

# Mississauga Business Times

*Mississauga's Business and Financial Newspaper*

Since first being featured in the Business Times in October 2000, Mississauga entrepreneur Hormoz Azizian has been a busy man. The president of NIR Technologies Inc. has steadily expanded the company's utilization of near infrared laser light technology over the past two years.

A major research initiative was undertaken starting in early 2001 to develop a reliable, accurate, fast and in-vivo fat content measurement technique for the human body. The research was co-funded by NRC-IRAP (National Research Council - Industrial Research Assistance Program). Due to the promising findings the co-funding arrangement was renewed in 2002 providing additional summer student employment. NIR also received technical assistance from Dr. Steve Heymsfield, deputy director of the New York Obesity Research Centre (St. Luke's - Roosevelt Hospital Centre) in providing their research information on MRI (Magnetic Resonance Imaging) for comparison.

Findings of this research were so encouraging that both Canadian and American patents were filed in 2002. The research findings will also be presented at an upcoming NIR2003 conference in Cordoba, Spain in April 2003.

In May of 2001, Roy Martin the senior vice president of RCM Technologies Inc., another Mississauga company, approached NIR Technologies Inc. for a potential subcontract in the non-destructive scanning of over 4000 nuclear cables as part of the Environmental Qualification project led by RCM Technologies at the Bruce Nuclear Power Plant. The environmental qualification project was in support of a \$340 million restart project consisting of two nuclear reactors at Bruce A (1500 megawatts installed capacity).

NIR Technologies Inc. had developed a non-destructive and non-intrusive capability of Materials Identification (chemical finger printing) that could be used in cables was a necessary first step in obtaining appropriate operating licenses for the nuclear power plant.

NIR Technologies Inc.'s staff teamed up with the IBEW members (Union Local 804, Kitchener, Ontario, Canada) employed by Comstock Canada Ltd. to provide the service. The first phase of the contract was completed in November 2001, one month ahead of schedule and well within the budget. NIR Technologies was retained for follow up scanning and identification activities and since then has visited the Bruce site four additional times.

NIR also signed a contract in 2001 with Taro Pharmaceuticals Inc. of Brampton to provide technical assistance in the training and implementation of near infrared (NIR) technology in their manufacturing operations.

The NIR technology, with its accuracy, ease of use, and fiber optic capabilities, is expected to enhance current QA/QC operations at Taro and result in significant cost and time savings.

An initial performance testing conducted by NIR Technologies indicated that the use of NIR technology would be significantly reduce the time and costs associated with testing and releasing the products. NIR Technologies has since provided testing services in the identification of the packaging components and has practically eliminated the waiting period for testing and has reduced the costs significantly.

In another development, ADL Process, a privately held company primarily in the business of recycling components of obsolete computer monitors, approached NIR Technologies Inc. in early 2002 to assist them in the evaluation of a separation process, and identification and quantification of separated products. The objective of ADL Process was to utilise expertise provided by other companies in developing a suitable plastic separation process to convert the plastic component of the computer monitors, mainly Acrylonitrile-Butadiene-Styrene (ABS), into recycling plastic that would be worth between \$500 to \$750 per ton.

NIR Technologies with its unique and non-destructive material identification capabilities was able to confirm that the computer monitor plastic separation process by Plas-Sep Process Ltd. Was feasible and that the NIR Technology could be used to determine the purity of separated ABS material.