Juan J Bravo-Suárez
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Ctr for Environ Beneficial Catalysis

PROFESSIONAL PREPARATION

University of Atlantico, Colombia	Chemical Engineering	B.S. 1997
Virginia Polytech Inst & St Univ	Chemical Engineering	Visiting Scholar 2000-2003
Ind University of Santander, Colombia	Chemical Engineering	Ph.D. 2004
Natl Inst Adv Ind Sci & Technol, Japan	Chemical Engineering	Postdoc Researcher 2004-2008
Lawrence Berkeley Natl Lab	Chemical Engineering	Postdoc Fellow 2008-2009
The University of Kansas	Chemical Engineering	Research Associate 2009-2013
Archer Daniels Midland Company	Chemical Engineering	Research Scientist 2013-2014

APPOINTMENTS

University of Kansas

Assistant Professor, Dept. of Chemical & Petroleum Engineering	8/14-present
Adjunct Assistant Res Professor, Ctr for Environ Beneficial Catalysis	9/13-8/14

Visiting Appointments

Visiting Scholar, Virginia Polytechnic Institute & State University	11/00-9/03

PUBLICATIONS

Five Related Technical Publications

1. J. J. Bravo-Suárez, E. A. Páez-Mozo, S. T. Oyama, "Intercalation of Decamolybdo-dicobaltate(III) Anion in Layered Double Hydroxides," *Chemistry of Materials.* **16**, 1214-1225 (2004).
2. J. Q. Lu, J. J. Bravo-Suárez, A. Takahashi, M. Haruta, S. T. Oyama, "In Situ UV-vis Studies of the Effect of Particle Size on the Epoxidation of Ethylene and Propylene on Supported Silver Catalysts with Molecular Oxygen," *Journal of Catalysis.* **232**, 85-95 (2005).
3. J. J. Bravo-Suárez, K. K. Bando, J. Q. Lu, M. Haruta, T. Fujitani, S. T. Oyama, "Transient Technique for Identification of True Reaction Intermediates: Hydroperoxide Species in Propylene Epoxidation on Gold/Titanosilicate Catalysts by XAFS Spectroscopy," *Journal of Physical Chemistry C.* **112**, 1115-1123 (2008).
4. J. J. Bravo-Suárez, B. Subramaniam, R. V. Chaudhari, "Vapor-Phase Methanol and Ethanol Coupling Reactions on CuMgAl Mixed Metal Oxides," *Applied Catalysis A: General*. **455**, 234-246 (2013).
5. J. J. Bravo-Suárez, R. V. Chaudhari, and B. Subramaniam, "Design of Heterogeneous Catalysts for Fuels and Chemicals Processing: An Overview," in: Novel Materials for Catalysis and Fuels Processing, *ACS Symposium Series* **1132**, J. J. Bravo-Suárez, M. Kidder, and V. Schwartz, Eds.; ACS: Washington, DC, pp 3-68 (2013).

Five other Relevant Technical Publications

1. J. J. Bravo-Suárez, E. A. Páez-Mozo, S. T. Oyama, "Microtextural Properties of Layered Double Hydroxides: A Theoretical and Structural Model," *Microporous & Mesoporous Materials.* **67**, 1-17 (2004).
2. J. J. Bravo-Suárez, J. Q. Lu, C. G. Dallos, T. Fujitani, S. T. Oyama, "Kinetic Study of Propylene Epoxidation with H_2 and O_2 over a Gold/Mesoporous Titanosilicate Catalyst," *Journal of Physical Chemistry C.* **111**, 17427-17436 (2007).
3. J. Q. Lu, Z. Zhang, J. J. Bravo-Suárez, K. K. Bando, T. Fujitani, S. T. Oyama, "Direct Propylene Epoxidation over Barium-promoted Au/Ti-TUD Catalysts with H_2 and O_2: Effect of Au Particle Size," *Journal of Catalysis*. **250**, 350-359 (2007).
4. J. J. Bravo-Suárez, K. K. Bando, T. Fujitani, S. T. Oyama, "Mechanistic Study of Propane Selective Oxidation with H_2 and O_2 on Au/TS–1," *Journal of Catalysis*. **257**, 32-42 (2008).

5. J. J. Bravo-Suárez, B. Subramanian, R. V. Chaudhari, "Ultraviolet-Visible Spectroscopy and Temperature Programmed Techniques as Tools for Structural Characterization of Cu in $CuMgAlO_x$ Mixed Metal Oxides," *Journal of Physical Chemistry C.* **116,** 18207–18221 (2012).

SYNERGISTIC ACTIVITIES

1. **Research in Multidisciplinary Environment with University-Industry Partnership**: Research Scientist at Archer Daniels MIdland (ADM) company and adjunct assistant research professor at the University of Kansas responsible for operating ADM-KU Research Center and advancing propietary and ADM-University of Kansas collaborative research projects.
2. **Journal Advisory Committee**: *Revista Ion*, Colombia, 05/2012--present.
3. **Patents and Technology Transfer**: Co-author of 3 issued patents and 1 patent application.
4. **Selected Professional Activitites:** (a) Reviewer for Journal of Colloid and Interface Science (Oct 2006-present), Journal of Catalysis (Oct 2007-present), Fuel Processing Technology (Jan 2012-present), Microporous and Mesoporous Materials (Mar 2012-present), Applied Catalysis A: General (Apr 2012-present), Industrial & Engineering Chemistry Research (Dec 2012-present), Catalysis Science & Technology (May 2013-present), ACS Sustainable Chemistry (May 2013-present), and ACS Petroleum Research Fund (Mar 2014-present); (b) Co-organizer of: Symposium on "Novel Materials for Catalysis and Fuel Processing," 243rd ACS National Meeting, PETR Division, Mar 2012, San Diego, CA; Symposium on "Novel Materials for Catalysis and Fuel Processing," 245th ACS National Meeting, ENFL Division, Apr 2013, New Orleans, LA; "Storch Award in Fuel Science: Symposium in Honor of Prof. S. Ted Oyama," 248th ACS National Meeting, ENFL Division, Aug 2014, San Francisco, CA; (c) Member of: American Chemical Society (2006-present), ACS Division of Energy and Fuels (formerly Division of Fuel Chemistry) (2006-present), ACS Division of Catalysis Science and Technology (2013-present), American Institute of Chemical Engineers (2013-present), and Colombian Catalysis Society (1998-present).
5. **Co-Edited:** *"Novel Materials for Catalysis and Fuel Processing,"* Eds. J. J. Bravo-Suárez, M. Kidder, and V. Schwartz, ACS Symposium Series No. 1132, American Chemical Society, Washington, D.C. (2013).

COLLABORATORS & OTHER AFFILIATIONS

Collaborators, Co-Authors, & Co-Editors (In preceeding four years to this submission)

Drs. Susumu Tsubota and Kyoko K. Bando at National Institute of Advanced Industrial Science and Technology (AIST), Japan; Prof. Biswajit Chowdhury at the Department of Applied Chemistry, Indian School of Mines, Dhanbad, India; Drs. Viviane Schwartz and Michelle Kidder at Oak Ridge National Laboratory (ORNL).

PhD Advisers: Prof. S. Ted Oyama, Virginia Polytechnic Institute & State University and Prof. Edgar A. Páez-Mozo, Industrial University of Santander, Colombia

Postdoctoral Advisors: Prof. Masatake Haruta, National Institute of Advanced Industrial Science and Technology (AIST), Japan; Dr. Tadahiro Fujitani, AIST, Japan; Prof. Enrique Iglesia, Lawrence Berkeley National Laboratory/University of California-Berkeley; Prof. Raghunath V. Chaudhari, The University of Kansas, and Prof. Bala Subramaniam, The University of Kansas.