

Online oil-in-water and suspended solids monitor based on thermal lens spectrometry and forward scattering

Highlights

- Fast measurements with no sample preparation needed.
- 0.02 ppm resolution in oil concentration measurements.
- Suspended solids and oil droplets are detected separately through signal processing.
- Particles of different sizes are distinguished by peak height distribution.
- Particles concentrations are obtained from interarrival times.
- The device proves ideal as an online monitor incorporated into injection flowline.