METHODS

APPLICATIONS

LM (Light microscopy)

Mass concentration and sedimentation rate of opaque (= anthropogenic) and transparent (= mineral and biogenic) particles

**SEM/EDS
(Scanning electron microscopy coupled to x-ray energy dispersive spectroscopy)**

Automated chemical and morphological analysis of single particles (> 600 particles)

**PACLA
(Particle Classifier Software)**

Identification and quantification of sources (natural vs. polutant) on a statiscal base (cluster analysis)

**ICP-MS
(Inductively coupled plasma mass spectrometry)**

Detection of metals and non-metals at low concentrations (part per quadrillion, ppq)

Raman spectroscopy
Fingerprinting of specific molecules

SIGMA-2
PASSIVE SAMPLER

Air quality monitoring network
(Governmental Offices for the Environment)

Air quality in mining, quarrying and dumping environments
(private industry)

Monitoring of construction works
(private and public properties)

Asbestos monitoring during renovation works
(long-term measurements)

Volcano Monitoring
(natural hazard assessment)

Bio-monitoring
(pollen, spores, agriculture)

Particle Vision
Die Partikelspezialisten

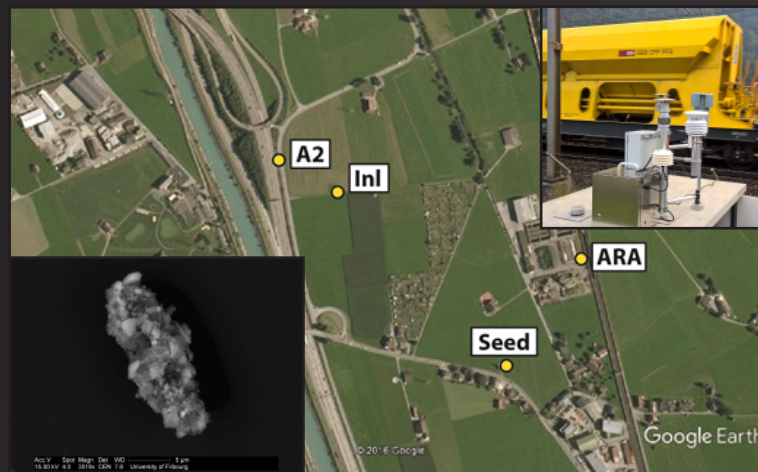# SIGMA-2
POSSIBLE FIELDS OF APPLICATION

Particle Vision
Die Partikelspezialisten

A) Monitoring of quarries (e.g. cement industry)

B) Monitoring of road and railway immissions (transect measurements)
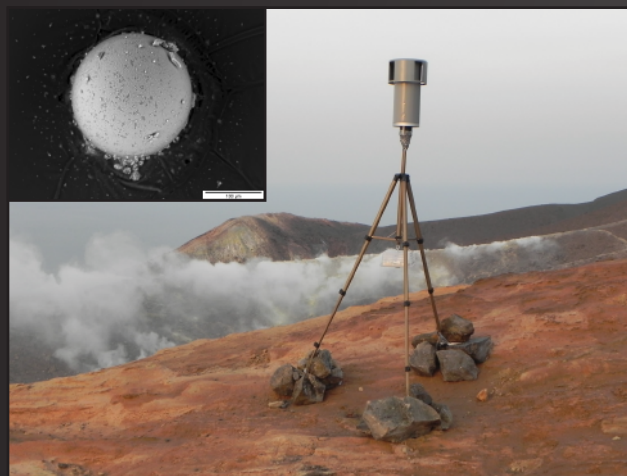
A2
Inl
ARA
Seed
Google Earth

C) Long-term asbestos monitoring at ambient air

D) Monitoring of dumps (e.g. slag)

E) Volcano monitoring

E) Monitoring of construction work

Details about the specific projects are available upon request: info@particle-vision.ch