

Two characteristic scales of glass-forming systems by Kyozi Kawasaki

Two scales which characterize glass-forming systems are explained.

(1) Dynamical heterogeneities

There are various experimental and computational evidences showing that glass-forming systems are spatially divided into small domains (of the order of nanometers or larger) with different relaxation times but with the same densities.

(2) Fischer cluster problems

Over many years there are mounting experimental evidences of anomalously large small angle X-ray or light scattering indicating existence of fluctuations of length scales going up to a few thousand Angstroms, that is, Fischer clusters.

These two problems will be briefly reviewed with some theoretical ideas.