

An optimized lyophilization process to minimize primary drying time

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Categories:

- Chemical Engineering
- Pharmaceuticals

Keywords:

- Chemical Engineering
- Lyophilization
- Pharmaceuticals

Researchers at Purdue University have developed a method to optimize the lyophilization process parameters in real time to minimize the primary drying time. The measurement of vapor pressure with wireless sensors reduces process variable uncertainty and enables accelerated drying times. The shelf temperature can also be controlled to reduce the difference in drying time between the center and edge vials, creating more consistent drying. Furthermore, this technology operates on any computing device that supports the Python language.

Advantages:

- Minimize primary drying time
- More consistent drying

Potential Applications:

- Lyophilization

People:

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Intellectual Property:

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