

## Tour of ACE Climatic Wind Tunnel

On September 29, 2016, PEO York chapter organized a tour of the Automotive Centre of Excellence Climatic Wind Tunnel. We had two tour groups sorted by Peterborough and York residents. We thank Rick Vender of the York chapter for organizing and inviting Peterborough to the event.

Our group of 30 was guided by John Komar, M.Eng., P.Eng., Director of Operations. He provided an enthusiastic tour and indicated the wind tunnel and 5 other test cells were available to all interested in the capability. OACETT and IEEE members also participated.

Below we see John explaining the completely laminar air flow over the 4 wheel dynamometer. The dynamometer is mounted on a turntable which can be used to test vehicles in crosswinds. To provide greater comfort for our group, John selected 25% UV exposure rather than rain, freezing rain, or blizzard conditions as we basked in the Arizona wind inside the tunnel.



Below are some of our members with their back to the source of the wind. You will notice their hair is blown straight forward and many have lost their hats.



Inside the belly of the beast.



The lab is part of the University of Ontario – [Institute of Technology](#) in Oshawa. It is used for labs in engineering classes and is available to all who need a high capability wind tunnel for product development or training in extreme weather conditions.

Other test chambers are useful for testing resistance to road vibrations or 6 degree of freedom vibration. Below is an anechoic vibration test chamber. This room is useful for sensing the noise related to vibration.



Watch for future tours.