

MEMS Reliability Assurance - EPAR FY01

Task Manager: Dr. Joanne Wellman (JPL)

Objective

- **Develop new techniques for test and characterization of MEMS devices and MEMS fabrication process variables.**
- **Improve MEMS Reliability through investigation of manufacturing process steps and implementation of process controls.**

Participating Centers

- **Mark Fan (GSFC)**
- **Dr. Phil Abel (GRC)**
- **Todd Hong (JSC)**

Deliverables

- **Test structures fabricated with the MUMPS process by Cronos Integrated Microsystems**
- **Technical reports**
 - **Polysilicon surface morphology study**
 - **Clamped/clamped beam resonant frequency study**
 - **Torsional beam study**
- **Report on IR imaging as MEMS reliability and failure analysis tool**