

**UNIVERSITY OF RHODE ISLAND**  
**Department of Chemistry**

**SEMINAR**

**Room 105 Beaupre**  
**3:00 P.M, Tuesday, Nov. 19, 2018**

**Prof. Alexander Lippert**

**Department of Chemistry**  
**Southern Methodist University**  
**Dallas, TX**

**“Shaping Light and Matter to  
Image and Visualize  
The Chemistry of Life”**

**HOST**

**Brenton DeBoef**  
**Department of Chemistry**  
**401-874-9480**

Seminar, Nov. 19, 2018

**Professor Alexander Lippert**

Department of Chemistry  
Southern Methodist University  
Dallas, TX

Title:

**Shaping Light and Matter to Image and Visualize the Chemistry of Life**

Abstract: The interactions between light and matter at the molecular level are instrumental in generating the colorful visual landscape that fills our day to day life. Our laboratory designs and synthesizes small organic molecules that translate chemical events into colorimetric, fluorescent, or chemiluminescent responses by finely tuning this light-matter interaction. This seminar will focus on chemiluminescent agents for real-time quantification of reactive nitrogen species and recent progress towards multi-color volumetric 3D displays based on photoswitch chemistry.

Biography: Dr. Lippert attended Caltech where he earned his BS degree in chemistry in 2003 and performed research with Prof. Linda Hsieh-Wilson. He then began his PhD at UC Santa Barbara with Prof. Jeffrey Bode and moved with his advisor to the University of Pennsylvania in 2007, to receive his PhD in 2008. After performing postdoctoral studies at UC Berkeley with Prof. Chris Chang, he began his independent career at Southern Methodist University in 2012, where he has worked on responsive luminescent organic molecules for imaging applications. He was promoted to the rank of Associate Professor in 2018.