**Biological removal of hexavalent chromium: evaluation of the metabolic activity of native and Cr(VI)-acclimated activated sludge using a respirometric method**

**- Supplementary Material -**



**Figure S1.** Solubility of Cr(III) as a function of pH. Total Cr(III) concentrations are 2x10-6 M (black), 2x10-5 M (red), and 2x10-4 M (green).



**Photograph of the employed open respirometer**

 Respirometric measurements were performed as follows. 500 ml of activated sludge were poured into the open respirometer. Agitation was provided by a magnetic stir-bar; the respirometer was aerated continuously by an air pump. Air was set to a stable flow rate using a high precision rotameter (Bruno Schilling model MB 60V, Argentina). The DO concentration (C) as a function of time (t) was recorded every 5 s using an optical DO probe (YSI ProODO). Before the addition of the tested compound, the oxygen mass transfer coefficient of the respirometer (kLa) was obtained using a non-steady state procedure (Lobo et al., 2014). When a stable dissolved oxygen concentration (C) was observed, the respirometer was spiked with the tested compound and C as a function of time (t) was recorded. The oxygen uptake rate (OUR) associated with the substrate oxidation (OUREx) was calculated from the DO mass balance in the respirometer:

$OUR = k\_{L}a \left(C\_{e}-C\right) - \frac{dC}{dt}$

where Ce is the dissolved oxygen concentration in the absence of an oxidizable substrate, and C is the instantaneous dissolved oxygen concentration.