

**Andrew D. Sutton**  
**Group Leader (Chemical Process Scale-Up)**  
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#### EDUCATION

- Ph.D., University of Manchester, UK. Chemistry. 2000-2004
- M.Chem (Hons.), University of Manchester, UK. Chemistry) 1995-1999

#### PROFESSIONAL EXPERIENCE

2020-Present *Oak Ridge National Laboratory* Senior Scientist & Group Leader  
2010-2020 *Los Alamos National Laboratory* Senior Scientist & Team Leader

#### **Postdoc Research Associate**

2007-2009 *Los Alamos National Laboratory.* Advisor: Dr. John C. Gordon  
2006-2007 *University of California, Berkeley.* Advisor: Prof. John Arnold  
2004-2006 *University of California, Davis.* Advisor: Prof. Philip P. Power

#### AWARDS AND HONORS

- 2020 R&D100 Award Recipient, Green Technology. Oleo Furanic Surfactants with Sironix Renewables (ChemCatBio DFA Project)
- 2020 Symposium Organizer, ACS Green Chemistry and Engineering Conference
- 2020 Visiting Researcher The University of Bath (UK) Center for Sustainable and Circular Technologies (CSCT) (Ongoing position)
- 2019 LANL Richard P. Feynman Center for Innovation – Innovation Honor Society Inductee
- 2018 LANL FY17 Postdoctoral Distinguished Mentor Award
- 2018 ACS Division of Inorganic Chemistry Award for Undergraduate Research (Mentor)

#### SELECTED PATENTS

- Synthesis of Fuels and Feedstocks, U.S. Pat. No. 9,783,477. 2018.
- Conversion of Bioderived Acetone and/or Isopropanol to Aliphatic Hydrocarbons, US Patent 1,032,9228. 2016
- Conversion of Oligomeric Starch, Cellulose or Sugars to Hydrocarbons, U.S. Pat. No. 9,751,815. 2016.

#### SELECTED PEER-REVIEWED PUBLICATIONS

1. C. D. Roland, C. M. Moore, J. H. Leal, T. A. Semelsberger, C. Snyder, J. Kostal, A. D. Sutton. "Fully Recyclable Polycarbonates from Simple, Bio-Derived Building Blocks, *ACS Applied Polymer Materials*, **2021**, 3(2), 730.
2. E. Chung, M. Stones, E. Latifi, C. M. Moore, A. D. Sutton, M. Schlaf, "Conversion of Furfural Derivatives to 1,4-Pentanediol and Cyclopentanol in Aqueous Medium Catalyzed by Trans-[(2,9-dipyridyl-1,10-phenanthroline)(CH<sub>3</sub>CN)<sub>2</sub>Ru](OTf)<sub>2</sub>" *ACS Catalysis*, **2020**, 10, 4, 2667.
3. W. L. Kubic Jr., R. W. Jenkins, C. M. Moore, T. A. Semelsberger, A. D. Sutton "An ANN-Based Group Contribution Method for Estimating Cetane and Octane Numbers of Hydrocarbons and Oxygenated Organic Compounds" *Ind. Eng. Chem. Res.*, **2017**, 56, 12236.
4. C. M. Moore, O. Staples, R. W. Jenkins, T. R. Brooks, A. D. Sutton "Ethanol Derived Bio-Building Blocks: An Alternative to the Guerbet Reaction" *Green Chem.*, **2017**, 19, 169.
5. A. D. Sutton, F. D. Waldie, R. Wu, M. Schlaf, L. A. Silks III, J. C. Gordon, "The Hydrodeoxygenation of Bioderived Polyols into Alkanes." *Nature Chemistry*, **2013**, 5(5) 528.