

# JUDIT K. BEAGLE

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## **Education:**

*December 2010 – December 2012* Ph.D. in Organic Chemistry at University of Florida, Gainesville, Florida  
Adviser: Prof. Alan R. Katritzky  
Title: New Ventures in Heterocyclic Chemistry

*August 2008 – December 2010:* Master of Science in Chemistry at University of Florida, Gainesville, Fl.  
Adviser: Prof. Alan R. Katritzky  
Title: Synthesis of Functionalized Pyrrolo[1,2-*b*]pyridines and Pyrazolo[1,5-*a*]pyridines

*September 2002 – July 2007:* Master of Science in Chemistry at Eotvos Lorand University of Science, Budapest, Hungary  
Adviser: Gabor Dornyei, Ph.D. and Jozsef Rabai, Ph.D.  
Title: Progress Towards the Stereoselective Total Synthesis of Epiquinamide

## **Positions and Employment:**

*August 2014 – Present:* Assistant Professor of Chemistry, University of Dayton, Dayton, Ohio. Teaching responsibilities include: Organic Chemistry (CHM 313 and 314), General Chemistry (CHM 123) and the development of higher level undergraduate classes. Research interest in sustainability, green chemistry, synthesis of new small organic materials.

*August 2013 – July 2014:* Assistant Professor of Chemistry, University of North Georgia, Watkinsville, Georgia. Teaching responsibilities include: General Chemistry Lecture and Laboratory (CHM1211 and CHM1211L), Survey of Chemistry Lecture and Laboratory (CHM1151 and CHM1151L). Research involved the development of new laboratory experiments for the general chemistry course.

*June 2013 – July 2013:* Postdoctoral Research Fellow, University of Georgia, Dr. Morrison's Research Group, Athens, Georgia. Organic synthesis.

*January 2013 – May 2013:* Part-time Instructor of Chemistry, University of North Georgia, Watkinsville, Georgia. Teaching Survey of Chemistry Lecture and Laboratory (CHM1151 and CHM1151L)

*January 2013 – May 2013:* Part-time Instructor of Chemistry, University of Georgia, Athens, Georgia. Teaching Modern Organic Chemistry Lecture (CHM2211).

*August 2009 – December 2012:* Supervisor of undergraduate students at the Florida Center for Heterocyclic Compounds, University of Florida, Gainesville, Fl.

*August 2008 – December 2012 (except Summer semester 2009):* Teaching Assistant for general and organic chemistry laboratory practice, head TA since Summer 2010 semester at the University of Florida, Gainesville, Fl.

*August 2007 – July 2008:* Adjunct Assistant in Chemistry, University of Florida – Florida Center for Heterocyclic Compounds, Gainesville, Florida. Industrial collaborative projects; US Army, L'Oreal

*August 2001 – August 2007: Research Scientist Intern at AMRI Hungary (Albany Molecular Research Inc. Hungary), Budapest, Hungary. Library synthesis (10 mg to 10 g scale) and reaction optimization for final derivatization step. Microwave assisted scaffold synthesis.*

### **Awards:**

Chemistry Teaching Award, University of Florida, Chemistry Department, Gainesville, FL, 2010

2<sup>nd</sup> Place – Thieme Poster Session Award, FLOHET 10, Gainesville, FL 2009

### **Professional Affiliations:**

Member, American Chemical Society

Reviewer, Carbohydrate Research

Reviewer, Words and Numbers, OpenStax Chemistry

### **Departmental, Institutional, and Community Service**

2015 – Present Member, Sustainability, Energy, Environment (SEE) Advisory Committee, University of Dayton, Dayton, OH

2014 – Present Member, Organic Chemistry Steering Committee, University of Dayton, Dayton, OH

2014 Lecturer for K-5 teachers' endorsement class organized by Oconee River Georgia Youth Science & Technology Center (GYSTC) of the Northeast Georgia Regional Educational Service Agency. University of North Georgia, Watkinsville, Ga

2014 Judge, 66<sup>th</sup> Georgia Science & Engineering Fair

2013 – 2014 Organizer, Science Olympiad Invitational for elementary schools, University of North Georgia, Watkinsville, Ga

2009 – 2012 Member, Safety Committee, Florida Center for Heterocyclic Compounds, University of Florida, Gainesville, FL.

### **Funding:**

- 1) Sustainability Course Development Grant (\$2500, funded) – University of Dayton  
Development of a hybrid undergraduate/graduate course titled Green Chemistry. The course will look into modern ways to address waste management, risk management in manufacturing processes.
- 2) Research Council SEED Grant (\$5500, funded) – University of Dayton Research Institute  
Synthesis of Novel Unsymmetrical Pyrrolo[3,2-b]pyrrole-2,5-diones
- 3) Presidential Academic Innovation Award (\$5000, funded) – University of North Georgia  
Development of an undergraduate general laboratory experiment, which gives the students an introduction to modern techniques. The experiment titled: Interdisciplinary Laboratory Experiment: Isolation, Separation, and Determination of Leaf Pigment Content

### **Publications:**

#### **Book Chapter:**

- 1) **Beagle, J. K.** (2015) *Benzotriazole-mediated Synthesis of Nitrogen-containing Heterocycles*. (Invited Review) In: *Topics in Heterocyclic Chemistry*, Monbaliu, J. C.; Ed. Springer, Germany doi:[10.1007/7081\\_2015\\_178](https://doi.org/10.1007/7081_2015_178)

## Original Articles:

- 1) Bol'shakov, O.; **Kovacs, J.**; Chahar, M.; Ha, K.; Khelashvili, L.; Katritzky, A. R. (2012) *S- to N-Acyl Transfers in S-Acylcysteine iso-Peptides via 9-, 10-, 12- and 13-membered Cyclic Transition States*. Journal of Peptide Science, Vol 18, 704-709, doi:[10.1002/psc.2438](https://doi.org/10.1002/psc.2438)
- 2) Monbaliu, J. C. M.; Beagle, L. K.; **Kovacs, J.**; Zeller, M.; Stevens, C. V.; Katritzky, A. R. (2012). *En route towards  $\alpha$ -benzotriazolyl nitroso derivatives*. RSC Advances, Vol 2, 8941-8945, doi:[10.1039/C2RA21311G](https://doi.org/10.1039/C2RA21311G)
- 3) Katritzky, A., R., Khelashvili, L., **Kovacs, J.**, Shanab, K. (2009). *Dye Labeling of Nucleosides*. Chemical Biology & Drug Design, Vol 73, 396-402, doi:[10.1111/j.1747-0285.2009.00792.x](https://doi.org/10.1111/j.1747-0285.2009.00792.x)
- 4) Katritzky, A., R., Munawar, M., A., **Kovacs, J.**, Khelashvili, L. (2009). *Synthesis of Amino Acid Derivatives of Quinolone Antibiotics*. Organic & Biomolecular Chemistry, Vol 7, 2359-2362, doi:[10.1039/B900762H](https://doi.org/10.1039/B900762H)

## Posters:

- 1) Farmer, A.; Hire, B.; **Beagle, J. K.** *Synthesis and Application of Bis(Quinoxalino) Ligands*. Presented at the Celebration of Research in the Natural Sciences Event, University of Dayton, Dayton, Ohio, October 11, 2016
- 2) Kelley, M.; Prestridge, S.; **Kovacs, J.** *Interdisciplinary Laboratory Experiment: Isolation, Separation, and Determination of Leaf Pigment Content*. Presented at Annual Research Conference, University of North Georgia, Watkinsville, Georgia, April 8, 2014
- 3) **Kovacs, J.**, Monbaliu, J-C. M., Beagle, L. K., Wypych, R. *Synthesis of Novel Unsymmetrical Pyrrolo[3,2-b]pyrrole-2,5-diones and their Application as Synthetic Pigments* Presented at 13th Annual Florida Heterocyclic and Synthetic IUPAC-Sponsored Conference (FLOHET XIII), Gainesville, Florida, March 4-7, 2012
- 4) **Kovacs, J.**, Monbaliu, J-C. M., Wypych, R. *Synthesis and Application of Bis-quinoxalino Ligands* Presented at FLOHET XIII, Gainesville, Florida, March 4-7, 2012
- 5) Monbaliu, J-C. M., Beagle, L. K., **Kovacs, J.**  *$\alpha$ -Benzotriazolyl Nitroso Derivatives: a Promising Class of NO Donors* Presented at FLOHET XIII, Gainesville, Florida, March 4-7, 2012
- 6) Bolshakov, O., **Kovacs, J.**, Khelashvili, L., *Study of Chemical Ligation of S-Acylated Cystein Containing Peptides via 9, 12, and 13-Membered Cyclic Transition States* FLOHET XII, Gainesville, Florida, March 6-9, 2011
- 7) **Kovacs, J.**, Chinn, K. D., *Kojic Acid Derivatives*. Presented at FLOHET XI, Gainesville, Florida, March 7-10, 2010
- 8) **Kovacs, J.**, Munawar, M., A. *Synthesis of Amino Acid Derivatives of Quinolone Antibiotics*. Presented at FLOHET X, Gainesville, Florida, March 8-11, 2009
- 9) Szommer, T., **Kovacs, J.**, et al. *Design, Synthesis, and Biological Screening of the Matrix Metalloproteinase Inhibitors*. Presented at Hungarian Chemistry Congress, Hajduszoboszlo, Hungary, June 19-21, 2008
- 10) **Kovacs, J.**, Khelashvili, L. *Azo-dye Labeling of Nucleosides*. Presented at FLOHET IX, Gainesville, Florida, March 9-12, 2008
- 11) Khelashvili, L., **Kovacs, J.** *Synthesis of Novel High Energy Heterocyclic N-Oxides*. Presented at FLOHET IX, Gainesville, Florida, March 9-12, 2008