

## Poster-Session

### Process Control and Optimisation by Remote Plasma Optical Emission Spectroscopy

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Remote plasma optical emission spectroscopy (RPOES) offers a robust alternative to conventional quadrupole RGAs. RPOES can operate at pressures from 0.5 mbar down to  $10E-7$  mbar thereby providing control and optimisation capabilities at pressures where RGAs cannot operate without differential pumping. Gencoa's 'Optix' demonstrates several advantages in comparison to RGAs including; Robustness: the detector is separated from chemicals by an optical (sapphire) window; There are no filaments, only a simple electrode geometry; Can be used for direct chamber monitoring – no requirement for differential pumping; Fast response times, 10-50 ms; Can tolerate volatiles in the vacuum including hydrocarbons, solvents and long-chain polymers. The device also offers a wide range of useful software applications such as gas tracking, leak detection, pump-down monitoring, water tracking, end-point detection and multi-mode process tracking. The operating principles will be explained and common questions from RGA users will be addressed. Application examples will also be included, illustrating the versatility of the method.