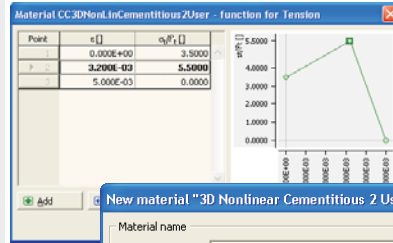
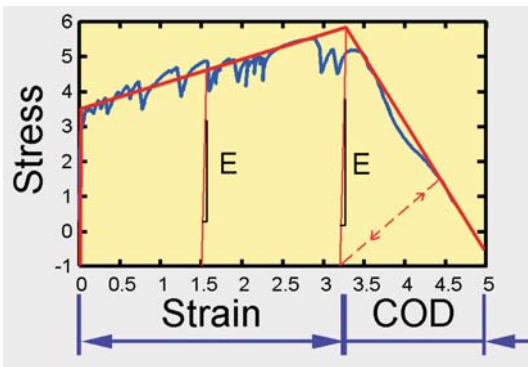
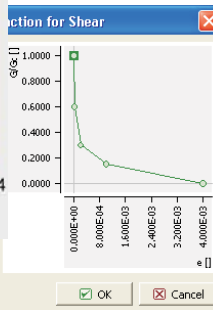
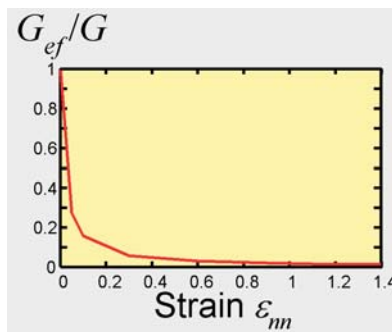
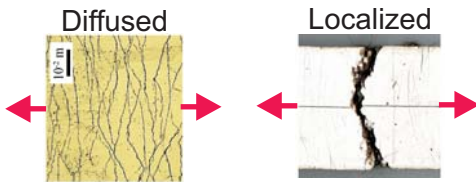
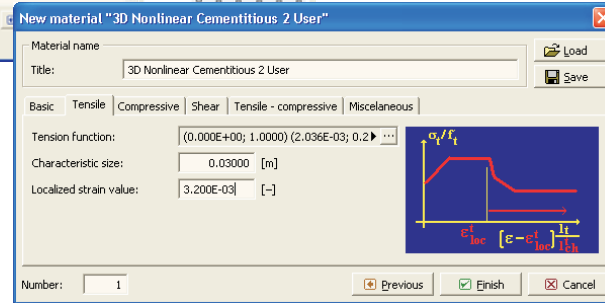


# ATENA simulates fibre reinforced concrete

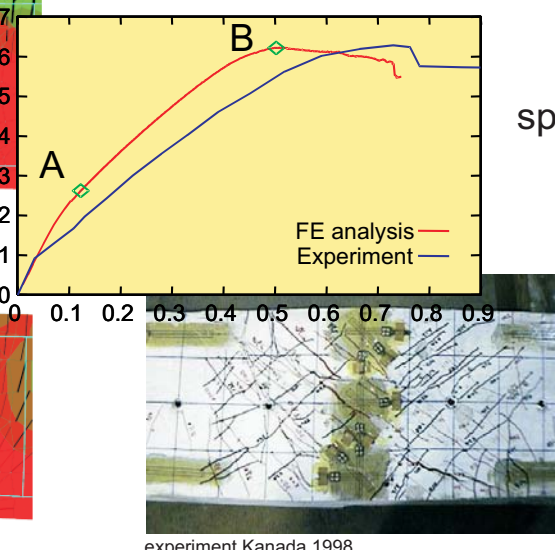
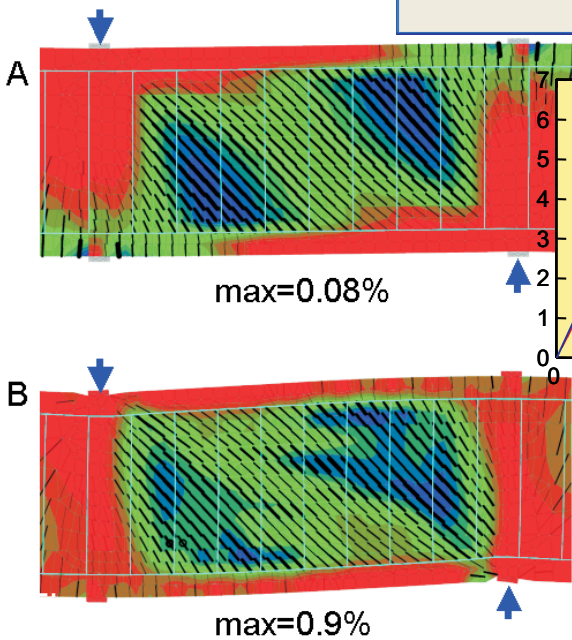


Unigue ATENA material models can be easily customized to model modern fibre reinforced materials, such as SHCC, ECC, HPFRC



Material specific stress-strain diagrams can be defined for tension, compression, and shear. Softening laws can be regularized using the crack band model. Characteristic size represents size of reference specimen. Crack band size is automatically calculated by ATENA.

Fracture strain & cracks



ATENA includes also specific SHCC material model proposed by Kabele. The figures on the left show the results and unigue ATENA post-processing features for crack display obtained for this special material model.



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ultimate load, pre- and postpeak response, deformations, crack propagation, crack width diagnosis of damage causes, reconstruction, prediction and evaluation of experiments, analysis of loading tests, research and development in materials and technologies