Dark Field Scattering and Electrochemiluminescence
Nanoparticle Analyzer

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Status:
Seeking R&D and/or licensing partner

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Nanoparticle Analyzer

- Performs rapid and precise in situ nanoparticle characterization
- Measures a variety of spatial and temporal information through dark field scattering and electrochemiluminescence optical signals
- Can detect and analyze single metal nanoparticles with sizes ranging from 5-50 nanometers

Advantages

- Rapid on-site determination of:
  - Nanoparticle size
  - Nanoparticle size distribution
  - Redox potentials
- Simultaneous tracking of thousands of nanoparticles individually
- Correlate electrochemical behavior with nanoparticle structure
- Combines size determination and electrochemical behavior analysis into one device

Figure 1: Schematic of the nanoparticle analyzer

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