

Yu recognized for innovation

SFU analytical/materials chemist **Hua-Zhong (Hogan) Yu** is the 2004 winner of the Canadian Society for Chemistry's national Fred Beamish award. The award recognizes individuals who demonstrate innovation in research in the field of analytical chemistry, where the research is anticipated to have significant potential for practical applications. Yu's research is devoted to biosensors and gene analysis. Most recently he has been working to fabricate a new generation of DNA chips.

A DNA chip (also called DNA microarray) is an orderly arrangement of DNA samples on a sensor. It provides a medium for matching known and unknown DNA samples and automates the process of identifying unknown DNA pieces. DNA chip technology is significant for genome studies, says Yu. "Many fields, including drug discovery and toxicological research, will benefit from DNA chip technology."

discovery of the electron, or Napoleon and the computer. (The electron's discoverer, J.J. Thomson, and Sherlock Holmes' creator Arthur Conan Doyle were both members of the Psychic Society. Napoleon's troops in Egypt bought shawls, starting a craze for the shawls. In Europe the shawls were made on automated, perforated-paper-control looms. This gave U.S. engineer Herman Hollerith the idea to automate calculation using punch cards, which were later used to control ENIAC, the first electronic computer.)

Specifically, the SFU Surrey group has created a prototype of a multi-user web-based game in which players can explore the K-World space and make connections of their own between different historical events and individuals. The prototype was demonstrated at the SFU Surrey open house on April 21.

"The *K-World* prototype promotes use of innovative thinking, whether in an academic or organizational context," says Michael Kiktavy, one of DiPaola's students. "It provides users with interesting and appealing ways of thinking about learning material in terms of relational connections and interdependencies.