

**Technology Title:** Ion Mobility Spectrometer (IMS)

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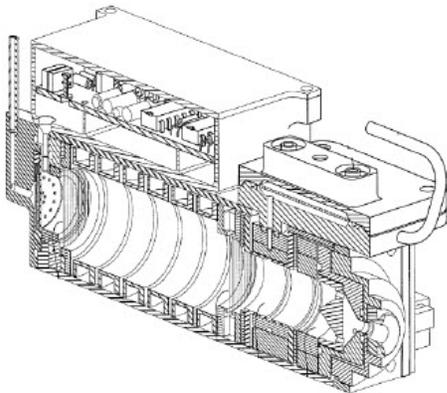
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**SYSCOM:** NAVSEA

**TRL:** 4, 9, 7

**Image:**



**ABSTRACT**

**Abstract #:** Explosive detection, ion mass spectrometer, Cargo detection, baggage screening, vehicle screening, personnel screening

Increases in Ion Mobility Spectrometer (IMS) efficiency can provide a market advantage to private industry involved in explosive detection. Three technologies have been developed to enhance the IMS process: a software algorithm to optimize IMS detection (Patent 7,361,206), a method to continuously remove water vapor from an IMS (Patent 7,078,680) and a method to calibrate an IMS in the field (Patent 7,751,999). These developments can potentially lower cost and increase efficiency during the IMS process. [NSWC Crane]

**THUMBNAIL**

New improvements in ion mass spectrometry (IMS) including algorithm optimization, water vapor removal and in-the-field system calibration.