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Ionic Wind for Vacuum Generation

A noninvasive ionic wind method for mass spectrometers and similar equipment allows for smaller vacuum pumps and power supply units due to directional gas movement from high to low voltage.

Researchers at Purdue University have developed a new method for generating ionic wind in mass spectrometers. Traditionally, a gas is moved through a container by conventional pumps which can exhaust the gas. Purdue researchers introduce ionic wind moves directionally from high to low voltage at speed between 0.1-1.5 m/s, a uniquely noninvasive approach. This setup allows for smaller vacuum pumps and power supply units in mass spectrometers and similar equipment.

Advantages:

-Lightweight

-Improved Wind Speed

Potential Applications:

-Mass Spectrometry

-Scientific Research

Technology Validation:

Testing for ionic wind speed

Additional Information:

Purdue Science Aston Labs

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TRL: 3

Intellectual Property:

Technology ID
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Category
Biotechnology & Life Sciences/Analytical & Diagnostic Instrumentation

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