Aerosol Chemical Speciation Monitor (ACSM…or mini-AMS)

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Background info

• Designed for **continuous monitoring** of aerosol composition (quantitative measurements of organics, ammonium, nitrate, sulfate, chloride)
• Builds on Q and ToF AMS concepts - Same vaporizer, ionizer, analysis (PMF)
• Limited sizing information
Properties

- Simpler to operate and maintain
- No extensive post-processing of data required
- Stable over extended periods of time (Long term unattended operation)
- Smaller size; Lower cost
- Ideal for
  - Routine monitoring of local and regional air quality
  - Continuous emissions monitoring at hazardous waste incinerators, power plants, and manufacturing facilities
  - Process control monitoring
- Lower sensitivity

ACSM

Size:
18”D x 22”W x 24”H
(46 cm x 56 cm x 61 cm).

Weight: 140 lbs
(64kg)

Power: 300W
universal AC power; 120/240 VAC, 50/60hz
DAURE: First Deployment!

• Goal
  – Compare loadings to AMS
  – Determine detection limits
Future deployments

• May, 2009: Houston
• August, 2009: Queens College New York