



# American Chemical Society Susquehanna Valley Section

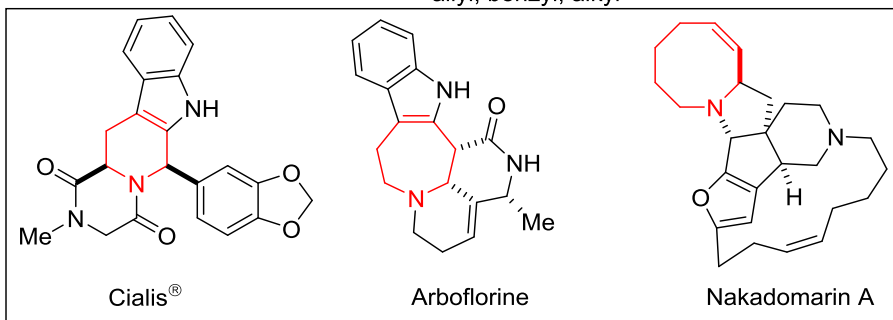
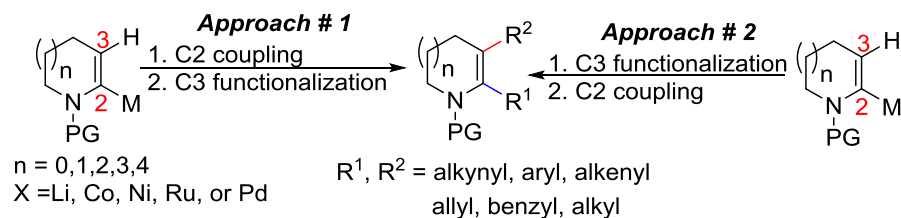
## MARCH 2015 NEWSLETTER

The four hundred and twenty-second meeting of the American Chemical Society Susquehanna Valley Section will be held on Wednesday, March 11, 2015 in Room 128A/B of the Natural Sciences Center on the campus of Susquehanna University in Selinsgrove, PA. The speaker will be Dr. Timothy Beng Ph. D., currently at Susquehanna University.

### “Direct Access to Biologically Relevant Nitrogen-Containing Cyclic Compounds”

Dr. Timothy K. Beng  
Department of Chemistry  
Susquehanna University  
Selinsgrove, PA

Functionalized azaheterocycles constitute the core of several alkaloids and pharmaceuticals including Cialis<sup>®</sup>, arboflorine, and nakadomarin A. Here, we report highly stereo- and site-selective strategies for efficient construction and functionalization of small to medium ring nitrogen heterocycles under lithium-, cobalt-, nickel-, palladium-, or ruthenium- catalysis. The desirable outcomes are accomplished through substrate- and/or reagent-controlled reactivity. In most cases, the functionalized products are obtained in synthetically attractive yields. The synthetic methodologies developed herein are subsequently exemplified through the stereoselective synthesis of piperidine, azepane, and azocane alkaloids, including pinidinone and benzazepanes.



Dr. Timothy Beng commenced his appointment in the Department of Chemistry at Susquehanna University in 2014. He hails from Cameroon-Africa, where he obtained a BS Chemistry degree at the University of Buea. After joining the graduate program at East Tennessee State University in 2003, he sought to understand the "Kinetics and Mechanism of the Decomposition of Hydrogen Peroxide by Schiff Base Complexes of Copper (II)". He subsequently obtained an MS Chemistry degree in 2004 under the joint supervision of Professors Jeff Wardeska and Thomas Huang. Further pursuits landed him at the University of Arkansas in 2007 where he obtained a Ph.D. degree in Physical Organic Chemistry, under the mentorship of late Professor Bob Gawley, with an emphasis on the "Dynamics of Enantiomerization, Stoichiometric and Catalytic Resolution of Selected Organolithium Species". Upon graduating in 2011, Dr. Beng joined the teaching staff at the University of Arkansas as instructor of Organic Chemistry. A year later, he moved to the University of California, Berkeley as an NIH postdoctoral fellow where he worked on the total synthesis of selected nitrogen-containing natural and unnatural products, under the guidance of Professor Richmond Sarpong. Foremost among Dr. Beng's research interests is the goal of developing highly efficient and practical synthetic strategies for accessing Nitrogen-containing cyclic compounds, which are classified as privileged substructures in drug discovery programs.

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**DINNER:** The lecture will be preceded by dinner at 5:30 PM at BJ's Steak and Rib House located at 17 North Market Street, Selinsgrove, Pennsylvania. RSVP to Bill Dougherty at [doughertyw@susqu.edu](mailto:doughertyw@susqu.edu) or 570-372-4255 by 4:00 P.M. on Monday, March 9, 2015. Dinner will be ordered from the menu. Directions to BJ's Steak and Rib House can be found at [www.bjsribs.com/locations.cfm](http://www.bjsribs.com/locations.cfm).

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#### DIRECTIONS TO SUSQUEHANNA UNIVERSITY:

##### **From Route I-80 West:**

Take the Danville exit, 224. Take route 54 east to Route 11 south towards Selinsgrove. Continue left on Route 11/15 south (continue as directed below from Route 11/15).

##### **From Route I-80 East:**

Take the Lewisburg exit, 210A. Take Route 15 south towards Selinsgrove. Turn right onto Route 11/15 south (continue as directed below from Route 11/15).

##### **From Route 11/15:**

Route 11/15 south becomes Market Street. Turn right onto W. Pine Street. West Pine Street becomes University Avenue. Follow the campus map to visitor parking.

A campus map can be found at: [Susquehanna University Campus Map](#). The Natural Sciences Center (# 71) is designated with the arrow on the map below:



## SECTION NEWS:

The local regions of the Pennsylvania Junior Academy of Sciences (PJAS) will be holding their annual high-school science competitions. PJAS is always looking for local science professionals to volunteer to judge the STEM projects of the area's 7<sup>th</sup> through 12<sup>th</sup> grade students. Region 5's competition (the western half of the SVS section) will be Saturday, February 28 at Susquehanna University and Region 2's competition (the eastern half of the SVS section) will on Saturday, March 7 at Wilkes University. For more information visit the websites at <http://www.pjas.net/region5> or <http://www.pjas.net/region2>.

Sunday, March 8, is the opening day of the current season at the Joseph Priestley House in Northumberland. The visitor center is open from 1 - 4 PM and will feature costumed guides and live chemistry shows. For more information call the house at 570-473-9474 or go to: <http://www.josephpriestleyhouse.org/event/commonwealth-charter-day-and-priestleys-birthday/>

Susquehanna Valley Section Web Page: <http://departments.kings.edu/SusquehannaValleyACS>

Please send any comments about the monthly newsletter to Ron Supkowski, Section Secretary King's College 131 N River St Wilkes-Barre PA 18711 [ronalsupkowski@kings.edu](mailto:ronalsupkowski@kings.edu)