**Abstract Submission Form**

Ontario-Québec Physical Organic Mini-Symposium



**November 4-6 2016**

Abstract Submission

Name:

University (or other affiliation):

Research Group (i.e. name of PI) :

Position (check one) : \_\_\_\_ Faculty

\_\_\_\_ From Industry

\_\_\_\_ Graduate Student

\_\_\_\_ Postdoc or Research Assistant

\_\_\_\_ Other (specify :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

I would prefer to give (check one) :

\_\_\_\_ an oral presentation preferably, but a poster otherwise

\_\_\_\_ an oral presentation only

\_\_\_\_ a poster presentation only

After completing the abstract on the next page, please save this document in word format and email the file to [tdudding@brocku.ca](mailto:tdudding@brocku.ca) and [kd11lk@brocku.ca](mailto:kd11lk@brocku.ca).

Abstract Format

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| --- | --- |
|  | TITLE |

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| --- |
| AUTHORS [Presenting Author (underline), Co-Authors, Corresponding Author\* (with asterisk)], Department, University, City, Prov, Postal Code, Corresponding Author’s email |

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| ABSTRACT – use only the space provided within the box. Do not modify box size.(Maximum 200 words; use superscripts or parentheses to number any references and place them at the bottom of the space provided in ACS format; include ACS formatted ChemDraw or high-resolution images embedded within the abstract, if desired) |

Example Abstract

**From Proton Sponge Analogues and NI-Centered Cations to Au(I) Catalysis**

Roya Mir, Lee Belding, Peter Stoyanov, Travis Dudding\*

Brock University, 500 Glenridge Avenue, St. Catharines, ON L2S 3A1 Canada

The development of a new class of highly basic cyclopropenimine based “proton sponges”, such as DACN(**1**) and “Janus” sponge (**2**), and their use in catalysis will be discussed. Notably, the strong proton affinityofthese sponges (PA = 23.8 - 27.0) derives in large part from the generation of aromaticity upon protonation. Further the Janus sponge and related derivatives have fluorescent properties both in the solid state and in solution, thus making them the first cyclopropenimine-based fluorescent organic compounds. The synthesis of cyclopropenium based phase-transfer catalysts (PTCs) and their use in benzylation and benzylic ﬂuorination reactions will also be discussed. In addition, the advancement of a solid, bench-stable, cyclopropenimine derived strong organic Brønsted acid (**3**) that was applied to the intermolecular hydroamination of unactivated alkenes and as an activator for Au(I)-catalyzed alkyne hydroamination will be described. Lastly, the development of novel Au(I)-precatalyst (**4**) incorporating a cyclopropenium counterion and its application to alkyne hydroamination will be presented.

