based Industrial Lubricant Research Program	University of Northern Iowa	
	Industrial uses of soyoil: A market analysis	Janice L. Callum and Industrial Agricultural Products Center	University of Nebraska	1994

<b>De-Icers</b>	Production of calcium magnesium acetate from renewable biomass via microbial fermentations	Rindfusz, K.P.	Michigan State University	1992
	Corrosion electrochemistry of bridge structural metals in calcium magnesium-acetate	Kennelley, K.J.	University of Oklahoma	1986
	Hydrolysis and fermentation kinetics in the production of road deicing salt from low-grade biomass	Choi, C.H.	Kansas State University	1992
	Concrete deicing salts amelioration	McCann, S.P.	University of Windsor, Canada	1993
	The Center has a patent pending on a process for producing a road de-icer from whole kernel sorghum	Industrial Agricultural Products Center	University of Nebraska	
	What's That Stuff?- Airport Deicers	Ritter, S.	Chemical & Engineering News	2001
<b>Durable Plastic Films</b>	Development of PLA based blends and their nanocomposites for packaging applications	Chidambarakuma, M.	Michigan State University	2005
	PLA/nanoclay cast film composites using various polymer-clay concentrates	Lewitus, D.	University of Massachusetts	2004
	Structural mechanisms as revealed by real time mechano optical behavior of polylactic acid films	Ou, X.	University of Akron	2004
	Processing of blown-film nanocomposites of PLA and organically modified montmorillonite clay	Thellen, C.T.	University of Massachusetts	2003
	Analysis: Mechanical properties of biodegradable films made from blends of PLA and polybutylene succinate adipated random copolymer by blown film extrusion	Laverde, G.V.	University of Massachusetts	1997
	Effect of Molecular Weight on Polyurethane Film Properties	Glasser, W.G., S.S. Kelley, T.C. Ward, and T.G. Rials	Virginia Polytechnical Institute and State University	1989
	Reactive extrusion process produces biodegradable films and injection molded soy-based products	Narayan, R.	Michigan State University	2000
	ASTM standards help define and grow a new biodegradable plastics industry	Narayan, R. and C. Pettigrew	Michigan State University	1999
	A method of preparing biodegradable modified-starch moldable products and films	Narayan, R., S. Bloembergen, and A. Lathia	Michigan State University	1999
	Biodegradable moldable products and films comprising starches esters and polyesters	Bloembergen, S. and R. Narayan	Michigan State University	1995
	A case study of starch based biodegradable plastics	Narayan, R.	Michigan State University	1998
	Biodegradable plastics opportunities: biotechnology, national institution of standards and technology	Narayan, R.	Michigan State University	1993
	Biodegradability of PLA in composting environments	Snook, J.B.	Purdue University	1994
	Maleation of polylactide by reactive extrusion	Carlson, D., P. Dubois, L. Nie, and R. Narayan	Michigan State University	1999
	Free radical branching of polylactide by reactive extrusion	Carlson, D., P. Dubois, and R. Narayan	Michigan State University	1998

	Properties and prospects of PLA polymers	Witzke, D.	Purdue University	1997
	Rational and design for biodegradable plastics	Narayan, R.	Michigan State University	2003
	Modification of PLA via reactive extrusion	Carlson, D.	Purdue University	1995
	Developing new industrial uses for proteins found in soybeans and wheat: Films, coatings and adhesives	Industrial Agricultural Products Center	University of Nebraska	
	Laboratory Composting of Polylactic Acid Industrial Agricultural Products Center	Weber, R.	University of Nebraska	
	Effects of storage time on properties of soybean protein-based plastics	Mo, X. and X. S. Sun	Kansas State University	2002
	Plastic performance of soybean protein components	Sun, X., H.-R. Kim, and X. Mo	Kansas State University	1999
		Bailey, C.A.	Cooperative State Research, Education & Extension Service	
		Kaempf, D.	Biomass Research & Development Initiative	
	Industrial Bioproducts: Today and Tomorrow	Paster, M., J.L. Pellegrino, and T.M. Carole	Energetic, Incorporated, Columbia, Maryland for the US Department of Energy	2003
	Analysis of Zein by Matrix-assisted Laser Desorption /Ionization Mass Spectrometry	Wang, J.-F., P.H. Geil, D.R.J. Kolling, and G.W. Padua	University of Illinois	2003
	Plasticulture practices fro early fresh market cantaloupe production	Bartolo M.E. and F.C. Schweissing	Colorado State University	2003
	Polyactides: Plastics from Corn	Dorgan, J.	Colorado School of Mines	2003
	Polylactide Stereochemistry: Effect on Enzymatic Degradability	Reeve, M.S., S.P. McCarthy, M.J. Downy, and R.A. Gross	University of Massachusetts	1994
<b>Fire Arm Lubricants</b>	Soy Lubes: No. 1 with a bullet	James, W.	University of Northern Iowa	2002
	New lubricants from vegetable oil	Filley, J.	Colorado School of Mines	2004
	Development of biobased synthetic fluids: application of molecular modeling to structure-physical property relationship	Adhvaryu, A., B.K. Sharma, H.S. Hwang, S.Z. Erhan, and J.M. Perez	American Chemical Society	2005
	Friction and Wear Behavior of Biobased Lubricant Additives	Sharma, B., J. Perez, and S. Erhan	USDA ARS	2006
	Use of Vegetable Oils in Functional Fluids	Erhan, S., A. Adhvaryu, and Z. Liu	USDA ARS	2002
	Soybean Oil-Based Base Stocks	Erhan, S.	USDA ARS	2001
	Friction Behavior of Some Seed Oils: Bio-Based Lubricant Applications	Adhvarya, A., G. Biresaw, B. Sharma, and S. Erhan	USDA ARS	2006

	Synthesis and Characterization of Biobased Lubricant Additives	Sharma, B., J. Perez, and S. Erhan	USDA ARS	2006
	General research	Agriculture-Based Industrial Lubricant Research Program	University of Northern Iowa	
<b>Floor Strippers</b>	No Results			
<b>Laundry Products</b>	Biobased Products Alternative Agricultural Research and Commercialization Corporation	Armstrong, R.E	Purdue University	1999
	Life cycle assessment of a biobased process for producing 1, 3-propanediol	Ogletree, A.L.	Iowa State University	2004
	Industrial products – the return to carbohydrate-based industries	Louwrier, A.	Longmead Business Centre Epsom, Surrey U.K.	1998
<b>Wood &amp; Concrete Sealers &amp; Coatings</b>	Use of bonding agents to improve the performance of wood polymer composites	Larsen, L.S.	State University of New York	1999
	Patents for innovative wood-preservative process	Agriculture-Based Industrial Lubricant Research Program	University of Northern Iowa	2004
	Patent: Chitin-based Coatings	Glasser, W.G., G. Samaranayake, and A. Toffey	Virginia Polytechnic Institute and State University	
		Bailey, C.A.	Cooperative State Research, Education & Extension Service	
		Kaempf, D.	Biomass Research & Development Initiative	
	General research	Coating Research Institute	Eastern Michigan University	
	Wood Preservation	Clausen, C.	Forest Products Laboratory	
	Innovation and Economics for Replacement of Fossil Fuel Products	Ladisch, M.	Purdue University	2005
	Biobased Products Alternative Agricultural Research and Commercialization Corporation	Armstrong, R.E	Purdue University	1999