

## **Susan E. M. Selke**

Professor  
School of Packaging  
Michigan State University  
East Lansing, MI 48824-1223

### **EDUCATION**

Ph.D. Chemical Engineering, Michigan State University, 1984.  
M.S. Chemical Engineering, Michigan State University, 1981.  
B.S. Mathematics, Michigan State University, 1968. With high honor.

### **PROFESSIONAL EXPERIENCE**

2015 - Present    Director, School of Packaging, Michigan State University

1995 - Present    Professor, School of Packaging, Michigan State University  
Adjunct Professor, Chemical Engineering, Michigan State University

2010 - Present    Member, editorial board, *Packaging Journal*, Hunan University of Technology, Hunan, China

2001 - Present    Member, editorial board, *Resources, Conservation and Recycling*, Elsevier Science, Oxford, England

2014 - 2015        Interim Director, School of Packaging, Michigan State University

2006 - 2015        Associate Director, School of Packaging, Michigan State University

2007 - 2009        Acting Director, School of Packaging, Michigan State University

4/2004 - 9/2004    Acting Director, School of Packaging, Michigan State University

1997 - 2004        Editor, *Reuse/Recycle*, Sage Pub. (formerly Technomic Pub.)

1997 - 2004        Contributor, environmental issues, *Food, Cosmetics and Drug Packaging*, PJ Barnes & Assoc., Bridgewater, England

1989-1995         Associate Professor, School of Packaging, Michigan State University  
Adjunct Associate Professor, Chemical Engineering, Michigan State University

1984-1989         Assistant Professor, School of Packaging, Michigan State University  
Adjunct Assistant Professor, Chemical Engineering, Michigan State University

1983                Instructor, Dept. of Chemical and Materials Engineering, University of Iowa

1982-1983         Teaching Assistant, Chemical Engineering, Michigan State University

1979-1983         Research Assistant, Chemical Engineering, Michigan State University

### **AWARDS**

2012                Michigan State University Distinguished Faculty Award

**PROFESSIONAL ACTIVITIES**

American Institute of Chemical Engineers, member  
American Chemical Society, member  
American Association for the Advancement of Science, member  
Society of Plastics Engineers, member  
Michigan State University Leadership Fellow, 1996-1997  
Member, Award Judging Panel, 2008 DuPont Awards, 1996 DuPont Awards, 1994 DuPont Awards, 1991 DuPont Awards  
Member, Committee on Shipboard Pollution Control, National Research Council, 1994-1995  
Member, Award Judging Panel, P.O.P. "Design of the Times," 1993  
Member, representing Universities, Plastics Recycling Development Fund Consortium, State of Michigan, 1989-1992  
Chair, Environmental Award Judging Panel, 1989 DuPont Awards  
Member, Steering Committee, Conservation Foundation's Design for Waste Reduction Project, 1989-1990

**PUBLICATIONS**

(\* indicates peer review; for multiple authors, lead author is underlined; if nothing underlined, all authors made approximately equal contribution)

## 1. Books:

1. *Cartons, Crates and Corrugated Board: Handbook of Paper and Wood Packaging Technology*, 2<sup>nd</sup> ed., D. Twede, S. Selke, D. Kamdem, D. Shires, DEStech Pub. Inc., Lancaster, PA, 2015.
2. *Poly(lactic acid): Structures, Production, Synthesis, and Applications*, R. Auras, L. Lim, S. Selke, T. Hideto, eds., Wiley, New York, 2010.
3. *Cartons, Crates and Corrugated Board: Handbook of Paper and Wood Packaging Technology*, D. Twede and S. Selke, DEStech Pub. Inc., Lancaster, PA, 2005.
4. *Plastics Packaging: Properties, Processing, Applications, and Regulations*, 2<sup>nd</sup> ed., S. Selke, J. Culter, and R. Hernandez, Hanser Pub., Munich, 2004.
5. *Plastics Packaging: Properties, Processing, Applications, and Regulations*, R. Hernandez, S. Selke, and J. Culter, Hanser Pub., Munich, 2000. (also published as Chinese translation)
6. *\*Understanding Plastics Packaging Technology*, S. Selke, Hanser Pub., Munich, 1997. (also published as Chinese translation)
7. *Biodegradation and Packaging*, 2<sup>nd</sup> ed., S. Selke, Pira Reviews of Packaging, Antony Rowe Ltd., Chippenham, Wiltshire, UK, 1996.
8. *Packaging and the Environment: Alternatives, Trends and Solutions*, rev. ed., S. Selke, Technomic Pub. Co. Inc., 1994.
9. *A Technical Framework for Life-Cycle Assessment*, J. Fava, R. Denison, B. Jones, M. Curran, B. Vigon, S. Selke, J. Barnum, eds., Society of Environmental Toxicology and Chemistry, Washington, D.C., 1991.
10. *Biodegradation and Packaging*, S. Selke, Pira Reviews of Packaging, Antony Rowe Ltd., Chippenham, Wiltshire, UK, 1990.
11. *Packaging and the Environment: Alternatives, Trends and Solutions*, S. Selke, Technomic Pub. Co., 179 pp. (1990). (also published as German translation)

## 2. Book Chapters:

## 2A Full Chapters:

1. \*"Food Packaging," J. Shin and S. Selke, in S. Clark, S. Jung and B. Lamsal, *Food Processing: Principles and Applications, 2<sup>nd</sup> ed.*, Wiley, pp. 249-273, 2013. (pub. 2014)
2. "Green Packaging," S. Selke, in J. Boye and Y. Arcand, eds., *Green Technologies in Food Production and Processing*, Springer, pp 443-468, 2012.
3. \*"Green Product Packaging Options and Considerations," S. Selke, in W. Schroeder, ed., *Sustainable Cosmetic Product Development*, Allured, Chapter 8, 2011.
4. "Poly(lactic acid) Blends," S. Detyothin, A. Kathuria, W. Jaruwattanayon, S. Selke and R. Auras, in R. Auras, L. Lim, S. Selke, T. Hideto, eds., *Poly(lactic acid): Structures, Production, Synthesis, and Applications*, Wiley, New York, pp 227-271, 2010.
5. \*"Environmental and Social Impacts of Nanotechnology in Packaging," S. Selke & N. Nordin, Ch. 14 in *Packaging Nanotechnology*, A. Mohanty, M. Misra, H. Nalwa, eds, American Scientific Publishers, Valencia, CA, pp. 305-331, 2009.
6. "Plastics Recycling and Biodegradable Plastics," S. Selke, in C. Harper, ed., *Handbook of Plastics Technologies*, McGraw-Hill, New York, 8.1-8.109, 2006.
7. "Natural Fibers, Biopolymers and Biocomposites: An Introduction," A. Mohanty, M. Misra, L. Drzal, S. Selke, B. Harte and G. Hinrichsen, in A. Mohanty, M. Misra, and L. Drzal, eds., *Natural Fibers, Biopolymers, and their Biocomposites*, CRC Press LLC, pp. 1-36, 2005.
8. \*"Food Packaging: Plastics," S. Selke, in Y. Hui, ed., *Handbook of Food Technology and Engineering, Vol. 3* CRC Taylor & Francis, Boca Raton, pp. 131-1 - 131-15, 2005.
9. \*"The Environmental Impacts of Detergent Packaging: the Case of Plastic Bottles," S. Selke, in U. Zoller, ed., *Handbook of Detergents, Part B: Environmental Impact*, Surfactant Science Series Vol. 121, Marcel Dekker, New York, pp. 299-316, 2004.
10. "Plastics in Packaging," S. Selke, in A. Andrady, ed., *Plastics and the Environment*, Wiley-Interscience, New Jersey, pp. 139-183, 2003.
11. "Applications of Plastic Films in Packaging," S. Selke, in E.M. Abdel-Bary, ed., *Handbook of Plastic Films*, Rapra Technology, Ltd., Shrewsbury, Shropshire, UK, pp. 235-262, 2003.
12. "Plastics Recycling," S. Selke, in C. Harper, ed., *Handbook of Plastics, Elastomers, and Composites*, 4th ed., McGraw-Hill, New York, pp. 693-757, 2002.
13. "Materials Recycling," S. Selke, in C. Harper, ed., *Handbook of Materials for Product Design*, McGraw-Hill, New York, pp. 14.1-14.106, 2001.
14. "Plastics Recycling and Biodegradable Plastics," S. Selke, in C. Harper, ed., *Modern Plastics Handbook*, McGraw-Hill, New York, pp. 12.1-12.108, 2000.
15. "Packaging Options," S. Selke, in J. Dalzell, *Food Industry and the Environment in the European Union: Practical Issues and Cost Implications, 2<sup>nd</sup> ed.*, Aspen Publishers, Inc., Gaithersburg, MD, pp. 253-290, 1999.

16. \*"Recycling of Plastic Materials," S. Selke, in C. Harper, ed., *Handbook of Plastics, Elastomers, and Composites*, 3rd ed., McGraw-Hill, New York, pp. 11.1-11.54, 1996.
17. \*"Packaging Options," S. Selke, in J. Dalzell, ed., *Food Industry and the Environment*, Blackie, Glasgow, pp. 283-317, 1994.
18. "Anhydrous Hydrogen Fluoride in Polysaccharide Solvolysis and Glycoprotein Deglycosylation," G. Rorrer, M. Hawley, S. Selke, D. Lamport and P. Dey, *Methods in Plant Biochemistry, Vol. 2 Carbohydrates*, P. M. Dey, ed., Academic Press, New York, p. 581-606, 1990.
19. "Hydrogen Fluoride Saccharification of Lignocellulosic Materials." Hawley, M.C., Downey, K.W., Selke, S.M. *Advances in Cellulose Chemistry and Technology*, R. Young, ed., pp. 297-322, 1986.
20. "Reaction Rates for Liquid Phase HF Saccharification of Wood. Selke, S., Hawley, M.C., Lamport, D.T.A. *Wood and Agricultural Residues: Research on Use for Feed, Fuels and Chemicals*. E. Soltes, ed., Academic Press, New York, pp. 329-349, 1983.
21. "Hydrogen Fluoride Saccharification: The Key to Ethanol From Wood?" Lamport, D.T.A., Hardt, H., Smith, G., Mohrlök, S., Hawley, M.C., Chapman, R., Selke, S. *Energy From Biomass*, W. Palz et. al., eds., Applied Sci. Publ. Ltd., London, pp. 292-297, 1981.

#### 2B Encyclopedia Articles:

1. \*"Nanotechnology and Packaging," S. Selke, in *Wiley Encyclopedia of Packaging Technology*, 3<sup>rd</sup> ed., K. Yam, ed., Wiley, Hoboken, NJ, 813-818, 2009.
2. \*"Environmental Impact of Packaging," S. Selke, in *Wiley Encyclopedia of Packaging Technology*, 3<sup>rd</sup> ed., K. Yam, ed., Wiley, Hoboken, NJ, 400-408, 2009.
3. "Recycling: Polymers," S. Selke, *Encyclopedia of Materials: Science and Technology*, Pergamon, pp. 8075-8079, 2001.
4. "Recycling of Paper Products," S. Selke, *Encyclopedia of Materials: Science and Technology*, Pergamon, pp. 8070-8075, 2001.
5. "Packaging: Corrugated Paperboard," R. Hernandez and S. Selke, *Encyclopedia of Materials: Science and Technology*, Pergamon, pp. 6637-6642, 2001.
6. "Packaging, Papers for Sacks, Bags, and Wraps," R. Hernandez and S. Selke, *Encyclopedia of Materials: Science and Technology*, Pergamon, pp. 6642-6646, 2001.
7. "Packaging: Polymers for Containers," S. Selke and R. Hernandez, *Encyclopedia of Materials: Science and Technology*, Pergamon, pp. 6646-6652, 2001.
8. "Packaging: Polymers in Flexible Packaging," S. Selke and R. Hernandez, *Encyclopedia of Materials: Science and Technology*, Pergamon, pp. 6652-6656, 2001.
9. \*"Environment," S. Selke, in A.L. Brody and K.S. Marsh, eds., *Wiley Encyclopedia of Packaging Technology*, McGraw-Hill, New York, pp. 343-348, 1997.

## 3. Articles (in refereed journals):

1. "Effects of molecular weight and grafted maleic anhydride of functionalized polylactic acid (PLA) used on reactive compatibilized binary and ternary blends of PLA and thermoplastic cassava starch," S. Detyothin, S. Selke, R. Narayan, M. Rubino, R. Auras, *Journal of Applied Polymer Science*, in press.
2. "Life Cycle Inventory Data Quality Issues for Bioplastics Feedstocks," A. Grabowski, S. Selke, R. Auras, M. Patel, R. Narayan, *International Journal of Life Cycle Assessment*, 20:584-596, doi:10.1007/s11367-015-0853-3, 2015.
3. "Choice of Life Cycle Assessment Software Can Impact Packaging System Decisions," R. Speck, S. Selke, R. Auras, J. Fitzsimmons, *Packaging Technology and Science*, DOI: 10.1002/pts.2123, 2015.
4. "LCA software: selection can impact results," R. Speck, S. Selke, R. Auras, J. Fitzsimmons, *Journal of Industrial Ecology*, DOI:10.1111/jiec.12245, 2015.
5. "A preliminary LCA case study: comparison of different pathways to produce purified terephthalic acid suitable for synthesis of 100% bio-based PET," Y. Akanuma, S. Selke, R. Auras, *International Journal of Life Cycle Assessment*, doi:10.1007/s11367-014-0725-2, **19**:1238-1246, 2014.
6. "Continuous blending approach in the manufacture of epoxidized soybean-plasticized poly(lactic acid) sheets and films," S. Vijayarajan, S. Selke, L. Matuana, *Macromolecular Materials and Engineering*, doi: 10.1002/mame.201300226, **299**:622-630, 2014.
7. "Reactive functionalization of poly(lactic acid), PLA: Effects of the reactive modifier, initiator and processing conditions on the final grafted maleic anhydride content and molecular weight of PLA," S. Detyothin, S. Selke, R. Narayan, M. Rubino, R. Auras, *Polym. Deg. Stability*, 98:2697-2708, doi: 10.1016/j.polymdegradstab.2013.10.001, 2013.
8. "Comparison of bacon packaging on a life cycle basis: a case study," D. Kang, N. Sgriccia, S. Selke, R. Auras, *J. of Cleaner Production*, 54:142-149, doi 10.1016/j.jclepro.2013.05.008, 2013.
9. "Migration of  $\alpha$ -tocopherol and resveratrol from poly-L-lactic acid/starch blends films into ethanol," S. Hwang, J. Shim, S. Selke, H. Soto-Valdez, L. Matuana, M. Rubino, R. Auras, *Journal of Food Engineering*, 116(4):814-828, doi:10.1016/j.jfoodeng.2013.01.032, 2013.
10. "Critical aspects in the life cycle assessment (LCA) of bio-based materials – reviewing methodologies and deriving recommendations," P. Pawelzik, M. Carus, J. Hotchkiss, R. Narayan, S. Selke, M. Wellisch, M. Weiss, B. Wicke, M.K. Patel, *Resources, Conservation and Recycling*, 73:211-228, doi 10.1016/j.resconrec.2013.02.006, 2013.
11. "Effect of Maleic Anhydride Grafting Reaction on the Physical and Mechanical Properties of Poly(L-lactic acid)/Starch Blends," S. Hwang, J. Shim, S. Selke, H. Soto-Valdez, M. Rubino, R. Auras, *Macromolecular Materials & Engineering*, doi:10.1002/mame.201200111, 2012.
12. "Assessment of the properties of poly(L-lactic acid) sheets produced with differing amounts of postconsumer recycled poly(L-lactic acid)," D. Chariyachotilert, S. Joshi, S. Selke, R. Auras, *J Plastic Film & Sheeting*, doi:10.1177/8756087911434337, 2012.
13. "Grafting of Maleic Anhydride on Poly(L-lactic acid). Effects on Physical and Mechanical Properties," S. Hwang, S. Lee, C. Lee, J. Lee, J. Shim, S. Selke, H. Soto-Valdez, L. Matuana, M. Rubino, R. Auras, *Polymer Testing*, 31 (2): 333-344, doi:10.1016/j.polymertesting.2011.12.005, 2012.

14. \*"Poly(L-lactic acid) with Added  $\alpha$ -Tocopherol and Resveratrol. Optical, Physical, Thermal and Mechanical Properties," S. Hwang, J. Shim, S. Selke, H. Soto-Valdez, L. Matuana, M. Rubino, R. Auras, *Polymer International*, 61 (3): 418-425, DOI: 10.1002/pi.3232, 2012.
15. \*"Poly(L-lactic acid) metal organic framework composites, mass transport properties," D. Elangovan, U. Nidoni, I. Yuzay, S. Selke, R. Auras, *Ind Eng Chem Res*, doi:10.1021/ie201378u, 50:11136-11142, 2011.
16. \*"Poly(L-lactic acid) metal organic framework composites: optical, thermal and mechanical properties," D. Elangovan, I. Yuzay, S. Selke, R. Auras, *Polym Int*, doi:10.1002/pi3186, 61:30-37, 2011.
17. \*"Formulation selection of aliphatic aromatic biodegradable polyester film exposed to UV/solar radiation," T. Kijchavengkul, R. Auras, M. Rubino, S. Selke, M. Ngouajio, R.T. Fernandez, *Polym Degrad Stab*, doi:10.1016/j.polymdegradstab.2011.07.001, 96:1919-1926, 2011.
18. \*"Use of a controlled chlorine dioxide (ClO<sub>2</sub>) release system in combination with modified atmosphere packaging (MAP) to control the growth of pathogens," J. Shin, B. Harte, S. Selke and Y. Lee, *J. of Food Quality*, doi: 10.1111/j.1745-4557.2011.00381.x, 34:220-228, 2011.
19. \*"Biodegradation and hydrolysis rate of aliphatic aromatic polyester," T. Kijchavengkul, R. Auras, M. Rubino, S. Selke, M. Ngouajio, R.T. Fernandez, *Polym Degrad Stab*, doi:10.1016/j.polymdegradstab/2010.07.018, 95:2641-2647, 2010.
20. \*"Effects of synthetic and natural zeolites on morphology and thermal degradation of poly(lactic acid) composites," I. Yuzay, R. Auras, H. Soto-Valdez, S. Selke, *Polym Degrad Stab*, 95:1769-1777, 2010
21. \*"Active Packaging of Fresh Chicken Breast, with Allyl Isothiocyanate (AITC) in Combination with Modified Atmosphere Packaging (MAP) to Control the Growth of Pathogens," J. Shin, B. Harte, E. Ryser, S. Selke, *J. Food Sci.*, 75(2):M65-M71, 2010.
22. \*"Bioadhesive from Distiller's Dried Grains with Solubles," C.Q. Fang, R. Auras, S.E. Selke, *Adv. Materials Research*, 87-88:357-361, 2010.
23. \*"Poly(lactic acid)/Aluminum Oxide Composites Fabricated by Sol-gel and Melt Compounding Processes," I. Yuzay, R. Auras, S. Selke, *Macromolecular Materials and Engineering*, 295:283-292, 2010.
24. \*"Poly(lactic acid) and Zeolite Composites Prepared by Melt Processing: Morphological and Physical-Mechanical Properties," I. Yuzay, R. Auras, S. Selke, *J App Polym Sci*, 15:2262-2270, 2010.
25. \*"Production and Properties of Spin-Coated Cassava-Starch-Glycerol-Beeswax Films," R. Auras, B. Arroyo and S. Selke, *Starch/Staerke*, 61:463-471, 2009.
26. \*"A Discussion of Net Water Gain for Water Vapor Transmission Rate Determinations," S. Yoon, D. Sparks, S. Selke, *Pharmacoepial Forum*, 35(2):488-492, 2009.
27. \*"Effects of Wood Flour and Chitosan on Mechanical, Chemical and Thermal Properties of Poly lactide," B. Shah, S. Selke, M. Walters and P. Heiden, *Polymer Composites*, 29:655-663, 2008 (available online, DOI 10.1002/pc.20415).
28. \*" Compostability of Bioplastic Packaging Materials: An Overview," G. Kale, T. Kijchavengkul, R. Auras, M. Rubino, S. Selke, S. Singh, *Macromolecular Bioscience*, 7:255-277, 2007.
29. \*"Development of Electronic Nose Method for Evaluation of Residual Solvent in Low-density Polyethylene Films," I. Yuzay and S. Selke, *Packaging Tech. & Science*, 20:99-112, 2007.

30. \*Development of electronic nose method for evaluation of HDPE flavour characteristics, correlated with organoleptic testing,” R. Das, S. Selke and J. Harte, *Packaging Technology and Science*, 20:125-136, 2007.
31. \*An Overview of the State of Lifecycle Assessment and its Application to Packaging,” D. Martino, S. Joshi, S. Selke, *J. Applied Packaging Research*, 1(1):23-48, 2006.
32. \*Strategy to Produce High Void Fraction in Microcellular Foam Polyolefins,” P. Rachtanapun and S. Selke, *Chiang Mai University Journal*, 5(1):15-31, 2006.
33. \*The Role of Container-Closure Systems in Stability Testing for Climate Zone IV,” H. Lockhart, S. Selke, and S. Yoon, *Pharmaceutial Forum*, 32:688-694, 2006.
34. \*Sorption of ethyl acetate and d-limonene in poly(lactide) polymers,” R. Auras, B. Harte, and S. Selke, *J. Sci Food Agric*, 86:648-656, 2006.
35. \*An Overview of Polylactides as Packaging Materials,” R. Auras, B. Harte, and S. Selke, *Macromolecular Bioscience*, 4(9):835-864, 2004.
36. \*Characterization of Microcellular Foamed Polyolefin Blend Composites with Wood Fiber,” P. Rachtanapun, S. Selke, and L. Matuana, *Int. J. Polymeric Materials*, 53:971-983, 2004.
37. \*Evolution of thermograph parameters during the oxidation of extra virgin olive oil,” A. Kanavouras and S. Selke, *European J. Lipid Sci. Tech.*, 106:359-368, 2004.
38. \*Oxidation-Derived Flavor Compounds as Quality Indicators for Packaged Olive Oil,” A. Kanavouras, P. Hernandez-Munoz, F. Coutelieres, and S. Selke, *J. Amer. Oil Chemists Soc.*, 81:251-257, 2004.
39. \*Effect of the High-density Polyethylene Melt Index on the Microcellular Foaming of High-density Polyethylene/Polypropylene Blends,” P. Rachtanapun, S. Selke, L. Matuana, *J. App. Polym Sci.*, 93:364-371, 2004.
40. \*Effect of Water on the Oxygen Barrier Properties of Poly(ethylene Terephthalate) and Polylactide Films,” R. Auras, B. Harte, S. Selke, *J. Appl. Polym. Sci.*, 92:1790-1803, 2004.
41. \*Relationship between Cell Morphology and Impact Strength of Microcellular Foamed High Density Polyethylene/Polypropylene Blends,” P. Rachtanapun, S. Selke, L. Matuana, *Polymer Eng. & Sci.*, 44:1551-1560, 2004.
42. \*Wood Fiber/Polyolefin Composites,” S. Selke and I. Wichman, *Composites, Part A*, Vol 35/3 pp 321-326, 2004.
43. \*Mechanical, Physical, and Barrier Properties of Poly(lactide) Films,” R. Auras, B. Harte, S. Selke and R. Hernandez, *J. Plast. Film & Sheeting*, 19:123-135, 2003.
44. \*Testing the FDA’s Mandate for Over-the-Counter Medication Labels,” L. Bix, H. Lockhart, F. Cardoso, and S. Selke, *J. Pharmaceutical Marketing & Mgt.*, 15(4):17-36, 2003.
45. \*Is x-height a Better Indicator of Legibility than Type Size for Drug Labels?” L. Bix, H. Lockhart, S. Selke, F. Cardoso and M. Olejnik, *Packag. Technol. Sci.*, 16:199-207, 2003.
46. \*Application of a Computer Model to Evaluate the Ability of Plastics to Act as Functional Barriers,” J. Han, S. Selke, T. Downes and B. Harte, *Packaging Technol. Sci.*, 16:107-118, 2003.

47. \*"The Effect of Color Contrast on Message Legibility," L. Bix, H. Lockhart, F. Cardoso, S. Selke, *Journal of Design Communication*, Spring 2003.
  48. \*"Microcellular foam of polymer blends of HDPE/PP and their composites with wood fiber," P. Rachtanapun, S. Selke, and L. Matuana, *J. Appl. Polym. Sci.*, 88:2842-2850, 2003.
  49. \*"Degradable Plastics," M. Booma, S. Selke and J. Giacin, *J. of Elastomers and Plastics*, 26:104-142, 1994.
  50. \*"Properties of Recycled High Density Polyethylene from Milk Bottles", C. Pattanakul, S. Selke, C. Lai, & J. Miltz, *J. of App. Polym. Sci.*, 43:2147-2150, 1991.
  51. \*"Composites From Compounding Wood Fibers With Recycled High Density Polyethylene", K.L. Yam, B.K. Gogoi, C.C. Lai & S.E. Selke, *Polymer Eng. & Sci.*, 30:693-699, 1990.
  52. "Developments and Applications of Recycled Plastics", Lai, C., Selke, S., *Packaging Technology and Science*, 1:157-160, 1988.
  53. \*"Recycling of Plastic Packaging in the United States", Selke, S. *Packaging Technology & Science*, 1:93-98, 1988.
  54. "Plastics Recycling - Will It Work?" Selke, S. *Journal of Packaging Technology*, 1(5):150-151, 1987.
  55. \*"Feasibility of Using Anhydrous Hydrogen Fluoride to 'Crack' Cellulose." Smith, J.J., Lamport, D.T.A., Hawley, M.C. and Selke, S.M. *J. Appl. Polymer Sci.*, Appl. Polym. Symp. 37, pp. 641-651, 1983.
  56. \*"A Comparison of HF Saccharification with Other Saccharification Technologies." Hawley, M.C., Selke, S., Lamport, D.T.A. *Energy in Agriculture*, 2:219-244, 1983.
  57. \*"Chemicals from Wood via HF." Selke, S.M., Hawley, M.C., Hardt, H., Lamport, D.T.A., Smith, G., Smith, J. *Ind. Eng. Chem. Prod. Res. Dev.*, 21:11-16, 1982.
4. Bulletins or Monographs:
1. *Recycling of High Density Polyethylene Milk Bottles*, Technical Report #18, (July 1, 1986 - June 30, 1987), Selke, S.E., Lai, C.C., Johnson, D., Yam, K., Grulke, E., Hernandez, R., Drzal, L., Pattanakul, C., Kalyankar, V., Toebe, J., Chou, S. Center for Plastics Recycling Research, Rutgers, The State University of New Jersey, 1987.
  2. *Recycled Plastics, Developments and Applications*, Lai, C., Yam, K., Selke, S., eds. Proceedings, 1987 Technical Seminar, School of Packaging, Michigan State University, 1987.
  3. *Recycling of High Density Polyethylene Milk Bottles*, Technical Report #15, (January 1 - June 30, 1986), Selke, S.E., Grulke, E.A., Johnson, D.I., Lai, C.C., Miltz, J. Plastics Recycling Institute, Rutgers, The State University of New Jersey, 1986.
  4. *Recycling of High Density Polyethylene Milk Bottles*, Technical Report #6, (7/1/85-12/31/85), Selke, S.M., Lai, C.C., Miltz, J., Grulke, E., Johnson, D.I. Plastics Recycling Institute, Rutgers, The State University of New Jersey, 1986.



## 5. Reviews:

1. "Polymers, the Environment and Sustainable Development," book review, S. Selke, *Food, Cosmetics and Drug Packaging*, 26(11):214-216, 2003.
2. "The Environmental and Economic Benefits of Refillable Beverage Containers," report review, S. Selke, *Food, Cosmetics and Drug Packaging*, 26(1):10-12, 2003.
3. "Re-examining the role of 'Extended Producer Responsibility,'" report review, S. Selke, *Food, Cosmetics and Drug Packaging*, 25(9):176-177, 2002.
4. "What We Learned in the Rainforest: Business Lessons from Nature," book review, S. Selke, *Food, Cosmetics and Drug Packaging*, 25(5):94-95, 2002.
5. "Handbook of Food Packaging Chemicals and Materials," book review, S. Selke, *Food, Cosmetics and Drug Packaging*, 23(9):167-169, 2000.

## 6. Conference proceedings and other publications:

1. "Development and characterization of zeolite embedded cellulose fibers and poly(L-lactic acid) composites for packaging applications," I. Yuzay and S. Selke, Proceedings, 18<sup>th</sup> IAPRI World Packaging Conference, Cal Poly State University, 2012.
2. "Effect of maleic anhydride on the reactive blending of poly(L-lactic acid)/starch," S. Hwang, J. Shim, S. Selke, H. Soto-Valdez, M. Rubino, R. Auras, Proceedings, 18<sup>th</sup> IAPRI World Packaging Conference, Cal Poly State University, 2012.
3. "Poly(lactic acid) added with  $\alpha$ -tocopherol and resveratrol. I. Optical, physical, thermal and mechanical properties," S. Hwang, S. Lee, K. Cho, J. Shim, S. Selke, H. Soto-Valdez, M. Rubino, L. Matuana, R. Auras, Annual Technical Conference - ANTEC, Conference Proceedings, pp. 312-316, 2011.
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5. "Thermal and Mechanical Properties of Polylactide-Nanoporous Zeolite Composites" I. Yuzay, R. Auras, & S. Selke, Proceedings, AIChE Annual Meeting, Philadelphia, PA Nov 16-21, 2008.
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## COMMITTEE WORK

### University

- University Appeals Board, 1985-1987, 2012-present  
Academic Council, 1988-1992  
Faculty Liaison Group to the Board of Trustees, 1988-1990, 1993-1995  
University Committee on the Academic Environment, 1990-1992  
Public Safety Oversight Committee, 1991-1992  
University Hearing Board, 1991-1994  
University Committee on Faculty Affairs, 1993-1997 (Personnel Subcommittee Chair, 1995-1997)  
University Committee on Student Affairs, 2005-2006  
University Committee on Faculty Tenure, 2006-2008 (chair 2007-2008)

### College

- Academic Council Liaison to CANR College Advisory Committee, 1988-1989  
CANR Advisory Committee, 1991-1993, 1997-1999 (Chair 1998-1999)  
CANR Graduate Committee, 2001-2004 (Chair 2002-2003)  
CANR Reappointment, Tenure and Promotion Committee, 2012-2015

### School of Packaging

- Advisory Committee, 1985-1987, 1990-1994, 1997-2004 (Chair 2001-2004, 2006)  
Graduate Committee, 1985-1987, 1988-2007 (Chair 1985-1987), 2009-present  
Curriculum Committee, 1984-1989, 1990-2001, 2004-2006, 2012-2013 (Chair 1990-1994, 1997-2001)

### Department of Materials Science and Mechanics

- Engineering Arts Advisory Committee, 1999-2001

Environmental Science and Policy Program

Program Advisory Group, 2006-2009

Other

Various search committees and ad hoc committees at University, College, and Department level

Various tenure and promotion committees at department level