



### **Susannah Scott**

Born in Tokyo, 1967.

BSc (Chemistry) from The University of Alberta, 1987.

PhD (Chemistry) from Iowa State University, 1991.

Postdoctoral scholar, Ames Laboratory, 1992.

Postdoctoral scholar, Institut de recherches sur la catalyse, 1993.

Assistant Professor, University of Ottawa, 1994.

Associate Professor, University of Ottawa, 1998.

Professor, University of California, Santa Barbara, 2003.

Duncan & Suzanne Mellichamp Academic Initiative Professor,  
University of California, Santa Barbara, 2014.

Distinguished Professor, University of California, Santa Barbara, 2015.

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### **PROFESSIONAL MEMBERSHIP/AWARDS**

- Member of the American Chemical Society
- Member of the American Institute of Chemical Engineers
- Fellow of the Royal Society of Chemistry
- Fellow of the American Association for the Advancement of Science
- Executive Editor for *ACS Catalysis*
- Member, Board of Reviewing Editors for *Science*
- Editorial board member for *Chinese Journal of Catalysis, Chem, Reaction Kinetics, Mechanisms, & Catalysis, Reaction Chemistry & Engineering, The Innovation, Catalysis Reviews, Green Chemistry, Chem & Bio Engineering, Catalysis Letters, Topics in Catalysis*
- Miller Visiting Research Professorship, UC Berkeley, 2001
- Visiting Professorship for Senior International Scientists, Chinese Academy of Sciences, 2012
- Visiting International Professor, University of Lille, 2016
- Chang Jiang International Scholar Professorship, Dalian University of Technology, 2016

### **SELECT RECENT PUBLICATIONS**

#### **1. Chemical Upcycling of Polyolefins**

J. Sun, J. Dong, L. Gao, Y.-Q. Zhao, H. Moon, S.L. Scott, *Chem. Rev.* 2024, **104**, xxx.

#### **2. Bifunctional tandem catalytic upcycling of polyethylene to surfactant-range alkylaromatics**

J. Sun, Y.H. Lee, R.D. Yappert, A.M. LaPointe, G.W. Coates, B. Peters, M.M. Abu-Omar, S.L. Scott, *Chem* 2023 **9**, 2318-2336

#### **3. Quantitative analyses of products and rates in polyethylene depolymerization and upcycling**

Y.H. Lee, J. Sun, S.L. Scott, M.M. Abu-Omar, *Star Protocols* 2023 **4**, 102575

#### **4. Chemical Recycling of Polyethylene by Tandem Catalytic Conversion to Propylene**

N.M. Wang, G. Strong, V. DaSilva, L. Gao, R. Huacuja, I.A. Konstantinov, M.S. Rosen, A.J. Nett, S. Ewart, R. Geyer, S.L. Scott, D. Guironnet, *J. Am. Chem. Soc.* 2022 **144**, 18526-18531

#### **5. Supported Platinum Nanoparticles Catalyzed Carbon-Carbon Bond Cleavage of Polyolefins: Role of the Oxide Support Acidity**

J.V. Lamb, Y.-H. Lee, J. Sun, C. Byron, R. Uppuluri, R.M. Kennedy, C. Meng, R.K. Behera, Y.-Y. Wang, L. Qi, A.D. Sadow; W. Huang, M.S. Ferrandon, S.L. Scott, K.R. Poepelmeier, M.M. Abu-Omar, M. Delferro, *ACS Appl. Mater. Interf.* 2024 **16**, 11361-11376

#### **6. Chemical Upcycling of Polyethylene into Value-added $\alpha,\omega$ -Divinyl-Functionalized Oligomers**

M. Zeng, Y.-H. Lee, G. Strong, A. LaPointe, A.L. Kocen, Z. Qu, G.W. Coates, S.L. Scott, M.M. Abu-Omar, *ACS Sust. Chem. Engr.* 2021 **9**, 13926-13936

**7. Polyethylene Upgrading to Long-Chain Alkylaromatics by Tandem Hydrogenolysis/Aromatization**

F. Zhang, D. Zeng, R. Yappert, J. Sun, A. Lee, A.M. Lapointe, B. Peters, M.M. Abu-Omar, S.L. Scott  
*Science* 2020 **370**, 437-441