Loading a protein crystal inside a capillary

Loading a protein crystal in a glass (or quartz) capillary for x-ray diffraction data collection

The following figures show the four stages of loading a protein crystal from a vapor diffusion drop to a glass or quartz capillary. The capillary diameter is between 0.7 to 1.0 mm (wall thickness is 0.001 mm). The crystal dimensions are 0.3 x 0.3 x 0.2 mm³.

1. **Capillary mounting of a crystal: Stage 1**
   - Take in salt solution

2. **Uptake of solution inside capillary to prevent crystal from drying out**

3. **Capillary mounting of a crystal: Stage 2**
   - Pick up a crystal

4. **Loading of the crystal along with mother liquor of crystal growth solution**
Drying out almost all mother liquor near crystal using a paper wick

**Capillary mounting of a crystal: Stage 3**
**Dry the crystal**

Sealing both the ends of the capillary with wax to prevent drying of crystal

**Capillary mounting of a crystal: Stage 4**
**Seal the crystal**