Integrated air quality monitoring technology for high-volume, low-cost measurements of indoor and outdoor air quality

Douglas Booker
National Air Quality Testing Services Ltd. (NAQTS)

Incorporating the latest developments in low-cost sensor technologies, alongside a regulatory grade Condensation Particle Counter (CPC), Thermal Desorption tubes (TD), and other environmental measurements, the NAQTS V1000 unit is a portable air quality monitoring station designed to be easy-to-use for high-volume, lower-cost measurements, facilitating a holistic understanding of indoor and outdoor air pollution.

Ultrafine Particles, Carbon Monoxide, Carbon Dioxide, Nitrogen Dioxide, VOCs, Ozone, Ammonia, Temperature, Pressure, Humidity, Noise, GPS, IoT Ready

CURRENT RESEARCH

IN-CABIN AIR QUALITY
Benchmarking vehicles on in-cabin comfort: Air Quality, Noise, and Vibration. Data from 100s of vehicles per year.

CITIZEN SCIENCE INDOOR AND OUTDOOR POLLUTION AT SCHOOLS
Capturing real-time pollution levels during school drop off/pick up times, as well as levels of student exposure in the classroom. Measurements taken by students at VIVES school.

IAQ AND ENERGY EFFICIENCY
Developing models for assisting building design and modification whilst ensuring energy efficiency and good indoor air quality. Investigating the relationship between real-time temporal TVOC concentrations and speciation of VOCs by TD GC-MS.

INDOOR ULTRAFINE PARTICLES
Investigating best practices to reduce indoor ultrafine particles, from both indoor and outdoor sources.

IAQ AND ENVIRONMENTAL JUSTICE
Are certain groups more likely to be exposed to poor IAQ? Previous research has suggested that “air pollution follows the poor”, however, this was based on outdoor air pollution, despite the fact that we spend 90% of our time indoors.

CONTACT
Douglas Booker, CEO
dbooker@naqts.com
www.naqts.com