

MEMS Tribology - EPAR FY01

Task Manager: Dr. Phil Abel (GRC)

Objective

- **Document testing of lubricious/hard coatings on MEMS contacting surfaces for increased device lifetimes.**
- **Compare MEMS tribological reliability using alternative substrate materials.**
- **Validate tribological performance testing of enhanced MEMS devices under “extreme” (e.g. mission) conditions.**
- **Transfer technology/methodology for enhanced tribological performance back to MEMS foundries.**

Deliverables

- **SiC MEMS test structures**
- **Report on testing for SiC MEMS coatings.**
- **Tribocoating recommendations for Si/SiC MEMS**

Participating Centers

- **Dr. Joanne Wellman (JPL)**