

# Dr. Dellacorte(NASA) Neuros visit (2007.9 / 2010.9)

  
**Oil-Free Technology**

  
**Applications**

  
**Outreach & Education**

  
**Team Members**

## Oil-Free Turbomachinery Program

"High-speed rotating equipment operating without oil lubricated rotor supports . . . bearings, dampers, seals"

### Strategic Vision

To realize revolutionary improvements in performance, efficiency and reliability of turbomachinery propulsion systems.

### Breakthroughs

Recent technology breakthroughs in **Foil Bearings, Tribological Coatings, & Analytical Modeling** enable High-Speed & High-Temperature Oil-Free Turbomachinery.

### Goal

Incorporate recent enabling technological breakthroughs into progressively larger, more complex systems to reach a revolutionary, but practical, Oil-free Aero propulsion Engine



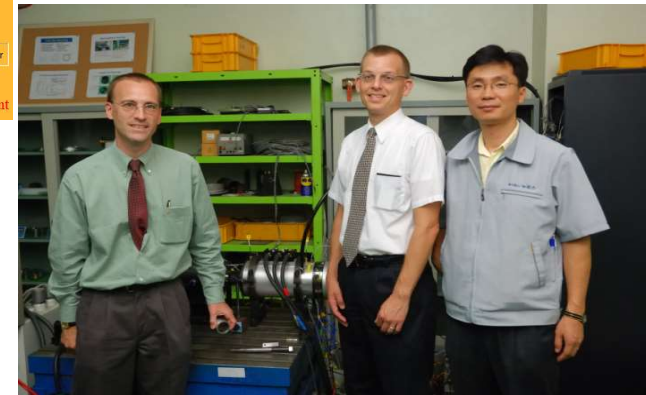
Awarded NASA's FY02 Turning Goals Into Reality (TGIR) Mobility Award

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### Current and Past Projects:

- Technical Lead for [Oil-Free Turbomachinery Technology Program](#)
  - Foil Air Bearings
  - Solid Lubricants
  - Modeling
- Tribology at extreme conditions:
  - High Temperatures
  - Tribology of Ceramics
  - Space and Vacuum lubricants
- Tribology of Ceramic Fibers
  - Seal Lubrication

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