

**What is meant by each of the following:**

Vector basis	Tensor basis
Orthonormal basis	Vector
Second-order tensor	Spherical and deviatoric parts of a second-order tensor
Fourth-order tensor	Tensor product
Transformation matrix	Orthogonal matrix
Isotropic tensor	Projector
Deviatoric projector	Spherical projector
Orthogonal projectors	Voigt-Mandel notation
Gradient (of a scalar wrt a scalar, of a vector wrt to a scalar, of a vector wrt a vector, etc)	
Fourth-order identity	Symmetric fourth-order identity
Isotropic approximation of a fourth-order tensor	
Matrix representation of spherical and deviatoric projectors	
Linear algebraic problem	Eigenvalue problem
Characteristic equation	Cayley-Hamilton theorem
Invariants	Principal basis
Spectral decomposition	

Elasticity	Linear elasticity
Nonlinear elasticity	Elasticity tensor
Material axes	Strain energy
Stiffness	Flexibility
Plane of symmetry	Orthotropy
Engineering moduli	Isotropy
Thermal elasticity	

Fluid	Perfect fluid
Incompressible viscous fluid	Compressible viscous fluid

Loading path	Uniaxial stress path
Uniaxial strain path	Hydrostatic loading
Shear loading (different examples)	
Triaxial compression	Triaxial extension
Octahedral plane	Octahedral shear
Pi-plane	Lode angle
Rendulic plane	

Driver program (why and what does it do)

Modification needed for a stress-prescribed path for assumed strain increments

Viscoelasticity

Linear viscoelasticity

Backstrain version

Creep problem

Time discretization

System integrator

Strain prescribed algorithm

Sinusoidal loading

Rate dependence

Nonlinear viscoelasticity

Standard linear viscoelastic model

Relaxation problem

Time integrator

Stability

Stress-prescribed algorithm

Plasticity

Rate independence

Initial yield

Isotropic hardening

Yield function

Hardening Function

Tangent modulus

“Effective” stress

Zero finding

Secant method

Evolution equations

Associated flow rule

Mises yield condition

Mohr-Coulomb yield condition

Dissipation power

Internal energy

Viscoplasticity

Rate dependence

Limit stress

Kinematic hardening

Yield surface

Plastic modulus

Bauschinger effect

“Effective” plastic strain

Newton-Raphson

Cohesion

Flow rule

Tresca yield condition

Dissipation power inequality

Conjugate stresses