

# ORNL & Industry: Accelerating Nanotechnology Commercialization



## **Metal Infusion Surface Treatment (MIST)**

- Infuses up to 51 elements into the surface of metals and alloys, and secures the elements with a thin, nanostructured coating
- ORNL User Facilities worked with C<sup>3</sup> to develop the process, which originated in eastern Europe
- C<sup>3</sup> formed a new company in 2002 to move process into commercial production
- Parts last 30 – 50 times longer and uses 10 – 100 times less coating materials than traditional materials
  - Aluminum die-casting
  - Hot rolled steel
  - Cutting tools
  - Future applications in automotive spark plugs & catalytic converters

