

Emerging biotech industry in the Okanagan Valley



STEVE
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Burns' Business Builder

Despite our tragic forest fire experience, Kelowna, BC and the Okanagan Valley is still a great place to live that is very much open for business. With all of its attractions, the Okanagan Valley continues to thrive with emerging industries, such as biotech.

At first the biotech industry seems difficult to define. The range of biotech-related research is quite broad—from early diagnostic tests used to assist physicians in identifying diseases such as cancer to creating new forms of plants and fruits.

The biotech sector in BC is one of the fastest-growing research communities in the world. It comprises over 90 private sector firms, as well as a number of research centres located at government institutions, universities, teaching hospitals and technical colleges.

In 2001, BC spent more than \$420 million on biotech research and development, which was the highest of all of the provinces. Canada-wide revenues produced by this sector in 2001 were over \$3.6 billion with the most significant sectors being human health at \$2.5 billion, food processing at \$581 million, environment at \$268 million and agriculture biotechnology at \$245 million.

But how much biotech really occurs in the Okanagan Valley? Is this an emerging industry cluster that we should watch closely? The simple answer is: absolutely.

For instance, AgriForest Bio-Technologies Ltd., Kelowna, uses its patented technology to produce over a million cultured plants a year for nurseries, garden centres and orchards across the country. The company is now one of the largest producers of tissue-cultured plants in Canada.

Summerland-based Okanagan Biotechnology Inc. develops new commercial tree fruit varieties. Using patented tech-

nology it's able to silence the browning reaction and deliver a fruit that will not go brown when cut or bruised.

Other innovative biotech companies focus on the wine industry to help grape production and to create innovative grape varieties, while others are assisting in the health care sector's growing genome research initiative.

Kamlesh Patel, president and CEO of AgriForest Bio-Technologies Ltd. provided me with a tour of its facilities and his perspective on the industry.

"Although we are involved in a very unique biotech niche, I believe that any biotech company could thrive in the Okanagan," he says. "Like the plants we produce, with the right growing conditions, the biotech industry in the Okanagan has the potential of becoming very large."

During the tour I saw the benefits of the company's patented tissue culture protocol, which involves exposing plant tissue to a specific regimen in vitro conditions.

The technology allows it to produce a plant with disease-free growth, a more fibrous, healthier root system, a bushier branching habit and a higher survival rate.

I was very interested in Patel's DNA fingerprinting project, which allows AgriForest to identify plant varieties and find out if they are true to type. This provides a useful tool for orchardists and nurseries, as well as for growers interested in filing patents for proprietary plant varieties.

In my opinion, AgriForest represents the potential for the Okanagan's biotech industry. While the industry is in its infancy in the region with many pieces still missing, innovation does thrive in this emerging technology cluster.

Steve Burns is the president and CEO of the Burns Innovation Group Inc., a technology consulting firm based in Kelowna, BC, and is the vice-president of the Okanagan Science and Technology Council. He may be reached by phone at 877-763-4022 or by e-mail at steve@burnsinnovation.com

COMMUNITECH

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The Waterloo region's technology community continues to make news and experience growth. Read on to learn about local companies and their successes.

ARISE Technologies Corporation, announced revenues in the second quarter up 62.0 percent from the same quarter in 2002. Revenues in the six months were up 59.4 percent from the same period in 2002. These increases were achieved against a challenging corporate backdrop – the completion of an IPO and amalgamation – and indicate the strength of consumer demand for new energy solutions.

"The sales growth in this quarter begins to reflect ARISE's potential in this market," said Ian MacLellan, President and CEO of ARISE. "We anticipate that sales will continue to grow, especially given energy concerns so dramatically demonstrated by the recent blackout. This fuels our vision of accelerating the mainstream use of solar energy". For more information, visit www.arisetech.com.

Dspfactory Ltd., recently teamed with Clarity Technologies Inc. and Auburn Hills based Trilogy Electronics to provide the uCAFE (Micro-Clarity Audio Front End) Solution to eliminate noise when integrated in communication products. The uCAFE can be easily integrated in a variety of applications, providing clearer listening for wireless communications, line powered telephones, 2-way radios and helmets, Bluetooth™ and hands-free devices.

"Dspfactory is excited to be part of this partnership with Trilogy and Clarity in bringing its growing suite of complete audio enhancement algorithm solutions to a wide range of audio-centric communications products", said Geoff Bellew, Vice President Sales and Marketing, Dspfactory. For more information, visit www.dspfactory.com.

Sirific Wireless Corporation, has been awarded the 2003 Frost & Sullivan Technology Innovation Award for the Electronics & Semiconductors market sector in recognition of its groundbreaking work in the field of Direct Conversion CMOS radio design. Michael Hogan, President & CEO of Sirific Wireless Corporation called this award, "A significant achievement for Sirific and a credit to the strength of our technical team".

Deepa Doraiswamy, Research Analyst for Frost & Sullivan's Semiconductor Group said, "Sirific's Direct Conversion CMOS technology provides a unique single chip, multi-band, multi-standard radio solution for mobile handsets, laptops and PDAs". For more information, visit www.sirific.com.

Communitech Community Insights

Congratulations to Constraints Management Systems Inc. (CMS)

CMS has made it to the 4th annual PROFIT HOT 50 list of Canada's Emerging Growth Companies, published in the September 2003 issue of PROFIT Magazine.

CMS is a professional business consulting firm, and a Communitech member, based in Cambridge, Ontario with a sales office in Detroit, Michigan.

CMS helps their clients (primarily manufacturers, distributors, project-based engineering companies and high-tech firms in Ontario and the NE USA) move beyond incremental improvements and achieve exponential growth in profit and sales through the design and implementation of a "Viable Vision". This "Viable Vision" leverages strategic internal improvements and exploits them as a competitive advantage throughout the supply chain.

CMS started in 2000 and thrived despite the worst economy in a decade. CMS' success has been achieved through the exceptional quality and experience of their people, their network of professional business associates and their portfolio of high-growth clients. Most importantly, CMS has succeeded by applying the "Viable Vision" concept to their own business. For more information on CMS, please go to their web site at www.cm-sys.com.

Communitech Emerging Business of the Month

ISOfarm Inc. is in the business of protecting farms against environmental liabilities by improving the way farmers make decisions. Using the ISOfarm Environmental Management System (IEMS) farms will easily gain ISO 14001 certification. Exposed to environmental lawsuits, moratoriums and regulations, corporate farms desperately need ISO 14001 in place to continue operating within economic constraints. The US Farm Bill has introduced new subsidies to help farms get their certification, but no solution currently exists that fits the unique parameters of agriculture.

Currently, ISOfarm is selling prototypes of the IEMS to select producers in the swine industry. ISOfarm is developing the second version of its product as a unique, proprietary on-line system that streamlines, enhances, and enables scalability of the IEMS solution. Initially geared to environmental concerns, this platform technology will eventually extend to all farm management areas. ISOfarm is entering its last round of financing before achieving projected monthly revenues of \$1M. For more information, visit www.isofarm.com

Communitech Technology Association

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435 King Street North, Suite 100
Waterloo, ON N2J 2Z5
(519) 888-9944

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