



Apr 10th, 2:35 PM - 3:35 PM

Macrocyclic Pendant Arm Extension: An Application of the Husigen 1,3-Dipolar Cycloaddition Reaction

Cory Kline
Illinois Wesleyan University

Rebecca Roesner, Faculty Advisor
Illinois Wesleyan University

Follow this and additional works at: <https://digitalcommons.iwu.edu/jwprc>



Part of the [Chemistry Commons](#)

Kline, Cory and Roesner, Faculty Advisor, Rebecca, "Macrocyclic Pendant Arm Extension: An Application of the Husigen 1,3-Dipolar Cycloaddition Reaction" (2010). *John Wesley Powell Student Research Conference*. 13.

<https://digitalcommons.iwu.edu/jwprc/2010/posters2/13>

This Event is protected by copyright and/or related rights. It has been brought to you by Digital Commons @ IWU with permission from the rights-holder(s). You are free to use this material in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/ or on the work itself. This material has been accepted for inclusion by faculty at Illinois Wesleyan University. For more information, please contact digitalcommons@iwu.edu.

©Copyright is owned by the author of this document.

Poster Presentation P26

MACROCYCLIC PENDANT ARM EXTENSION: AN APPLICATION OF THE HUISGEN 1,3-DIPOLAR CYCLOADDITION REACTION

Cory Kline and Rebecca Roesner*
Chemistry Department, Illinois Wesleyan University

Click chemistry reactions are simple, one-step processes that ideally have readily available starting materials, simple reaction conditions, and give high yields of a single product.

These reactions are widely used in both medicinal and materials chemistry and have attractive characteristics for use in the assembly of supramolecular systems. Application of the Huisgen 1,3-dipolar cycloaddition reaction between azides and alkynes, a common "click" reaction, was explored. A known macrocycle with four alkyne functional units was reacted with benzyl azide under several reaction conditions, including both catalyzed and uncatalyzed Huisgen 1,3-dipolar cycloaddition reactions. The results of this study will be presented.

