



SURFACE HYDRATION WITH AN ION BEAM

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WARF: P210409US02

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The Invention

UW-Madison researchers disclose a supplemental innovation to their mass spectrometer-based approach for preparing high-quality cryoEM samples (P170235US02). In this version, the cryoEM sample preparation method/system was modified to allow for the ion beam to generate an amorphous solvent layer (e.g., ice) on the sample grid and to deposit the analyte on the grid. This approach leverages a combined solution, comprising the analyte and solvent, and can be conducted at atmospheric pressure or under vacuum. The sample grid (substrate) is cooled to facilitate formation of a solid solvent layer into which the analyte particles are embedded. Upon completion, the grid containing the combined solid solvent and analyte can be imaged using standard cryoEM techniques.

Additional Information

For More Information About the Inventors

- [Joshua Coon](#)

Related Technologies

- [P170235US02](#)

Tech Fields

- [Analytical Instrumentation, Methods & Materials : Microscopy.](#)
- [Analytical Instrumentation, Methods & Materials : Spectroscopy.](#)

For current licensing status, please contact Jennifer Gottwald at jennifer@warf.org or 608-960-9854