

WINNER: Canadian Innovation Award for New Technology
Supporting Partner: NRC/IRAP



(Photo left to right: Tony Rahilly, Director General Industrial Research Assistance Program, Chris Lumb, President & CEO, Micralyne Inc., Perrin Beatty, President & CEO, Canadian Manufacturers & Exporters, David Simpson, Vice President, Technology Industry Support, NRC)

[Micralyne Inc.](#)

Micralyne Incorporated deals with technology that is measured in microns. In fact, the smaller, the better. Scientists in their clean rooms in Edmonton, Alberta are busy developing the means to make smaller, faster industrial components.

They manufacture Micro-Electro-Mechanical Systems, or MEMS, and their work is at the heart of products we use everyday - our cars, our communications equipment, even medical research.

But as electronic and mechanical devices get smaller, the technologies to build them must also get more precise. Micralyne scientist, Dr. Siamak Akhlaghi, in conjunction with the University of Alberta, developed a gold-tin electroplating process that does just that.

The gold-tin solder is an alternative to existing solder technologies that were too big for today's microelectronics or optoelectronics. The gold-tin alloy is deposited through an electroplating process. Electroplating is less expensive and more precise than other processes. And it has the added advantage of making the microelectronics lead-free.

Micralyne's new technology was recognized with an award for **New Technology** at the Canadian Innovation Awards.

