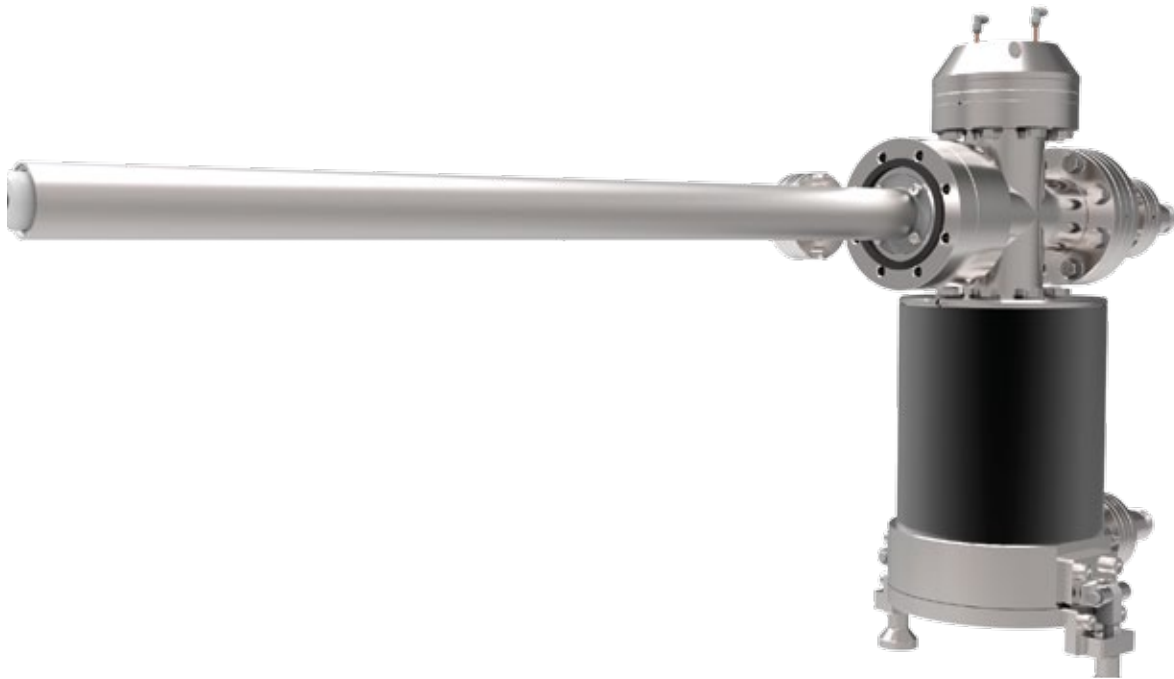




Genco: perfect your process

Pulsed Effusion Cell



Pulsed Effusion Cell

A novel solution for deposition of sulphur and selenium.

Genco and their partner Nano4Energy have developed a corrosion free and highly controllable type of Effusion Cell - providing a solution for deposition of materials which are traditionally difficult to deliver. Where such a requirement exists, the inclusion of a pulsed effusion cell can improve processes across a of range of applications including OLED, LCD, and solar cells.



nano4ENERGY



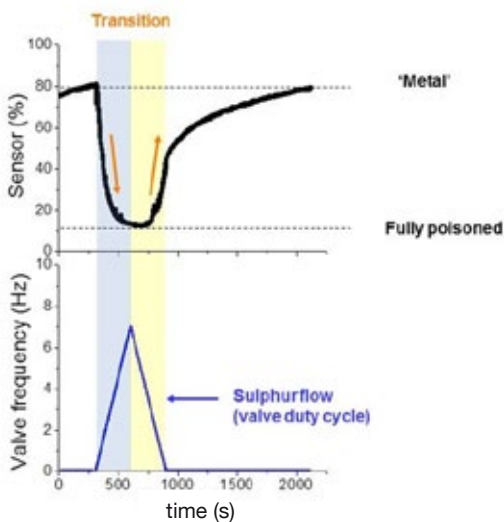
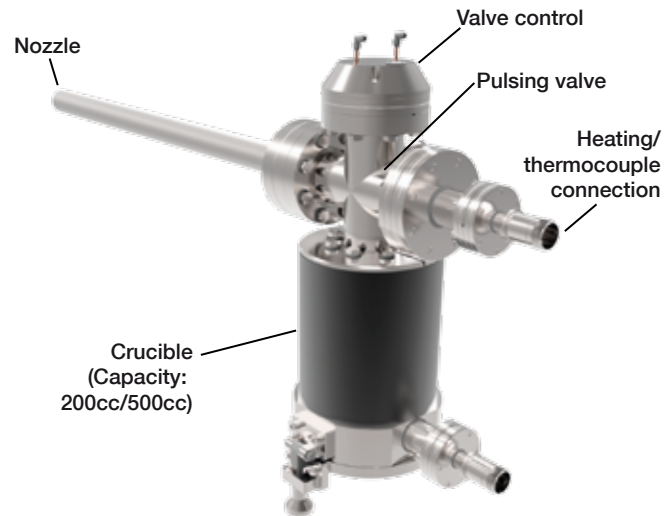
Pulsed Effusion Cell

High precision effusion cell: a joint development between Gencoa and Nano4Energy.

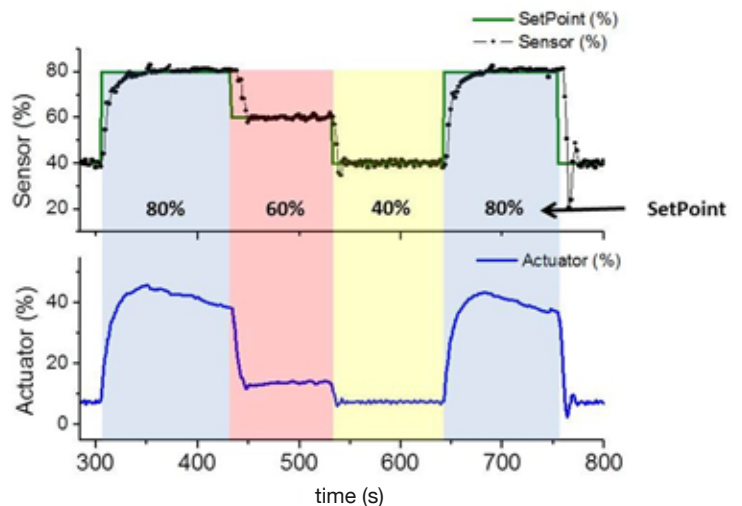
Novel solution for the control of chalcogen and other compounds in the mass production of Photovoltaic solar cells and OLED.

The pulsed effusion cell, coupled with a Speedflo reactive feedback gas control system, enables the fast reactive response and precision control for the injection of chalcogen materials, such as Sulphur and Selenium materials, commonly used in CIGS and CIS solar cell technology.

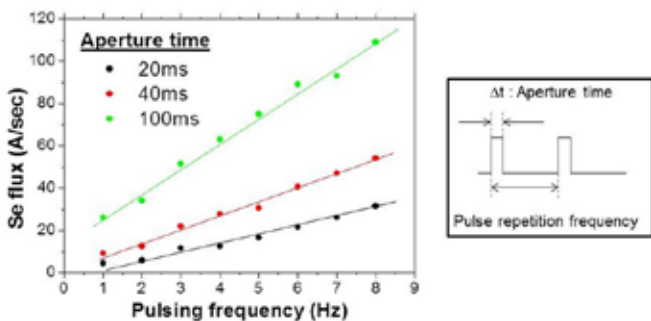
The chalcogenides are injected into the plasma in the vapour phase, offering a viable solution for the production of CIGS and CIS absorber layers by a single step reactive sputtering process.



Evolution of the optical P.E.M. signal (Copper target, $\lambda = 514\text{nm}$) as a function of the S flux. The metal-to-poisoned state of the magnetron sputtering source is clearly observed.



Evolution of the optical P.E.M. signal as a function of time under active effusion cell feedback control (Copper target, $\lambda = 514\text{nm}$). The intensity of the P.E.M. signal is kept constant under effusion cell valve actuation in order to adjust the S flux



S and Se sensor now also available.

Dimensions

