crystallite_stressAndItsTangent (Crystallite Loop)

NiterationCrystallite $=$ NiterationCrystallite $+$ 1

any: .not. crystallite_converged .and. .not. crystallite_localConstitution

.true.	.false.
all: crystallite_converged $=$ crystallite_converged .and. crystallite_localConstitution	∅

crystallite_converged

.true.	.false.

WINDING FORWARD:
crystallite_subFrac $=$ crystallite_subFrac $+$ crystallite_subStep
crystallite_subStep $=$ min(1.0 $-$ _crystallite_subFrac, 2.0 $*$ crystallite_subStep)

crystallite_subStep $>$ subStepMin

.true.	.false.
crystallite_subF0 $=$ crystallite_subF crystallite_subFp0 $=$ crystallite_Fp crystallite_subLp0 $=$ crystallite_Lp constitutive_subState0 $=$ crystallite_state	∅

CUTBACK:
crystallite_subStep $=$ 0.5 $*$ crystallite_subStep
crystallite_Fp $=$ crystallite_subFp0
crystallite_Lp $=$ crystallite_subLp0
constitutive_state $=$ crystallite_subState0

crystallite_onTrack $=$ crystallite_subStep $>$ subStepMin

crystallite_onTrack

.true.	.false.
crystallite_subF $=$ crystallite_subF0 $+$ crystallite_subStep $*$ (crystallite_partionedF $-$ crystallite_partionedF0) crystallite_subdt $=$ crystallite_subStep $*$ crystallite_dt crystallite_converged $=$ .false.	∅

crystallite_updateState

NiterationState $=$ 0

STATE LOOP: any: crystallite_requested .and. crystallite_onTrack .and. .not. crystallite_converged
         .and. NiterationState $<$ ncryst

NiterationState $=$ NiterationState $+$ 1

crystallite_requested .and. crystallite_onTrack .and. .not. crystallite_converged

.true.	.false.
crystallite_onTrack $=$ crystallite_integrateStress	∅

crystallite_requested .and. crystallite_onTrack .and. .not. crystallite_converged

.true.	.false.
crystallite_converged $=$ crystallite_updateState	∅