Slip and Plastic Deformation: Slip occurs when dislocations move within the crystal lattice, allowing layers of atoms to slide past each other.Crystal Shape Alteration: Strain hardening can cause elongation or shape changes in individual grains.Preferred Slip Systems: Grains adapt to the most favorable slip systems, aligning their crystallographic directions.Texture Development: Preferred orientations emerge, affecting material properties.In polycrystalline materials, dislocations pile up at grain boundaries during plastic deformation.Smaller Grains: More grain boundaries form, limiting dislocation movement.