

Prof. Ana C. Alba-Rubio

(a) Professional Preparation

- University of Málaga, Málaga, Spain, Chemical Engineering, 2007.
- Institute of Catalysis and Petrochemistry (CSIC) & Department of Applied Physical Chemistry at the Autonomous University of Madrid, Madrid, Spain, PhD, 2011.
- University of Wisconsin-Madison, Madison, WI, Post-Doc, Chemical Engineering, 2015.

(b) Appointments

- Assistant Professor, Department of Chemical and Environmental Engineering, University of Toledo, Toledo, OH, 2015-present.
- Postdoctoral Research Associate, Department of Chemical and Biological Engineering, University of Wisconsin-Madison, Madison, WI, 2012-2015.
- Graduate Research Assistant, Institute of Catalysis and Petrochemistry (CSIC), Madrid, Spain, 2007-2011.

(c) Most significant products *(full list is available through Google Scholar)*

- A.C. Alba-Rubio, F. Vila, D. Martín Alonso, M. Ojeda, R. Mariscal, M. López Granados, “Deactivation of organosulphonic acid functionalized silica catalysts during biodiesel synthesis”, *Applied Catalysis B: Environmental*, 95, 279-287, 2010.
- M. López Granados, A.C. Alba-Rubio, F. Vila, D. Martín Alonso, R. Mariscal, “Surface chemical production of Ca oxide catalysts in biodiesel production reaction by the addition of monoglycerides, diglycerides and glycerol”, *Journal of Catalysis*, 276, 229-236, 2010.
- M. López Granados, A.C. Alba-Rubio, I. Sádaba, R. Mariscal, I. Mateos-Aparicio, A. Heras, “Poly(styrenesulphonic) acid: an active and reusable acid catalyst soluble in polar solvents”, *Green Chemistry*, 13, 3203-3212, 2011.
- A.C. Alba-Rubio, M.L. Alonso Castillo, M.C.G. Albuquerque, R. Mariscal, C.L. Cavalcante Jr., M. López Granados, “A new and efficient procedure for removing calcium soaps in biodiesel obtained using CaO as a heterogeneous catalyst”, *Fuel*, 95, 464-470, 2012.
- B.J. O’Neill, D.H.K. Jackson, A.J. Crisci, C.A. Farberow, F. Shi, A.C. Alba-Rubio, J. Lu, P.J. Dietrich, X. Gu, C.L. Marshall, P.C. Stair, J.W. Elam, J.T. Miller, F.H. Ribeiro, P.M. Voyles, J. Greeley, M. Mavrikakis, S.L. Scott, T.F. Kuech, J.A. Dumesic, “Stabilization of copper catalysts for liquid-phase reactions by atomic layer deposition”, *Angewandte Chemie International*, 52, 13808-13812, 2013.
- A.C. Alba-Rubio, B.J. O’Neill, F. Shi, C. Akatay, C. Canlas, T. Li, R. Winans, J.W. Elam, E.A. Stach, P.M. Voyles, J.A. Dumesic, *ACS Catalysis*, 4, 1554-1557, 2014.
- S.H. Hakim, C. Sener, A.C. Alba-Rubio, T.M. Gostanian, B.J. O’Neill, F.H. Ribeiro, J.T. Miller, J.A. Dumesic, “Synthesis of supported bimetallic nanoparticles with controlled size and composition distributions for active site elucidation”, *Journal of Catalysis*, 328, 75-90, 2015.
- R. Carrasquillo-Flores, I. Ro, M. Kumbhalkar, S. Burt, C.A. Carrero, A.C. Alba-Rubio, J.T. Miller, I. Hermans, G.W. Huber, J.A. Dumesic, “Reverse water-gas shift on interfacial sites formed by deposition of oxidized molybdenum moieties onto gold nanoparticles”, *Journal of the American Chemical Society*, 137, 10317-10325, 2015.

(d) Collaborators & Other Affiliations

Collaborators and co-authors:

- *University of Wisconsin-Madison:* Mr. S.P. Burt, Dr. R. Carrasquillo-Flores, Dr. C.A. Carrero, Dr. C.A. Farberow, Mr. T.M. Gostanian, Dr. S.H. Hakim, Prof. I. Hermans, Prof. G.W. Huber, Mr. D.H.K. Jackson, Dr. H.J. Kim, Prof. T.F. Kuech, Ms. M.D. Kumbhalkar, Dr. J. Lee, Ms. S. Li, Dr. B.J. O'Neill, Mr. A. Plauck, Mr. I. Ro, Dr. C. Sener, Dr. F. Shi, Dr. S. Singh, Prof. P.M. Voyles, Mr. T. S. Wesley.
- *ICP-CSIC:* Ms. N. Alonso-Fagúndez, Mr. V. Laserna, Prof. R. Mariscal, Dr. D. Martín Alonso, Dr. M. Ojeda, Dr. I. Sádaba, Dr. F. Vila.
- *University of Málaga:* Dr. M.L. Alonso Castillo, Prof. A. Cabeza, Prof. A. Jiménez-López, Dr. L. León-Reina, Prof. P. Maireles-Torres, Prof. J. Mérida-Robles, Prof. R. Moreno-Tost, Prof. J. Santamaría-González.
- *Other affiliations:* Mr. C. Akatay (Purdue University), Prof. M.C.G. Albuquerque (University of Ceará), Prof. P. Brettes (GAIKER), Mr. C. Canlas (Argonne National Lab), Prof. C.L. Cavalcante Jr. (University of Ceará), Dr. A.J. Crisci (University of California, Santa Barbara), Dr. P.J. Dietrich (Purdue University), Dr. J.W. Elam (Argonne National Lab), Prof. J. Greely (Purdue University), Dr. X. Gu (Purdue University), Prof. A. Heras (Complutense University of Madrid), Mr. T. Li (Argonne National Lab), Prof. J. Lu (University of Science and Technology of China), Dr. C.L. Marshall (Argonne National Lab), Dr. I. Mateos-Aparicio (Complutense University of Madrid), Prof. M. Mengibar (Complutense University of Madrid), Prof. J.T. Miller (Argonne National Lab), Prof. F.H. Ribeiro (Purdue University), Prof. J. Rius (Materials Science Institute of Barcelona), Prof. S.L. Scott (University of California, Santa Barbara), Dr. E.A. Stach (Brookhaven National Lab), Prof. P.C. Stair (Argonne National Lab), Dr. E. Stangland (DOW), Dr. R. Winans (Argonne National Lab).

Total number of collaborators and co-authors: 61.

Graduate Advisor – Prof. M. López Granados, Institute of Catalysis and Petrochemistry (CSIC), Madrid, Spain.

Postdoctoral Sponsor – Prof. J. Dumesic and Prof. M. Mavrikakis, University of Wisconsin-Madison, Madison, WI.

Total number of graduate advisors and postdoctoral sponsors: 3

Thesis Advisor and Postgraduate-Scholar Sponsor:

Dr. Victor Robles, Mr. Subhash Kalidindi (present), Mr. Godfred Owusu (present).

Total number of graduate students advised: 3. Number of postdoctoral scholars sponsored: 0