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# fission product

THE RHODE ISLAND SECTION OF THE AMERICAN CHEMICAL SOCIETY "THE FIRST SECTION"

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# MAY RIACS DINNER MEETING AT URI MONDAY, MAY 15

The Richard E. Beaupre Center for Chemical and Forensic Sciences University of Rhode Island

140 Flagg Rd., Kingston, RI 02881

### PROF. FANG WANG

University of Rhode Island

# "Ultra-Rapid Cysteine Bioconjugation"

**Abstract:** Chemical modification of cysteine is among the most commonly employed strategies for bioconjugation. Our group has developed a library of simple pyridinium salts exhibiting remarkable reactivity toward cysteine. This methodology enables rapid metal-free, catalyst-free cysteine arylation under mild conditions. Comprehensive kinetic studies and other investigations have been conducted to quantify the reactivity of these pyridinium-based reagents and reveal the mechanistic basis of this unusually fast chemistry. Such information facilitates the rational design of versatile and practical synthetic tools for constructing structurally diverse biomacromolecules via cysteine functionalization.

**Bio:** Prof. Fang Wang is currently an Assistant Professor of Chemistry at the University of Rhode Island. His work leverages organic chemistry to develop new functional molecular tools to study otherwise intractable problems in medicine and biology. Specifically, guided by principles in physical organic chemistry, his research focuses on synthesizing small molecules for direct biological and pharmaceutical applications. Prior to arriving at URI, he received his Ph.D. from the University of Southern California under the supervision of George Olah and worked as a Postdoctoral Fellow at MIT under the mentorship of Stephen Lippard.

### 6:00 Buffet dinner (vegetarian options included) - Ground floor lobby

#### 7:00 Presentation of awards and lecture - Room 105

Please RSVP to Dugan Hayes at <u>dugan@uri.edu</u> by Monday, April 17th if you plan to attend the dinner. The cost is \$25 for general attendees and \$5 for students. Payment may be made on the date of the meeting.

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