

Animating Organic Chemistry

University of New Brunswick



For Professor Ghislain Deslongchamps, organic chemistry is a way of life. As the son of a renowned chemistry professor, Deslongchamps himself became a professor of chemistry at the University of New Brunswick with impressive research credentials and experience, including the invention of a new method of manufacturing anticancer drugs.

When teaching his students in the classroom, though, Deslongchamps found that certain students had difficulty grasping the concepts of chemical reactions. Indeed, mentally visualizing chemical activity at the molecular level is no easy task, even for the brightest of students. With this in mind, Deslongchamps took it upon himself to develop a solution. While on sabbatical, he mastered a computer animation program and began to build an extensive series of interactive multimedia animations to help students “visualize” and better understand organic chemistry.

“ Within six years, he had developed more than 130 multimedia learning modules, which were hailed by students and teaching colleagues alike.

With a \$20,000 award from Springboard Atlantic, a network of 14 Canadian universities, he was able to hire a

programmer, purchase equipment and complete a beta prototype. The Canadian educational publishing company, Thomson Nelson, became keenly interested in Deslongchamps' multimedia creations. Ultimately, Thomson Nelson and the University of New Brunswick signed an exclusive, global licensing agreement for the technology, which is now known as Organic Chemistry Flashware.

Deslongchamps is developing the platform even further to include general chemistry. In the future, it may also encompass biology, biochemistry and other physical sciences.

As the saying goes, a picture paints a thousand words. In this case, moving pictures of organic chemistry can paint tens of thousands of words, illuminating complex scientific concepts.

For more information, visit <http://flashchem.nelson.com>.

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