

## Nanofacilities for Emerging Technologies, Industry-University Showcase May 13<sup>th</sup>, 2015

The first NanoOntario-sponsored Industry-University Showcase highlighting Ontario Nanofacilities for emerging technologies took place on May 13<sup>th</sup>, 2015 at the Mike & Ophelia Lazaridis Quantum-Nano Centre at the University of Waterloo. The attendance was composed of 100 registered participants including 68 members from Industry. The feedback from the attendees was very positive and emphasized that this was a useful first step in improving links between the academic and industrial partners. Fruitful discussions during the day and at the final Panel Session raised the following points:

## 1. Such events are key to raising the visibility of NanoOntario and its partners.

As pointed out by several participants, the marketing of NanoOntario needs to be much improved. We should therefore plan to organize other events focusing on "Developing Greater Industry Awareness" with workshops on a more regular basis (once or twice a year for example) with more emphasis on specific industries that have an interest in nanotechnologies.

For example, the automotive sector has considerable interest in nano- and micro-scale materials and devices for a variety of applications ranging from foams for weight efficient car elements, thin film technology for coatings, to a variety of sensors embedded in cars. Another example is the biomedical sector where companies need small, faster and much more reliable diagnostic technologies for the detection of pathogens. Such technologies can be enabled by the facilities in our universities in many ways: benefitting from the expertise of our researchers in Photonics; micro- and nano-scale fabrication; and the possibility of using our facilities to help prototype small devices for clinical testing. Other sectors include: health and safety; IT; nanomaterials and soft matter (e.g. cosmetics); paint and coatings for the building industry, etc. Aside from fostering industry-academic aspects of possible collaborations, NanoOntario could be more involved in other governmental R&D such as defense programs, aerospace or transportation. In this context, we could envisage a one-day workshop with government officials to remind them that we represent a unique asset and that we can address a broad range of problem-solving needs.

Lastly, beyond the sought after increase in Academia-Industry collaborations, NanoOntario should also make efforts to enhance collaboration between universities with the overall aim of strengthening their collective infrastructure to keep it at the highest level. This would also avoid duplicating of expensive equipment that is costly to maintain. Considering the number of industry attendees, the workshop can also be seen as a good venue for building Industry-Industry collaboration and exchange.



2. The organization of the day may not have been optimal and several attendees suggested that the panel session should have been earlier in the day.

That would potentially lead to greater engagement within the audience and might naturally showcase the benefits of partnerships to those companies and labs that have not been actively engaged. Furthermore, a fresh audience is more likely to engage and participate (although we had excellent participation). Secondly, the ideas discussed during the panel can be used to frame the rest of the day's events/presentations, and could catalyze some new ideas or questions. A challenge with any panel is ensuring diversity of viewpoints and experiences. The panel was very well directed and assembled but a broader spectrum of industries with a better representation from small, medium and large companies would be a good thing. Gender balance on any panel needs to be addressed. Going forward, every opportunity to ensure that qualified, diverse voices are represented on a panel whenever possible would lead to a successful event.

3. Some industrial participants were not aware of the possibilities of funding from NSERC, MITACS and ORF.

These programs do present a unique opportunity for collaboration. NanoOntario should make every effort to advertise these programs on the NanoOntario website.