

CGS 2003.32

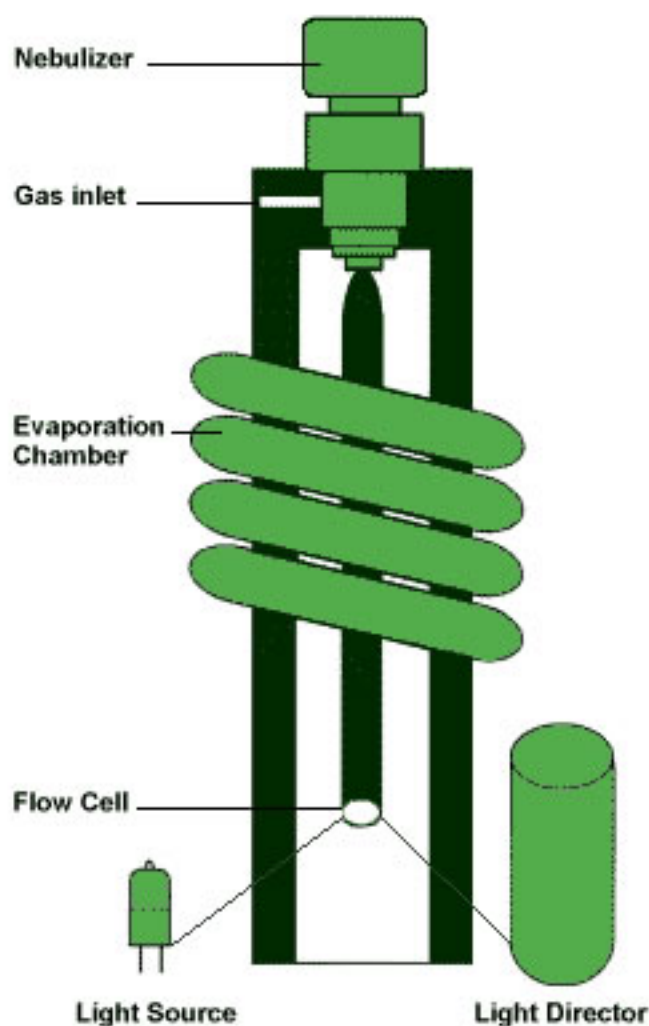


- Universal detection of non-volatile compounds
- Sensitive detection of weak chromophores (e.g., lipids, phospholipids, triglycerides, carbohydrates, polymers and pharmaceuticals)
- More sensitive than RI and low wavelength UV detection
- Compatible with gradient elution HPLC
- Low temperature evaporation for semi-volatile and thermosensitive analytes
- Compatible with aqueous mobile phases, even at high flow rates
- Response factors are less variable than RI, UV and MS

High baseline stability- insensitive to temperature and flow variations

ELS detection is based on the universal ability of particles to cause photon scattering when they traverse the path of a polychromatic beam of light. The liquid effluent from an HPLC is first nebulized and the resultant aerosol mist, containing the analyte particles, is directed through a light beam. A signal is generated that is proportional to the mass present, and independent of the presence or absence of chromophores, fluorophores or electroactive groups. Since essentially every compound can be separated by HPLC or micro-HPLC and detected by ELS, the ESA Model 301 is the detector every chromatography laboratory should have.

The Model 301 Evaporative Light Scattering detector is a mass sensitive device, which provides a response directly proportional to an analyte's mass in the sample. The presence of functional groups or chromophores are not necessary for detection. Relative amounts of compounds can be easily assessed by evaporative light scattering technology. Any non-volatile analyte can be detected and gradient elution can be employed to optimize the separation, aqueous as well as solvent based mobile phases can be used to detect compounds that are not generally "seen" by other detection techniques. This detector can be used in conjunction with mass spectrometers to provide a complete analysis of the sample



The 301's unique nebulization system and temperature controlled drift tube provides sensitivity, reliable and reproducible analysis. The unit's small footprint requires a minimum of bench space, allowing use in space limited conditions.