

MIRARCO Update: Promoting mining innovation and economic growth

The Mining Innovation, Rehabilitation, and Applied Research Corporation (MIRARCO) was established at Laurentian University to promote mining innovation, to assist in regional diversification, and to stimulate economic growth in Northern Ontario. Founded in April 1998, MIRARCO is an applied research and service company formed through collaboration between Laurentian's Mining Research Centres (MRC) and the private and public sectors. MIRARCO just completed its first phase of development, having appointed a Board of Directors to implement its business plan, hired its first employees and generated substantial funding for its operation.

The five-year business plan for MIRARCO requires \$10 million of seed funding to roughly double the private sector funded research contract volume of its MRCs, establish two new centres, develop the Innovation and Development Group, and provide high technology infrastructure for the centres' collective utilization. In order to achieve this financial target, MIRARCO split its development needs into four funding sub-categories.

The first funding objective was to enhance research capacity by adding two new Chairs and Directors of two new centres, one in Mining Technology and another in Environmental Monitoring Technology. This highly touted application received \$2,238,000 of funding from the Ontario Research and Development Challenge Fund (ORDCF). The second significant application was to the Northern Ontario Heritage Fund (NOHFC) to establish an Innovation and Development Group. This group will focus on the commercialization of research and development as well as technology transfer. This successful application was awarded \$1,632,806.

The next step was to provide a high technology research infrastructure that could not only be used by all the research centres but also serve the needs of other researchers. The proposal to the Canada Foundation for Innovation for the Centre for Integrated Monitoring Technology (CIMTec) was prepared. CIMTec's design includes data acquisition, collection, storage, and analysis. All these characteristics are common to most research methods. This proposal was awarded \$1,920,000 from the Canada Foundation for Innovation and on August 23, 1999 CIMTec was awarded a matching \$1,920,000 from the Ontario Innovation Trust.

The final element of the funding strategy involves the private sector. The funding received from government sources are intended to foster and develop the MIRARCO organization, however to achieve self-sustainability, private sector project participation will be required beyond the five-year term. MIRARCO is currently establishing strategic alliances with SMEs for technology implementation projects together with larger organizations such as the European Space Agency (ESA). Projects such as the application of space technology to Harsh Environments including mining and other resource sectors demonstrate not only the caliber of researchers at MIRARCO but also a clear path to its self-sustainability.

The success of the funding strategy, combined with support from the MRCs, Laurentian University, Regional, Provincial and Federal governments, and industrial partners, have put MIRARCO into a position where it has achieved its \$10 million funding objective. The time is right for MIRARCO. Together with its strategic partners, in academia, government, and industry, and in an economic climate that now stimulates innovation and research and development, MIRARCO can succeed.