

## INDUSTRY OPEN HOUSE

**Dynamic Demonstrations** 

WED. MARCH 26, 2014 1-7PM

## TOUR MULTIPLE LOCATIONS

at McMaster University & McMaster Innovation Park

- ▶ McMASTER MATERIALS & MANUFACTURING RESEARCH LABS
- ▶ McMASTER AUTOMOTIVE RESOURCE CENTRE
- CanmetMATERIALS

with complimentary shuttle & parking

- Material and Process Development Sustainable Nano-composites, light metal material development, high pressure die casting, forging and rolling technology / Steel development & process improvement / Heat treatment process development
- Material Characterization Electron microscopy, mechanical, corrosion, thermal and electrochemical performance / Corrosion prediction and protection
- □ CAD/CAM Inspection path generation, integrated laser/blue LED scanning with touch probe, point cloud to CAD GD&T analysis
- Machining Tooling selection and development / Virtual machining process development and optimization using CUTPRO® and MACHPRO™
- Bulk and Sheet Metal Forming Formability assessment including forming limits, fracture prediction / Process development and optimization for hot/cold rolling, extrusion, upsetting and forging
- □ Polymer Processing Formulation, conversion and characterization, modeling of single and twin screw extrusion, co-extrusion, injection molding, thermoforming, rotational molding, reactive extrusion, mixing and coating
- Metrology Closed loop machining / Final part inspection and on machine geometric calibration using PolySAMBA
- ☐ Design, Public Policy and Entrepreneurship Student project highlights
- Powertrain Test Facilities Advanced test facilities covering all major automotive powertrain components and assemblies up to complete vehicles / Hybrid powertrain technologies, including batteries, electric motors, SI and CI engines, hybrid transmissions, power electronics and controls