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Supporting information for article:

Viscous hydrophilic injection matrices for serial crystallography

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Supplementary Movies S1-S4.

Movie S1.

Close-up view on the extruding stream from the HVE injector nozzle with the online microscope camera at beamline X10SA (PXII) at the SLS. The size of the X-ray beam is $50 \times 10 \mu\text{m}$. The ID of the nozzle is $150 \mu\text{m}$ and the extruding stream consists of HEWL crystals embedded in NaCMC.

Movie S2

Close-up view on the extruding stream from the HVE injector nozzle with the online microscope camera at beamline X10SA (PXII) at the SLS. The size of the X-ray beam is $50 \times 10 \mu\text{m}$. The ID of the nozzle is $100 \mu\text{m}$ and the extruding stream consists of TRL crystals embedded in F-127.

Movie S3

Close-up view on the extruding stream from the HVE injector nozzle with the online microscope camera at beamline X10SA (PXII) at the SLS. The size of the X-ray beam is $50 \times 10 \mu\text{m}$. The ID of the nozzle is $100 \mu\text{m}$ and the extruding stream consists of bR crystals in LCP mixed with F-127.

Movie S4

Close-up view on the extruding stream from the HVE injector nozzle with the online microscope camera at beamline X10SA (PXII) at the SLS. The size of the X-ray beam is $50 \times 10 \mu\text{m}$. The ID of the nozzle is $100 \mu\text{m}$ and the extruding stream consists of bR crystals in LCP without F-127. While the diameter of the stream is fairly constant, the stream velocity is not. When the stream flows slowly, crystals (purple plates) extruding downstream can be clearly identified. When the stream accelerates, extruded crystals cannot be seen clearly and appear vertically “smeared”.

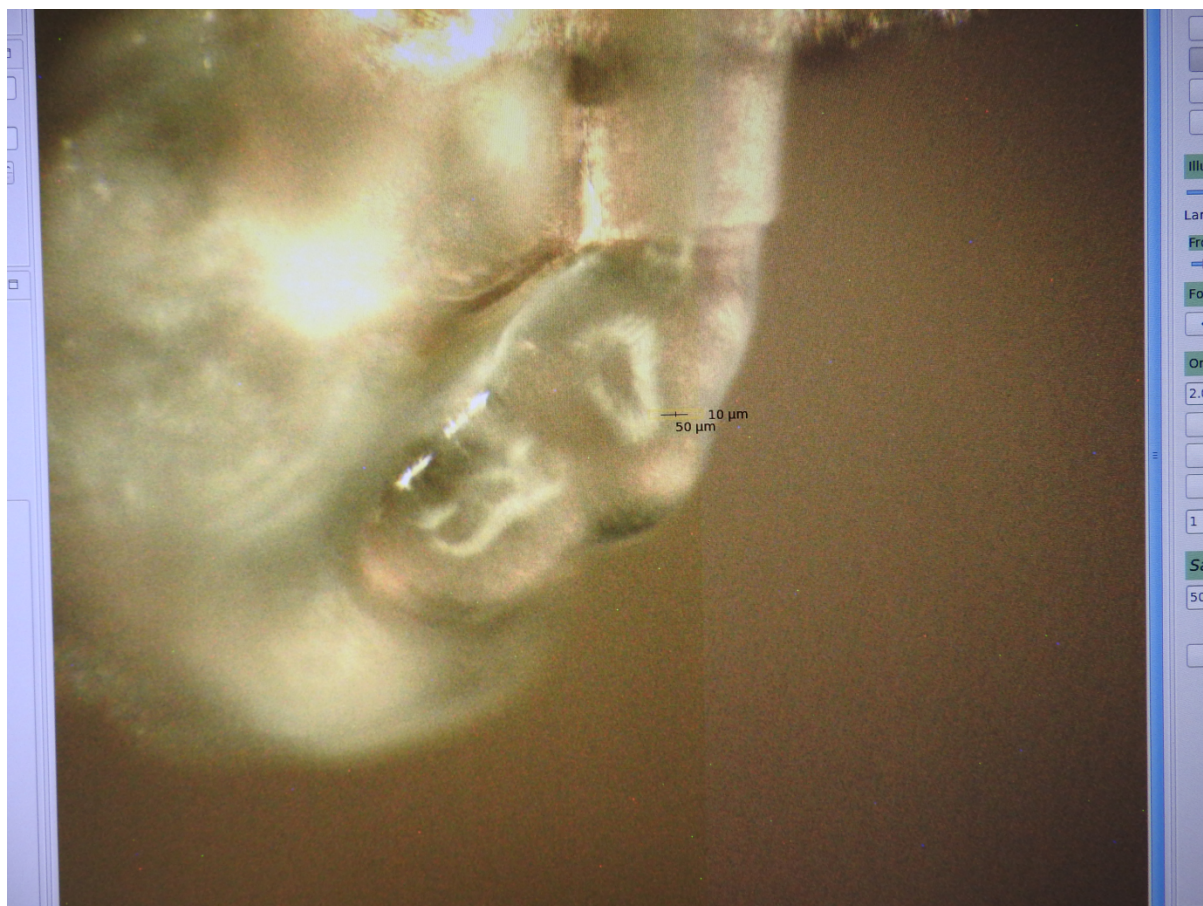


Figure S1 Close-up view of the extruded grease sample with embedded TRL crystals. The continuous flow of the grease matrix was disturbed by sudden “curling up” and attaching of the grease to the tip of the inner and outer capillary. This typically clogs the outer gas capillary and thorough cleaning of both capillaries is needed.