

EQP Facilities

Atmospheric Sampling

- Custom-built field laboratory at Fort Prospect, Bermuda
- High Volume **Total Suspended Particle (TSP) samplers** - Tisch Environmental, Inc.
- High Volume **PM₁₀ samplers** - Tisch Environmental, Inc.
- High Volume **PUF samplers** for semi-volatile organic compounds - Tisch Environmental, Inc.
- Continuous TSP Monitor - **DustScan Sentinel Model 3030 Aerosol Monitor**, Rupprecht and Patashnick
- Continuous PM_{2.5} Monitor - **TEOM (Tapered Element Oscillating Micro-balance)**, Rupprecht and Patashnick
- Continuous NO_x Monitor - **Model 200E** Chemiluminescence NO_x Analyzer, Teledyne-API
- Continuous SO₂ Monitor - **Model 100E** UV Fluorescence SO₂ Analyzer, Teledyne-API
- Model 8832 Data System Controller - **ESC**
- Meteorological instrumentation - **RM Young**
- Aerosol filter sampling (custom built)
- Automatic Wet/Dry Precipitation Samplers - **Loda/Aerochem Metrics**
- 23 m walk-up **sampling tower** at Tudor Hill, Bermuda

Environmental Analytical Chemistry

- Gas Chromatograph-Mass Spectrometer - Agilent 6890GC/5973MSD + autosampler
- Accelerated Solvent Extractor - Dionex ASE300
- Soxhlet extraction system
- Solid Phase Micro-Extraction (SPME)
- Solid Phase Extraction (SPE)
- Atomic Absorption/Emission Spectrometer - Perkin Elmer AAnalyst 800 (flame and graphite furnace)
- Ion Chromatograph - Dionex DX100 + autosampler
- Large volume solvent concentrator - **Zymark TurboVap II**
- Small volume solvent concentrator - **Techne Sample Concentrator**
- Constant temperature/humidity chamber for conditioning filters for gravimetric determination
- 4- and 5-place analytical balances
- Reverse osmosis and Milli-Q water systems