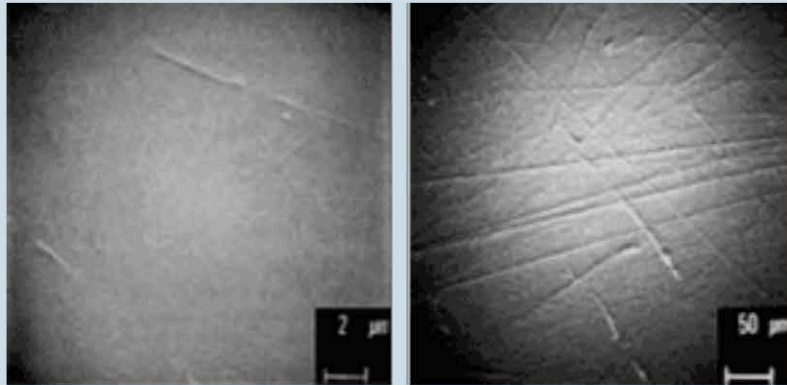


Glass prosthesis



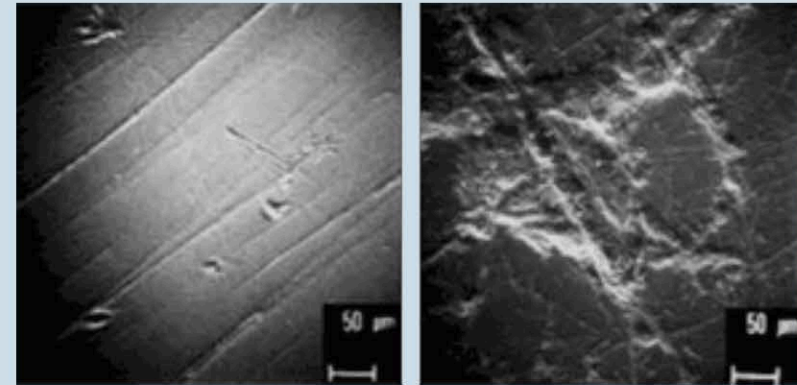
to the left: a new glass prosthesis

The surface is extremely smooth – compare this 25 times magnified image with other ones! An artificial eye made of glass is *blown* and has therefore no further processing. After its cooling it hardens exactly the way it was shaped when in a semi-liquid state. The result is an incomparably smooth, *fire-polished* surface.

to the right: a glass prosthesis after one year of use

Fine scratches in various directions can be noticed. These mechanical injuries are caused by hard dust particles [1], which grind the surface of the glass with every movement of the eyelid.

Plastic prosthesis



to the left: a new eye prosthesis made of plastic

The characteristic parallel running scratches are noticeable in plastic prostheses. These occur when the prosthesis is polished in the last step of making an artificial eye.

to the right: a plastic prosthesis, worn for one year

Countless damaged areas, up to 150 µm in width can be noticed, which turn this prosthesis into a *microscopic arrow*. Since PMMA is relatively soft, the artificial eye is unbreakable, but it is easily damaged.