

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

**Room 105 Beupre Center**  
**2:00pm, Friday, March 22, 2019**

***Elsa Ortega***

**Graduate Student**  
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**URI**

***“Investigating the Structures of Rh560 in  
Thin Films”***

**HOST**

**Jason Dwyer**  
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## Investigating the Structures of Rh560 in Thin Films

### Abstract:

Thin films of fluorophores such as xanthene dyes have been widely used for sensing detection. The photophysical properties of many xanthene dyes are well known in solution but very few have been studied as thin films. This presentation will look into the cationic fluorophore Rhodamine 560 in thin films. Rhodamine 560 of varying concentrations was either dip coated or spin coated onto glass substrates to further understand its photophysical properties. The coating technique and the thickness of the Rhodamine 560 is a key factor for both the absorption and emission spectra. By controlling the aggregation of the fluorescent dye we gained an understanding of its photophysical properties to improve our fluorescence-based sensor efficiently.