In situ Observation of Solid State Crystal Rounding at High Temperature

# Kazuto Saiki [1]


A crystal surrounded by other host phases often changes its shape from angular to spherical in order to reduce its surface energy during metamorphism. A new heating stage was developed for in situ observation of solid state crystal rounding at high temperature. The stage is equipped with CO2-H2 gas blender and maximum temperature is 1400°C. Olivine fragments were loaded into the heating stage and annealed at 1300°C lasting 5 hours. The rounding process of olivine is successfully observed.