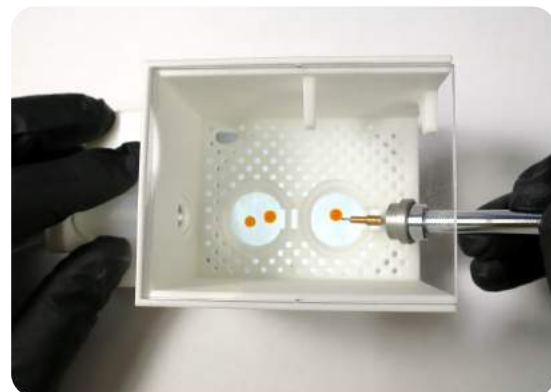


Control Dehydration

MiTeGen Watershed™

Humidity Controlled Workstation for Protein Crystal Harvesting



“This is a powerful benchtop tool for optimizing crystal harvesting and post-growth treatment protocols.”

- Dramatically increase drop working times
- Reduce protein precipitation and degradation
- Harvest more crystals from each drop
- Reduce dehydration and crystal non-isomorphism
- Controllably dehydrate crystals to improve diffraction
- Use with cover slips, plates, or home X-ray sources



(Watershed Control Unit)

Precisely control the output humidity to either the humidified chamber or direct nozzle workstations. Simple controllers allow users to quickly adjust parameters to change the humidity and flow rate of the output stream.

www.mitegen.com/product/watershed/



Control Dehydration



(Humidified Chamber Workstation)

Humidified Chamber Workstation

The Humidified Chamber Workstation accepts drops on 18 or 22 mm cover slips or on standard microscope slides. Crystals can be harvested and manipulated within the workstation using standard crystal loops and magnetic wands. The workstation is designed to work on standard stereo microscopes with working distances of 60 mm or larger.



(Directed Nozzle Workstation in use)

Directed Nozzle Workstation

The Directed Nozzle Workstation can be used with crystals in multiwell plates to provide humidified air flow directed at a well being examined. This workstation can also be used with a laboratory X-ray source to controllably vary the hydration of a crystal during diffraction data collection.



WHITMAN
COLLEGE

The Watershed system was developed in collaboration with Professor Douglas Juers, Whitman College

References:

“Improved reproducibility of unit-cell parameters in macromolecular cryocrystallography by limiting dehydration during crystal mounting,” Christopher Farley, Geoffry Burks, Thomas Siegert and Douglas H. Juers, *Acta Cryst. D70*, 2111-2124 (2014).

Improve your crystal harvesting now:

www.mitegen.com/product/watershed/

