



TRIUMF and D-Pace Win 2007 Synergy Award for Innovation

Recognized for Outstanding Collaboration Between Academia and Industry in Science and Technology

December
2007

Volume 10
Issue 6

Technology Transfer Bulletin

TRIUMF and one of its spin-off companies, **Dehnel-Particle Accelerator Components and Engineering (D-Pace)**, have been named as the winners of **2007 Synergy Award for Innovation** for small- and medium-sized companies by the **Natural Sciences and Engineering Research Council (NSERC)** of Canada. The Synergy Awards for Innovation were launched in 1995 by NSERC to recognize excellence in collaborations in research and development (R&D) between academia and industry, and the award given to TRIUMF and D-Pace was one of only seven awards given to academic-industrial partnerships within all of Canada.

D-Pace supplies products and services to the international commercial accelerator industry, specializing in charged particle transport systems and components for cyclotrons, ion implanters, and linear accelerators. Its customers include sub-atomic research institutions, radioisotope producers and radiotracer manufacturers.

After obtaining his Ph.D in Applied Accelerator Physics from the University of British Columbia for work performed at TRIUMF, Dr. Dehnel founded Dehnel Consulting Limited (DCL) with his wife, Patricia, in 1995. As the first company of its kind in Canada and operating out of the small town of Nelson, BC, DCL initially provided consulting for beamline engineering and design, supporting industry and research institutions like TRIUMF in creating charged particle transport systems. It was later restructured and renamed to D-Pace in 2004, when it began to provide products in addition to services to the commercial accelerator industry.

Since DCL's inception and through its transition into D-Pace, TRIUMF has developed novel technologies which D-Pace is able to license and market to end users. Also, TRIUMF has provided services and assistance in engineering, manufacturing, and commercializing the technologies. Their collaboration has involved the effective use of their collective intellectual and technical capital for financial, scientific, and educational advances. As a result of Dr. Dehnel's doctoral research and TRIUMF's alliance with D-Pace, formerly under-utilized laboratory equipment has been leveraged for providing a development and testing facility that would not otherwise be available in Canada. In addition, TRIUMF has provided assembly space for training D-Pace's staff and allowed D-Pace to subcontract TRIUMF when its specialized services are not available elsewhere in Western Canada. D-Pace has also initiated the documentation of much of the know-how from TRIUMF's staff into manufacturing drawings and technical manuals, preserving valuable knowledge for training and future use. Combined with the licensed technologies, this information is available to both parties through a cross-licensing feature in their agreement.

With continuous support from TRIUMF, D-Pace has grown into a successful business, impacting both the national and local economies. Currently, D-Pace has doubled its revenues in each of the past four years, with customers from France, Japan, South Korea, Taiwan, the Netherlands, and the US. D-Pace's success in its rural setting has resulted in hiring local sub-contractors in scientific modeling, electronic engineering, technical writing, web design, marketing, business development, and machining. Moreover, Dr. Dehnel is a founding member of five non-profit organizations dedicated to improving the scientific, technological and business sectors in the Kootenays, as well as supporting local schools' science and technology programs through judging, donations and lectures. With a grant-in-aid from TRIUMF, D-Pace has proposed to Selkirk College to set-up an ion source test facility in the Nelson Campus, which would enhance D-Pace's local operations, create jobs for the local economy, and provide educational opportunities for local students.



Dr. Morgan Dehnel (left), President and Co-Founder of D-Pace, accepted the 2007 NSERC Synergy Award for Innovation with Dr. Jean-Michel Poutissou, Associate Director of TRIUMF. Reprinted with permission from NSERC. Photographer: Normand Huberdeau.



“This is a tremendous honour for D-Pace, and I am proud to be recognized with such an internationally accomplished institution like TRIUMF,” said Dr. Dehnel. “Our success is largely derived from the skills obtained and the technologies licensed from TRIUMF, and the staff members in its Technology Transfer Division have been especially helpful, insightful, and kind in their support. Their expertise and dedication have been instrumental to my company’s growth from the beginning.”

Philip Gardner, Head of TRIUMF’s Technology Transfer Division, has been a key member of this alliance. “Dr. Dehnel has worked very hard to build his business, and the results have been most rewarding for not only D-Pace, but for its local community and the Canadian economy,” said Mr. Gardner. “D-Pace has helped to establish our country as a leader in innovation in accelerator physics.”

TRIUMF Selected to Enter into Second Round of National Funding Application Among 25 Institutions Invited for \$15-Million Competition From 110 Applicants

TRIUMF was recently short-listed as a candidate for the Centres of Excellence for Commercialization and Research (CECR) competition from the Networks of Centres of Excellence (NCE). After 110 institutions submitted Letters of Intent in the first phase of this competition, TRIUMF was among 25 applicants who were selected to submit full applications. The winners of the competition will be officially announced in Spring, 2008.

The NCE is an agency of the Government of Canada that supports partnerships between universities, industry, government and not-for-profit organizations to connect leading research with industrial expertise and strategic investments, boosting our country’s leadership in science and technology (S&T). As part of the Government of Canada’s national strategy on S&T, *Mobilizing Science and Technology to Canada’s Advantage*, the CECR competition’s goal is to create internationally recognized centres of commercialization and research expertise to deliver economic, health, social and environmental benefits to Canadians, as well as to encourage an entrepreneurial advantage and greater investments from the private sector in S&T.

TRIUMF Hosts Chinese Visitors to Share Technology Transfer Practices

On October 24, 2007, a group of administrators from Zhejiang Province, China, visited TRIUMF as part of their North American tour to learn about the role of science and technology in Canada and the US.

Jean-Michel Poutissou (sixth from left), TRIUMF’s Associate Director, welcomed the visitors during the luncheon with a brief overview of TRIUMF, and **Eric Cai** (fourth from left), Technology Transfer Assistant, gave a presentation about TRIUMF’s organizational structure and technology transfer. Afterward, **Philip Gardner** (fifth from left), Head of the Technology Transfer Division, and **Yi-nong Rao** (first from right), a Research Scientist in the Accelerator Division, led them through a tour of TRIUMF’s nuclear medicine facilities with the help of **Tom Ruth**, Head of the Life Science Group. TRIUMF also arranged for the opportunity to take the visitors to the adjacent facilities owned by **MDS Nordion**, a nuclear medicine company and one of TRIUMF’s major licensees. **Jerry Porter**, General Manager of its Vancouver branch, kindly gave them a tour and highlighted the interactions between academia and industry in the award-winning collaboration between TRIUMF and MDS Nordion.



“We enjoyed giving an introduction of TRIUMF and also how Canadian intellectual property (IP) law affects technology transfer,” said Mr. Gardner. “We are always glad to host such visits, as they provide opportunities to exchange ideas about organizational structure, IP ownership, and social and economic impact of basic research in science and technology.”

TRIUMF receives a financial contribution from the Government of Canada through the National Research Council.

TRIUMF is owned and operated as a joint venture of:

Members: University of Alberta, University of British Columbia, Carleton University, L’Université de Montréal, Simon Fraser University, University of Toronto, University of Victoria
Associate Members: University of Guelph, University of Manitoba, McMaster University, Queen’s University, University of Regina, Saint Mary’s University

Questions and comments regarding Technology Transfer or this newsletter can be addressed to ttadmin@triumf.ca or to:

Philip Gardner	Division Head, Technology Transfer	604.222.7436
Ann Fong	Manager of Intellectual Property & Technology Commercialization	604.222.7471
Nathan Reboh	Technology Transfer Assistant (Co-op Student)	604.222.7659

To become notified of the release of a new issue by e-mail each month or receive a new issue by mail, please contact us.

All bulletin issues are available online: http://www.TRIUMF.info/public/tech_transfer/tech_transfer_5.php

For information on how to become part of TRIUMF’s supplier base, contact Brenda Morrey | 604.222.7434 | morrey@TRIUMF.ca