Abstract :

The flow and heat transfer of molten silicon during Czochralski growth under the
interaction buoyancy and crucible rotation in the Czochralski process are studied
numerically.
In this work we present a set of computational simulations using the finite volume
package in
order to analyse different instabilities induced by buoyancy, and centrifugal forces
that occur
in silicon Czochralski crystal growth in a traditional and a new systems.