Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supplementary Files

Oscillatory Dynamics during Methanol Electrooxidation Reaction on Pt(111)

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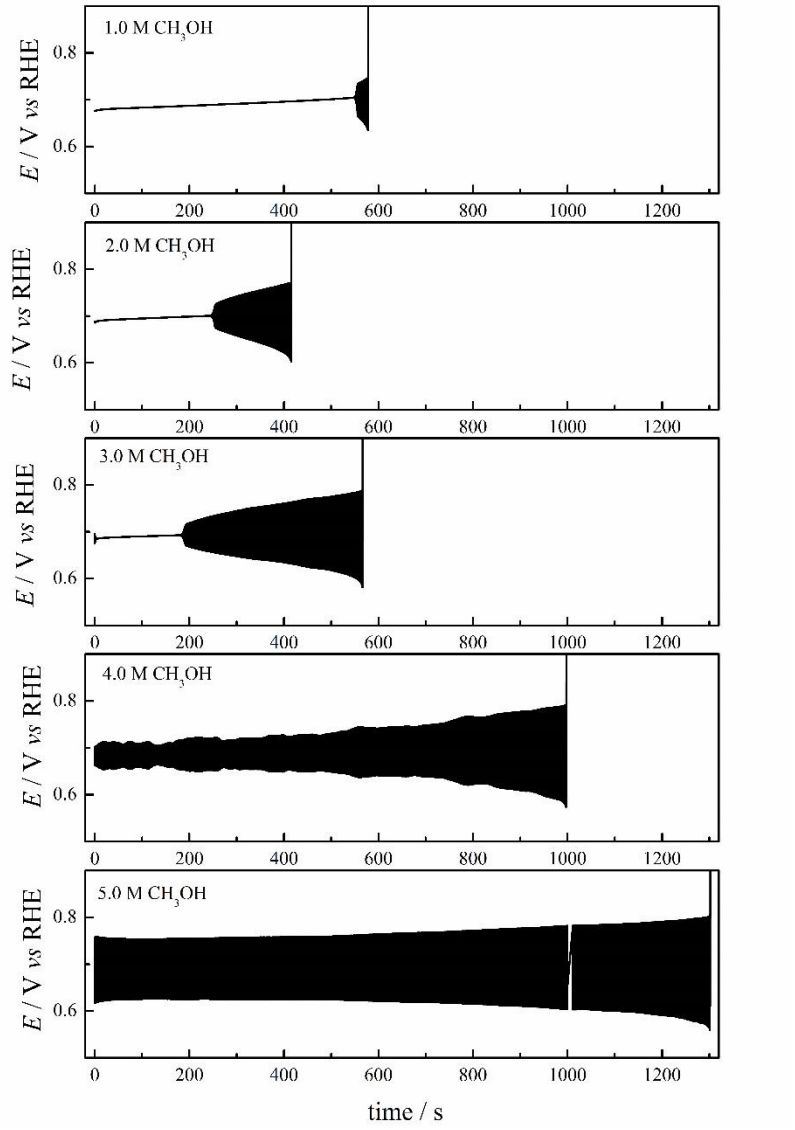

Figure S 1 - Galvanostatic time-series for Pt(111) at distinct methanol concentrations.

Mean potential calculus for each oscillation cycle

The mean potential (E_m) was estimated by the potential integration between two subsequent minimum potentials (n_{min} and $n+1_{min}$) of one oscillation cycle over time and dividing these value by the time interval as shown by the equation:[1]

$$E_m = \frac{1}{t_{n+1\,min} - t_{n-min}} \int_{t_{n\,min}}^{t_{n+1\,min}} E dt$$

The dE/dt versus time evolution for the time-series with methanol concentration higher than 3.5 M are shown on Figure S *2*

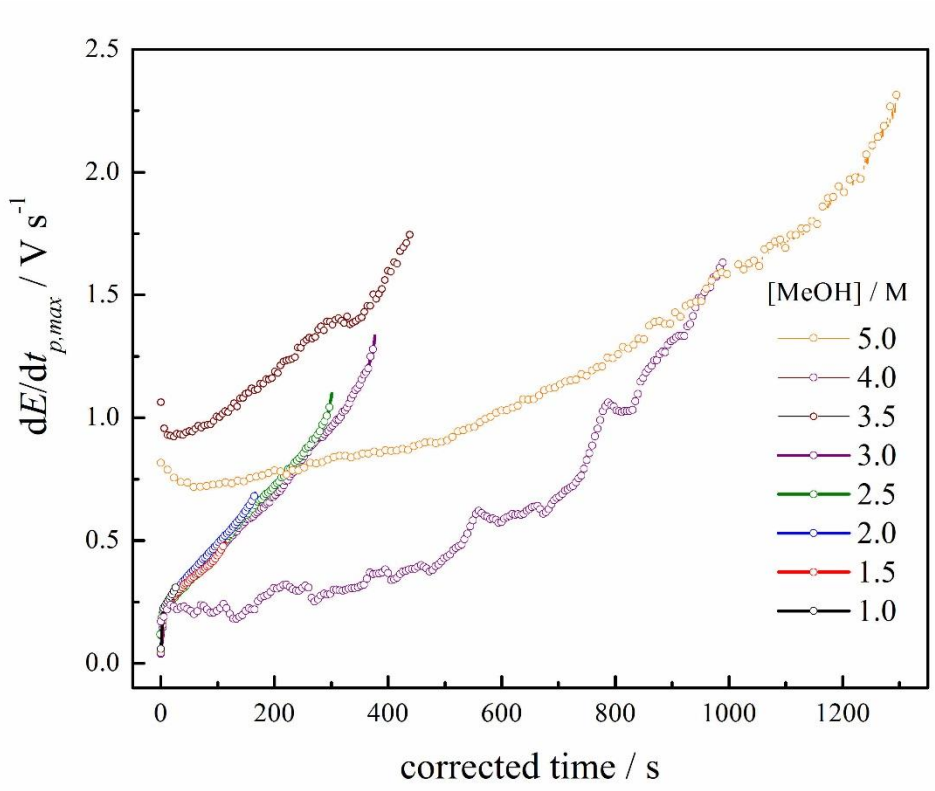

Figure S 2 - Maximum poisoning rate (dE/d$t_{p,max}$)for each oscillation cycle along the whole time-series in distinct methanol concentrations

[1] M. Cabral et al. Phys.Chem. Chem. Phys., 2013, 15, 1437