

LABORATORY OF SOLID PHASE AEROSOLS AND BOTTOM SEDIMENTS

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Portable aerosol spectrometer Grimm 1.109

- In situ measuring the particle distribution and dust mass
- Laser 655 nm, 31 size channels (0,25 - 32 μm)
- Concentration 0,1 - 100 000 $\mu\text{g}/\text{m}^3$, 1 - 2 000 000 particles/l
- Flow rate 1,2 l/min \pm 5%, output PC, RS-232, USB



Samplers Leckel MVS6 a Digitel DH77

- Sampling particulate matter TSP, PM₁₀, PM_{2,5}) for further analysis
- Electronically controlled programmable sampling by medium and high volume method

Applications

- Measurement of the concentration and size distribution particles in real time of ambient and indoor air
- Measurement and control cleanroom
- Sampling air pollutants for further analysis



Energy-dispersive XRF spectrometer SPECTRO XEPOS

- Pd – X-ray tube, voltage 0 –50 kV, 12 samples positions
- SDD detector 10 mm² with Peltier cooling
- Target changer with up to 8 polarization and second. targets
- Spectral resolution at MnK α \leq 155 eV (10 000 pulses/s.)

Applications

- Quantitative analysis of elements from Na to U in the solid samples (without mineralization) in the light and heavy matrices (soil, waste, bottom sediments, minerals, slag, alloys)



DMA-80 Tricell – Direct Mercury Analyser

- The range: 0-1000 ng Hg, 3 cuvette automatic system, detection limit of 0.0015 ng
- Programmable drying and burning, autosampler 40 position, sample measurement time to 5 min.



Applications

- Direct analysis of liquid and solid samples for mercury concentration (without mineralization) - soil, bottom sediment, water, waste, biological material, food)