# F C P A S

Fracture and Crack Propagation Analysis System

✓ **FCPAS** is a *general-purpose* finite element-based program for *three-dimensional analyses* of structures. It is proven to be *accurate*, employs *three-dimensional enriched elements* and allows computation of important fracture parameters such as *stress intensity factors* very *efficiently without any special mesh requirements* and *post-processing efforts*.

✓ Currently, models can be generated within **ANSYS**^{TM} and their fracture analysis can be performed within **FCPAS** very *efficiently*.

✓ **FCPAS** is *free* to use for *education*, *research* and *scientific publications*. Usage for *commercial* purposes is *not permitted*.

✓ Its further development is continuing through a research project sponsored by TUBITAK.
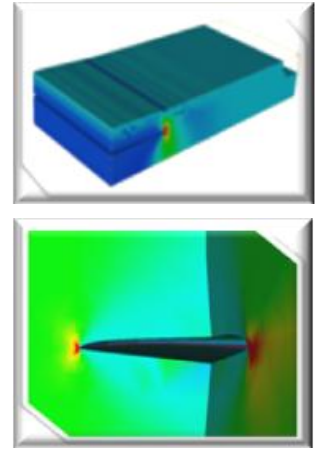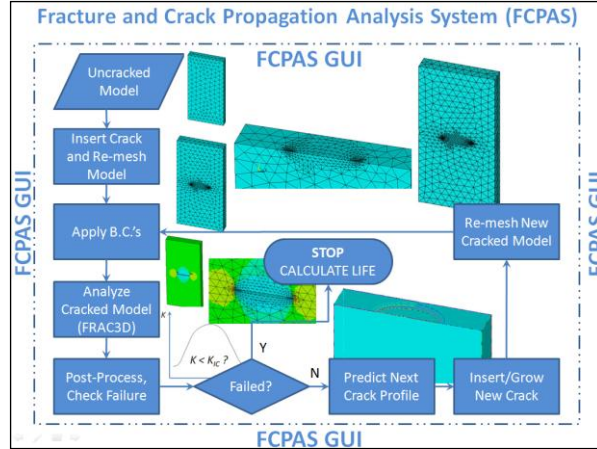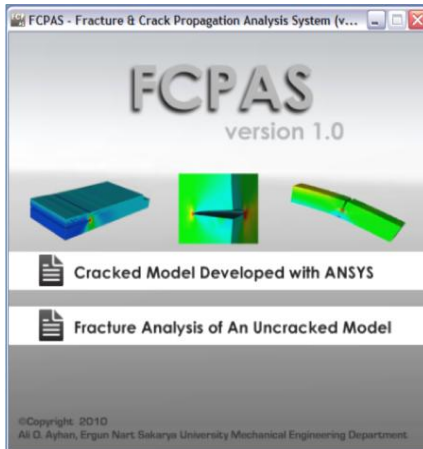
Analysis Types	Material Systems	Loads	Boundary Cond.s
✓ Elastic stress	✓ Homogeneous isotropic	✓ Surface pressures	✓ Nodal displacements
✓ Elastic/plastic stress	✓ Composite/multi-material	✓ Concentrated nodal forces	✓ Nodal sets
✓ Linear elastic fracture mechanics	✓ Homogeneous orthotropic	✓ Thermal loads	✓ Skew boundaries
✓ Submodel analysis of ANSYS models	✓ FGM isotropic	✓ Inertia loads	✓ Submodel boundary cond.s
	✓ Elastic/plastic isotropic	✓ Centrifugal loads	
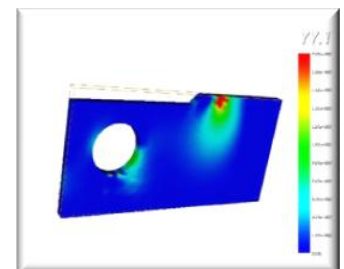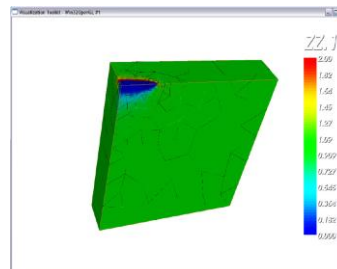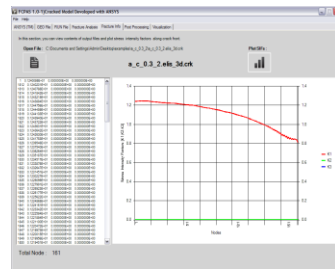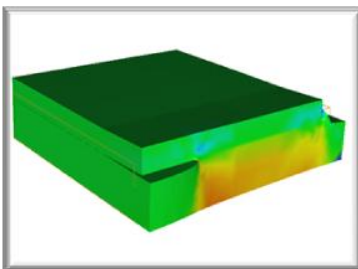
If you are interested in obtaining a copy of FCPAS, please contact Dr. Ali O. Ayhan by writing to ayhan@sakarya.edu.tr.