Ionic Wind for Vacuum Generation

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Categories:
- Chemistry and Chemical Analysis
- Micro & Nanotechnologies

Keywords:
- Analytical Chemistry
- Chemistry and Chemical Analysis
- Micro & Nanotechnologies
- Research Tools

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:
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People:
- Cooks, Robert Graham (Project leader)
- Marsh, Brett

Intellectual Property:

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