



## Aishik Chakraborty

*Ph.D. Aspirant*

*Chemical and Petroleum Engineering*

Aishik Chakraborty was born and raised in the “city of joy” (Calcutta), where he received his Bachelor’s degree in Chemical engineering, at the West Bengal University of Technology. In 2013, he joined The University of Kansas and received his Master’s degree under the guidance of Dr. Prajnaparamita Dhar, in Chemical Engineering, with an award for the best Master’s Thesis from the Department of Chemical and Petroleum Engineering. He is currently pursuing his Ph.D. under the same advisor in biomolecular interactions at interfaces, which emphasizes on lipid-protein interactions as well as lipid-nanoparticle interactions at air-water interfaces. He has been to multiple conferences across USA and India, namely the annual meetings organized by American Institute of Chemical Engineers (AIChE), Biophysical Society and Indian Science Congress Association (ISCA), where he represented his work.

*Presentation Title:*

*Biomolecules at Air-Water Interfaces.*

*Studying the impact of synthetic protein, Mini-B, and cholesterol on Lung Surfactant Monolayers*



## Yuanchao Li

*Ph.D. Aspirant*

*Chemical and Petroleum Engineering*

Yuanchao received his bachelor of science degree in chemistry from Nankai University in China. At same time, he received my bachelor of engineering degree in chemical engineering from Tianjin University in China. Both were received in 2007. Then he got his master of engineering from Tianjin University in 2014. Currently, he is a PhD student and graduate research assistance in Prof. Nguyen’s group. His research is in the development of catalysts for the hydrogen reactions in the H<sub>2</sub>-Br<sub>2</sub> flow battery. There has been growing interest in electrical energy storage because of the challenge of integrating intermittent renewable energy sources such as wind and solar into the electrical grid. The hydrogen-bromine reversible fuel cell system serves as a promising technology to meet this need because of its high round-trip conversion efficiency and low cost. Since the commonly used catalyst, platinum, is not stable in the corrosive HBr and Br<sub>2</sub> environment, an alternative catalyst which is durable and active is needed.

*Presentation Title:*

*Core-Shell Rhodium Sulfide as Catalyst for HER/HOR in H<sub>2</sub>-Br<sub>2</sub> Reversible Fuel Cell*

**Thursday, December 7<sup>th</sup>, 2017 | 11:00 – 11:50AM**  
**2 Eaton Hall (Spahr Auditorium)**