EDITORIAL

CMC Microsystems mired in funding crisis

After 34 years of serving as a driver to the success and growth of many high tech firms and educational institutions across Canada, Kingston Ontario-based, not-for-profit organization CMC Microsystems (CMC), has been “dumped to the street,” according to its president and CEO Gordon Harling.

CMC was first warned in 2016 that it would lose its historical funding arrangement with the Natural Sciences and Engineering Research Council (NSERC) – set to end its decades of financial support.

As a result, Harling has been busy pulling out all the stops to persuade governments and other stakeholders that its expertise and services in microelectronics, photonics and other cutting edge technologies are critical to Canada’s future competitiveness in advanced manufacturing and other key tech-based sectors.

With the deadline looming (June 20, 2019), the organization has been pursuing multiple avenues and approaches including changing its support model for microelectronics and associated research at academic institutions from coast to coast.

Its importance as a lifeblood to high tech incubation and fueling innovation in Canada cannot be understated, as CMC has focused on advanced manufacturing industries since 1984. Among its efforts, CMC has managed Canada’s National Design Network (CNDN), which provides researchers access to the world’s best design tools, manufacturing technologies, and engineering support for making micro-nano-technologies, and for training industry-ready graduates.

Among its achievements includes simplifying access to state-of-the-art design, manufacturing and testing facilities for start-up businesses. CMC lowers costs of R&D for professors and companies alike. These services provided by CMC are even more essential today, as the research and training required to advance Canada’s digital economy has been accelerated with the emergence of such sectors as Industry 4.0, autonomous vehicles, big data, Internet of Things (IoT), cyber defense/security, 5G, quantum computing, artificial intelligence (AI).

Over time, CMC had more educators seek to use its high-end industrial tools to teach classes – not just research, but education, which is the job of the provinces and not the job of the feds, notes Harling. In an effort to offset the pending impact of funding withdrawal, CMC has also spent more time on the industrial side, conducting contract research for industry.

Based on the shut down timeline issued by NSERC and the absence of the $6.5 million CMC requires annually to function – CMC had to issue termination notices to all employees this October. In December fabrication runs cease and by March of 2019 access to all software packages and R&D platform partnerships will be terminated. Operations will officially end this coming June.

“The university programs we’ve supported have generated graduates that demonstrate real industry strengths, speeding up their entry into the work force,” says Harling, a successful entrepreneur who has led several microelectronics companies.

Harling estimates approximately 950 companies across Canada have been impacted by the efforts of CMC. “We’re a national network and we are in all 10 provinces, operating as a truly third-party organization,” Harling adds.

The CMC issued a pre-budget consultation submission to the House of Commons standing committee on finance this summer, detailing its position on the importance of advanced technologies to competitiveness.

“Advanced technologies are present in every major economic sector in Canada, but they are often taken for granted because they are almost invisible, highly-integrated components. Every technological product requires some form of intelligence and this is enabled using high-performance computing, microelectronics, micro-electromechanical systems, photonics or nanofabrication,” read the statement.

“The CMC went further to say, “Not-for-profit organizations generally provide the ‘glue’ that hold a nation’s ecosystems together. At present there is no coherent strategy, federal or otherwise, that links the various players in Canada’s micro-nano-technology ecosystem or ensures that there are no critical gaps now or in the foreseeable future.”

What can we do?

According to Harling – you can help! He urges supporters to reach out via letter or social media (#NeedMyCMC), to the federal government. You can find letter templates and messaging info here: https://community.cmc.ca/community/letter-of-support-campaign-2019

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