Bonded vs. Unbonded Interface
Composite Structural Behavior
Elastic Foundation Formulation
Trabecular Bone Stresses
Interface Bonding
Subsidence
Straight Stem Load Transfer
Interface Stresses
Stem/Cement Interface Shear
Tensile Stress in Cement Mantle
Interface Normal Stresses

- Bonded
- Unbonded Frictionless
- Fibrous Layer
Effects of Coating Configuration

Bone/Implant Interface Normal Stresses
Trabecular Bone
VMES

Alteration of Pelvic Stresses
Effect of Metal Backing
Roentgen Stereophotogrammetric Analysis (RSA)
Femoral Head Migration

(RSA)
Bone/Prosthesis Motion Measurement
Measurement of Cortical Bone Strain
Subsidence due to Cement Creep
Effect of Creep on Cement Stresses