

Amanda Bongers

Department of Chemistry, Queen's University
90 Bader Lane, Chernoff Hall
Kingston, Ontario, Canada, K7L 3N6

EMPLOYMENT HISTORY

Assistant Professor, *Queen's University* 07/2019–Present

EDUCATION

Postdoctoral Fellow, Chemistry Education, *Royal Ottawa Mental Health & University of Ottawa* 09/2016–03/2019
Advisors: Prof. Alison B. Flynn, Prof. Georg Northoff, MD

Doctor of Philosophy, Organic Chemistry, *University of Ottawa* 09/2011–08/2016
Advisor: Prof. André M. Beauchemin
Thesis: Intermolecular [3+2] Cycloadditions of Imino-isocyanates to Access β -Aminocarbonyl Compounds

Bachelor of Science, Honours Biochemistry Co-op, *University of Waterloo* 2006–2011
Graduation with Distinction, Dean's Honour List.

SCHOLARSHIPS AND AWARDS

- NSERC Alexander Graham Bell Canada Graduate Scholarship – Doctoral 2012–2015
- Best Oral Presentation, QOMSBQC, Ryerson University 2014
- NSERC Canada Graduate Scholarship – Masters 2011–2012
- University of Ottawa Excellence Scholarship 2011–2016
- President's Scholarship, University of Waterloo 2006
- Waterloo County Entrance Scholarship, University of Waterloo 2006

ACADEMIC AND SCHOLARLY ACTIVITIES

- Graduate & Mentor, *Mentor STEM Leaders Program – WISE Ottawa* 2015–2018
- Teaching Assistant, *University of Ottawa* 2011–2016
Courses: Advanced Analytical Laboratory (4th year); Medicinal Chemistry (4th year); Intermediate Organic Chemistry (3rd year); Organic Chemistry II (2nd year); Organic Chemistry I Lab (1st year).
- Science Ambassador and Volunteer Researcher, *Evidence for Democracy*, Ottawa 2015–Present
- President, *Chemistry Graduate Student Association*, University of Ottawa 2015–2016
- Co-lead volunteer, *Canadian Society for Chemistry Conference*, Ottawa 2015
- Volunteer, *IUPAC Conference on Physical Organic Chemistry*, Ottawa 2015
- President, *Undergraduate Chemistry Club*, University of Waterloo 2010–2011
- Chief organizer, *Southern Ontario Undergraduate Student Chemistry Conference*, Waterloo 2011

PUBLICATIONS

Peer Reviewed Journals:

- "Working with Mental Models to Learn and Visualize a New Reaction Mechanism." A. Bongers, G. Northoff, A. B. Flynn. *Chem. Educ. Res. Pract.* **2019**, Advance Article doi: 10.1039/C9RP00060G
- "Intermolecular Aminocarbonylation of Alkenes using Concerted Cycloadditions of Imino-isocyanates." A. Bongers, C. Clavette, W. Gan, T. Markiewicz, P. Moon, L. Betit, K. Lavergne, N. Das Neves, A. Toderian, S. Gorelsky, A. M. Beauchemin. *J. Org. Chem.* **2017**, 1175–1194.
- "Synthesis of Cyclic Azomethine Imines by Cycloaddition Reactions of N-Isocyanates and N-Isothiocyanates." A. Bongers, I. Ranasinghe, P. Lemire, A. Perozzo, J. F. Vincent-Rocan, A. M. Beauchemin. *Org. Lett.* **2016**, 3778–3781.

4. "Kinetic Resolution of Azomethine Imines by Bronsted Acid Catalyzed Enantioselective Reduction." A. Bongers, P. J. Moon, A. M. Beauchemin. *Angew. Chem. Int. Ed.* **2015**, *54* 15516–15519.
5. "Modular Synthesis of Pyrazolones Using an Alkene Aminocarbonylation Reaction." K. Lavergne, A. Bongers, L. Betit, A. M. Beauchemin. *Org. Lett.* **2014**, 3612–3515.
6. "A Tunable Route for the Synthesis of Azomethine Imines and β -Aminocarbonyl Compounds from Alkenes". C. Clavette, W. Gan, A. Bongers, T. Markiewicz, A. B. Toderian, S. Gorelsky, A. M. Beauchemin. *J. Am. Chem. Soc.* **2012**, 16111–16114.

Patents:

1. Electroactive Fluoroacylated Arylamines. XRCC, USP 9070886, Issued June 30, **2015**.
Inventors: A. Côté, R. A. Klenker, A. Bongers, G. P. McGuire.
2. Charge Transport Layer Comprising Fluoroacyl Arylamine. XRCC, USP 8883383B2, Issued November 11, **2014**.
Inventors: A. Côté, R. A. Klenker, A. Bongers, G. P. McGuire.
3. Method for Preparing Fluoroacylated Arylamines. XRCC, USP 8754260B2, Issued November 11, **2014**.
Inventors: A. Côté, A. Bongers.

PRESENTATIONS

1. "Exploring how static and dynamic representations of reaction mechanisms affect learning, mental models, and brain activity" CSC 2018 Conference, Edmonton, Canada, **May 30, 2018**
2. "Studying Students' Experience with Animations of Organic Reaction Mechanisms" CSC 2017 Conference, Toronto, Canada, **May 31, 2017**
3. "Flynn research group's work in organic chemistry education: Exploring learning outcomes when using multimedia for chemistry reaction mechanisms" University of Ottawa Cross-Faculty Symposium on SoTL, **May 8, 2017**
4. "Exploring Learning Outcomes when using Multimedia for Chemistry Reaction Mechanisms" ACS National Meeting and Exposition, San Francisco, California, **April 5, 2017**
5. "Conversion of Alkenes into Enantioenriched β -Aminocarbonyl Compounds" International Symposium on Challenges in Organic Chemistry, Irvine, California, **March 22, 2016** (Poster)
6. "Intermolecular Aminocarbonylation of C=C and C=N Bonds" CSC 2015, Ottawa, Canada, **June 17, 2015**.
7. "Brønsted Acid Catalyzed Kinetic Resolution of Azomethine Imines" QOMSBOC, Toronto, Canada, **November 9, 2014** (selected as Best Oral Presentation)
8. "Kinetic Resolution of Azomethine Imines to Access Enantioenriched β -Aminocarbonyls" International Symposium on Homogeneous Catalysis, Ottawa, Canada, **July 10, 2014** (Poster)
9. "Enantioenriched β -Aminocarbonyl Compounds from Azomethine Imines" QOMSBOC, Sherbrooke, Quebec, **November 9, 2013** (Poster)
10. "Accessing β -Aminocarbonyl Compounds from Azomethine Imines" CSC 2013, Quebec City, Canada, **May 29, 2013** (Poster)
11. "Accessing β -Aminocarbonyl Compounds from Azomethine Imines" Ottawa Carleton Chemistry Institute Day, Ottawa, Canada, **May 18, 2012** (selected as Best Poster Presentation)

PROFESSIONAL EXPERIENCE

Research Associate (co-op), Materials Chemistry, Xerox Research Centre Canada	2010
R&D Analyst (co-op), Quality Control Division, Piramal Healthcare (formerly Torcan Chemical)	2008
Laboratory Technician (co-op), Air Quality Division, Environment Canada, Ottawa, Ontario	2008

TECHNICAL SKILLS

Eye-tracking, electroencephalography (EEG), interviewing, data management & analysis (Excel, SPSS, MATLAB, NVivo).