### G.B. FROST MEMORIAL LECTURE

The Grenville Frost Visiting Lectureship in Chemistry was established in 1966 by a bequest from the estate of the Honourable Leslie M. Frost, Premier of Ontario, in memory of his brother, Grenville. This fund is used to invite a Visiting Lecturer to Queen's.

Grenville Frost completed his education at the University of Toronto and, after graduating, went on to the University of California where he worked under the famous G.N. Lewis. Dr. Frost was appointed Lecturer at Queen's in 1924 and Full Professor in 1944. He became Head of the Department of Chemistry in 1956 and served in this post until retirement in 1961.

Dr. Frost was also the Supervisor to H.G. McAdie, who was the first Ph.D. Graduate in the Department of Chemistry

#### SELECTED RECENT PUBLICATIONS

- Petitjean, L.; de Winter, T. M.; Petrovic, P. V.; Coish, P. Hitce, J.; Moreau, M.; Bordier, T.; Erythropel, H.C.; Anastas, P. T. Heterogeneous Copper-Catalyzed Direct Reduction of C-glycosidic enones to Saturated Alcohols in Water. Green Chemistry 2019, in press.
- Melnikov, F.; Botta, C. C.; Schmuck, S. C.;
   Winfough, M.; Schaupp, C. M.; Gallager, E.; Brooks,
   B. W.; Williams, E. S.; Coish, P.; Anastas, P. T.;
   Voutchkova, A.; Kostal, J.; Kavanagh, T. Kinetics of Glutathione Depletion and Antioxidant Gene
   Expression as Indicators of Chemical Modes of Action
   Assessed in vitro in Mouse Hepatocytes with
   Enhanced Glutathione. Chemical Research in
   Toxicology 2019, in press.
- Turcel, G.; Kovacs, E.; Merza, G.; Coish, P.; Anastas, P.T.; Tuba, R. Synthesis of Semiochemicals via Olefin Metathesis. ACS Sustainable Chemistry & Engineering 2019, 7 (1), 33-48.
- Erythropel, H. C.; Kong, G.; DeWinter, T. M.; O'Malley, S. S.; Jordt, S. E.; Anastas, P. T.; Zimmerman, J. B. Presence of High-Intensity Sweeteners in Popular Cigarillos of Varying Flavor Profiles. JAMA 2018, 320 (13), 1380-1383.
- Steele, W. B.; Kristofco, L. A.; Corrales, J.; Saari, G. N.; Haddad, S. P.; Gallagher, E. P.; Kavanagh, T. J.; Kostal, J.; Zimmerman, J. B.; Voutchkova-Kostal, A.; Anastas, P. T.; Brooks, B.W. Comparative Behavioral Toxicology with Two Common Larval Fish Models: Exploring Relationships Among Modes of Action and Locomotor Responses. Science of the Total Environment 2018, 640-641, 1587-1600.
- DeWinter, T.; Balland, Y.; Neski, A. E.; Petitjean, L.; Erythropel, H. C.; Moreau, M.; Hitce, J.; Coish, P.; Zimmerman, J. B.; Anastsa, P. T. Exploration of a Novel, Enamine-Solid-Base Catalyzed Aldol Condensation with C-Glycosidic Pyranoses and Furanoses. ACS Sustainable Chemistry & Engineering 2018, 6 (9), 11196-11199.



# Department of Chemistry Queen's University

is honoured to host the 2019 Frost Lecturer:

Dr. Paul Anastas Yale University

"Green Chemistry: The Path Forward"



Friday, February 1, 2019 11:30 AM Room 117, Chernoff Hall

## DR. PAUL T. ANASTAS



Paul T. Anastas
Yale University
Department of Chemistry
New Haven CT

Professor **Paul T. Anastas** is on the faculty of Yale University with appointments in the Department of Chemistry, the School of Engineering and Applied Sciences, The School of Forestry and Environmental Studies, School of Medicine and the School of Management. He is widely known for his work in pioneering the field of Green Chemistry and has published 13 books on sustainable technology. He has experience in business (co-founded three companies), the NGO world (co-founded the Green Chemistry Institute), and government having served in the Administrations of the past three U.S. Presidents including serving in the White House Office of Science and Technology Policy in the Clinton and Bush Administrations and as Assistant Administrator and Chief Scientist at the U.S. Environmental Protection Agency in the Obama Administration.

### SELECTED HONOURS & AWARDS

- US Environmental Protection
   Agency R1 Lifetime
   Achievement Award, 2017
- •Emmanuel Merck Lecture Prize, 2015.
- •Edward O. Wilson Biodiversity
  Technology Pioneer Prize, ACM,
  2012.
- •Rachael Carson Award, Natural Products Association, 2012.