Author Profile



M. Lautens

The author presented on this page has recently published his 10th article since 2000 in Angewandte Chemie: "Efficient Synthesis of Benzothiophenes by an Unusual Palladium-Catalyzed Vinylic C-S Coupling": C. S. Bryan, J. A. Braunger, M. Lautens, Angew. Chem. 2009, 121, 7198-7202; Angew. Chem. Int. Ed. 2009, 48, 7064 - 7068.

Mark Lautens

Date of birth: July 9th, 1959

associations:

interests:

Positions: 1998-Present Astra Zeneca Professor of Organic Synthesis

2003-Present Merck Frosst/NSERC Industrial Research Chair

Education: 1977–1981 BSc, University of Guelph (Canada)

1981–1985 NSERC PhD with B. M. Trost, University of Wisconsin, Madison (USA)

1985–1987 NSERC Posdoc with D. A. Evans, Harvard University (USA)

1987–1992 Assistant Professor, University of Toronto (Canada)

1992-1995 Associate Professor, University of Toronto

1995-1998 Professor, University of Toronto

Professional Visiting Professor: University of Marburg, Paris VI, Geneva,

Santiago do Compostela, Gargnano Summer School, MPI Mülheim, Tokyo Institute of

Technology

1991 A. P. Sloan Fellow, 1994 E. W. R. Steacie Award, 2001 Fellow of the Royal Society of Awards:

Canada, 2002 Eli Lilly Grantee, 2004 R. U. Lemieux Award, 2006 Alfred Bader Award and

A. C. Cope Scholar, 2009 Alexander von Humboldt Senior Scientist

Current research Development of new chemical reactions giving novel and useful heterocyclic scaffolds,

enantioselective transformations, ring-forming reactions, ring-opening reactions, use of strain to

promote chemical processes and metal-promoted reactions

Hobbies: Traveling with my family, skiing, playing squash, cycling, and good food and wine

My most exciting discovery to date has been ... catalytic enantioselective ring-opening reactions.

When I was eighteen I wanted to be ... a professor of veterinary medicine.

My favorite subject at school was ... calculus, at least until I took quantum mechanics.

When I wake up I ... wonder how am I going to accomplish what needs to be done today?

The biggest challenge facing chemists is ... educating everyday citizens and those in government so that they understand what we do and why spending tax dollars on research represents a valuable investment in our future.

chose chemistry as a career because ... Gord Lange at Guelph made organic chemistry sound logical.

f I wasn't a scientist, I would be ... a chef, preferably at a 3* Michelin restaurant.

n a nutshell, my research involves ... searching for new modes of reactivity that will make bioactive products in an efficient way.

n my spare time I ... enjoy nearly any kind of activity with my children that gets us moving and talking.

The secret of being a successful scientist is ... finding the right balance between listening to what others say is possible and following your own ideas to something new.

The part of my job which I enjoy the most is ... watching students gain confidence to try their own

A good work day begins with ... news that a grant was funded.

My 5 top papers:

- 1. "Rhodium-Catalyzed Coupling Reactions of Arylboronic Acids to Olefins in Aqueous Media": M. Lautens, A. Roy, K. Fukuoka, K. Fagnou, B. Martin-Matute, J. Am. Chem. Soc. 2001, 123, 5358-5359.
- 2. "Mechanistic Studies of the Palladium-Catalyzed Ring-Opening of Oxabicyclic Alkenes with Dialkylzinc": M. Lautens, S. Hiebert, J.-L. Renaud, J. Am. Chem. Soc. 2001, 123, 6834-6839.
- 3. "Effects of Halide Ligands and Protic Additives on Enantioselectivity and Reactivity in Rhodium-Catalyzed symmetric Ring-Opening Reactions": M. Laut-
- ens, K. Fagnou, J. Am. Chem. Soc. 2001, 123, 7170-
- 4. "Pd-Catalyzed Tandem C-N/C-C Coupling of gem-Dihalovinyl Systems: A Modular Synthesis of 2-Substituted Indoles": Y.-Q. Fang, M. Lautens, Org. Lett. **2005**, 7, 3549 – 3552.
- "The Norbornene-Shuttle: Multicomponent Domino Synthesis of Tetrasubstituted Helical Alkenes through Multiple C-H Functionalization": K. M. Gericke, D. I. Chai, N. Bieler, M. Lautens, Angew. Chem. 2009, 121, 1475-1479; Angew. Chem. Int. Ed. 2009, 48, 1447-1451.

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