Author Profile



N. Branda

The author presented on this page has recently published his 10th article since 2000 in Angewandte Chemie: "Remote-Control Photorelease of Caged Compounds Using Near-Infrared Light and Upconverting Nanoparticles": C.-J. Carling, F. Nourmohammadian, J.-C. Boyer, N. R. Branda, Angew. Chem. 2010, 122, 3870–3873; Angew. Chem. Int. Ed. 2010, 49, 3782–3785.

Neil Branda

Date of birth: February 25, 1967

Position: Professor of Chemistry, Canada Research Chair in Materials Science and Executive Director of

4D LABS at Simon Fraser University (Canada)

Education: 1989 BSc University of Toronto (Canada)

1994 PhD with Julius Rebek, Jr., "Synthetic Recognition Systems: Self-Assembly and Metal

Chelation", MIT, Cambridge (USA)

1994 Postdoc with Jean-Marie Lehn, Université Louis Pasteur, Strasbourg (France)

Awards: 2005 E. W. R. Steacie Memorial Fellowship, 2006 Canada's Top 40 Under 40

Current research We are the ultimate control freaks and are always looking for new ways to provide "oninterests: command" regulation of structure–function relationships at the molecular and nanoscopic

levels. We provide "on–off" control of molecular functions by taking advantage of molecular switch systems that respond to light, electricity, or other stimuli by undergoing reversible

changes in their molecular structure

Hobbies: Gastronomy (preparing and consuming)

When I was eighteen I wanted to be ... older and wiser.

n ten years time I will be ... ten years older but probably no wiser.

When I wake up I ... hope somebody will bring me breakfast in bed.

A good work day begins with ... breakfast in bed (if you are luckier than I).

My first experiment was ... determining whether the family dog prefers rhubarb pie or chocolate cake.

My most exciting discovery to date has been ... dogs prefer whichever is closer.

If I could go back in time and do any experiment, it would be ... make sure both the pie and cake are the same distance from the subject (an early appreciation for proper scientific methods).

The best advice I have ever been given is ... "Drop out of the arts and try the sciences".

chose chemistry as a career because ... I was bad at arts.

If I could be a piece of lab equipment, I would be ... a magnetic stir bar.

My favorite song is ... any one that I can sing to, which limits it greatly.

The part of my job which I enjoy the most is ... working with some of the world's brightest minds. The most exciting thing about my research is ... seeing our chemistry potentially applied to so many technologies.

The biggest challenge facing scientists is ... identifying which problems are truly important to society and not just to the scientific community.

The three qualities that make a good scientist are ... curiosity, perseverance, and confidence.

My 5 top papers:

- "A Photo-Controlled Molecular Switch Regulates Paralysis in a Living Organism": U. Al-Atar, R. Fernandes, B. Johnsen, D. Baillie, N. R. Branda, J. Am. Chem. Soc. 2009, 131, 15966–15967. (The reversible photoswitching of a biological function in living organisms.)
- "Remote-Control Photoswitching Using NIR Light": C.-J. Carling, J.-C. Boyer, N. R. Branda, J. Am. Chem. Soc. 2009, 131, 10838–10839. (An example of how nanoparticles can be used to overcome the problem that most organic reactions require high-energy light but many practical environments of use demand lowenergy light.)
- "Creating a Reactive Enediyne by Using Visible Light: Photocontrol of the Bergman Cyclization": D. Sud, T. J. Wigglesworth, N. R. Branda, Angew. Chem. 2007, 119, 8163-8165; Angew. Chem. Int. Ed. 2007, 46,

- 8017–8019. (An example of the use of light to add or remove a potentially important therapeutic molecular motif "on command".)
- "Selective and Sequential Photorelease Using Molecular Switches": V. Lemieux, S. Gautier, N. R. Branda, Angew. Chem. 2006, 118, 6974–6978; Angew. Chem. Int. Ed. 2006, 45, 6820–6824. (An illustrative demonstration of how one or another derivative of a photoresponsive compound in a mixture can be triggered to undergo a release event due to them responding to different colors.)
- "Electrochromism in Photochromic Dithienylcyclopentenes": A. Peters, N. R. Branda, J. Am. Chem. Soc. 2003, 125, 3404–3405. (A generalized method to make a versatile class of photochromic compounds activate by using electricity as well as light.)

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