



FIG. 1.5 Superfluid film creep. Similar to the behavior of a siphon, a film of superfluid He II will creep up and over the sides of a container to either (a) fill a vessel or (b) empty a vessel, until the level in the vessel matches that in the liquid-helium reservoir. Fig. (c) shows a glass vessel partially filled with superfluid He II, suspended by threads above a reservoir of superfluid helium. Amazingly, superfluid helium film will creep up and over the vessel wall, collect at the bottom as a drop that then drips into the reservoir (totally unlike a siphon). This process will continue spontaneously until the vessel is empty.