### **PUBLICATIONS**

#### **University of Delaware**

- **Dunwell, M.**, Wang, J., Yan, Y., Xu, B., Surface Enhanced Spectroscopic Investigations of Adsorption of Cations on Electrochemical Interfaces. *submitted*.
- **Dunwell, M.**, Lu, Q., Heyes, J., Rosen, J., Chen, J.G., Yan, Y., Jiao, F., Xu, B., The Central Role of Bicarbonate in the Electrochemical Reduction of Carbon Dioxide on Gold. *submitted*.
- Heyes, J.; **Dunwell, M.**; Xu, B., CO<sub>2</sub> Reduction on Cu at Low Overpotentials with Surface-Enhanced in Situ Spectroscopy. *Journal of Physical Chemistry C* (2016).
- **Dunwell, M.**; Yan, Y.; Xu, B., A surface-enhanced infrared absorption spectroscopic study of pH dependent water adsorption on Au. *Surface Science* (2015).

## **New Mexico State University**

- Chen, G.; Liaw, S. S.; Li, B.; Xu, Y.; **Dunwell, M.**; Deng, S.; Fan, H.; Luo, H., Microwave-assisted synthesis of hybrid Co<sub>x</sub>Ni<sub>1-x</sub>(OH)<sub>2</sub> nanosheets: Tuning the composition for high performance supercapacitor. *Journal of Power Sources* (2014), 251 (0), 338-343.
- Xu, Y.; Chen, G.; Fu, E.; Zhou, M.; **Dunwell, M.**; Fei, L.; Deng, S.; Andersen, P.; Wang, Y.; Jia, Q.; Luo, H., Nickel substituted LiMn<sub>2</sub>O<sub>4</sub> cathode with durable high-rate capability for Liion batteries. *RSC Advances* (2013), *3* (40), 18441-18445.
- Xu, Y.; Yi, R.; Yuan, B.; Wu, X.; **Dunwell, M.**; Lin, Q.; Fei, L.; Deng, S.; Andersen, P.; Wang, D.; Luo, H., High Capacity MoO<sub>2</sub>/Graphite Oxide Composite Anode for Lithium-Ion Batteries. *The Journal of Physical Chemistry Letters* (2012), *3* (3), 309-314.

#### **PRESENTATIONS**

# **University of Delaware**

- **Dunwell, M.**, Yan, Y., Xu, B., "In-Situ Infrared Spectroscopic Investigation of Pyridine-Mediated CO<sub>2</sub> Reduction on Pt Electrocatalysts", *American Institute of Chemical Engineers Annual Meeting*, San Francisco, CA, 2016. (oral presentation).
- **Dunwell, M.**, Wang, J., Yan, Y., Xu, B., "The Effect of Alkali and Quaternary Ammonium Cations on the Electrochemical Interface Studied by In-Situ Infrared Spectroscopy", *American Institute of Chemical Engineers Annual Meeting*, San Francisco, CA, 2016. (oral presentation).
- **Dunwell, M.**, Lu, Q., Heyes, J., Rosen, J., Yan, Y., Chen, J.G., Jiao, F., Xu, B., "Mechanistic Insights into the Electrochemical Reduction of CO<sub>2</sub> using *In-situ* Infrared Spectroscopy", *American Chemical Society Meeting*, Philadelphia, PA, 2016. (oral presentation).
- **Dunwell, M.**, Lu, Q., Heyes, J., Rosen, J., Yan, Y., Chen, J.G., Jiao, F., Xu, B., "The Central Role of Bicarbonate in the Electrochemical Production of CO on Gold", *American Institute of Chemical Engineers Annual Meeting*, Salt Lake City, UT, 2015. (oral presentation).
- **Dunwell, M.**, Yan, Y., Xu, B., "Potential-Dependent Behavior of Near-Electrode Water on Au", *American Institute of Chemical Engineers Annual Meeting*, Salt Lake City, UT, 2015. (oral presentation).
- **Dunwell, M.**, Lu, Q., Heyes, J., Rosen, J., Yan, Y., Chen, J.G., Jiao, F., Xu, B., "The Central Role of Bicarbonate in the Electrochemical Production of CO on Gold", *Catalysis Club of Philadelphia*, Wilmington, DE, 2015. (poster).
- **Dunwell, M.**, Lu, Q., Heyes, J., Rosen, J., Yan, Y., Chen, J.G., Jiao, F., Xu, B., "The Central Role of Bicarbonate in the Electrochemical Production of CO on Gold", *Center for Catalytic Science & Technology Annual Review*, Newark, DE, 2015. (oral presentation).
- **Dunwell, M.**, Yan, Y., Xu, B., "Infrared Spectroscopic Studies of Organic Cation Adsorption on Au Electrodes", *Catalysis Club of Philadelphia*, Wilmington, DE, 2014 (poster).

#### **New Mexico State University**

• Marco Dunwell, Yun Xu, Hongmei Luo, "Synthesis and Analysis of Vanadium (V) Oxide Nanostructures as Cathode in Lithium-Ion Batteries", *NM AMP URA Research Symposium*, Las Cruces, NM, October 5, 2012 (oral presentation). \*Third Place in Oral Presentations