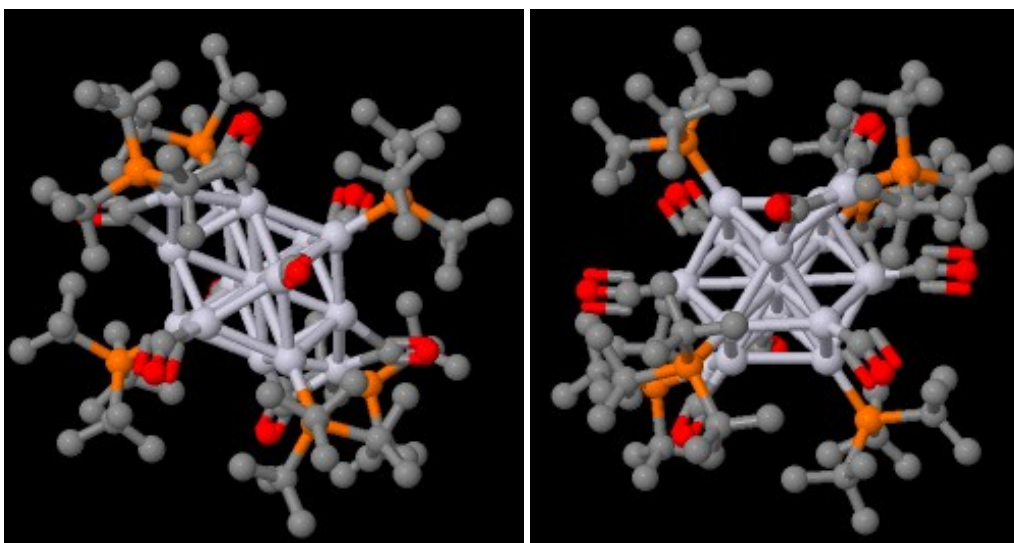
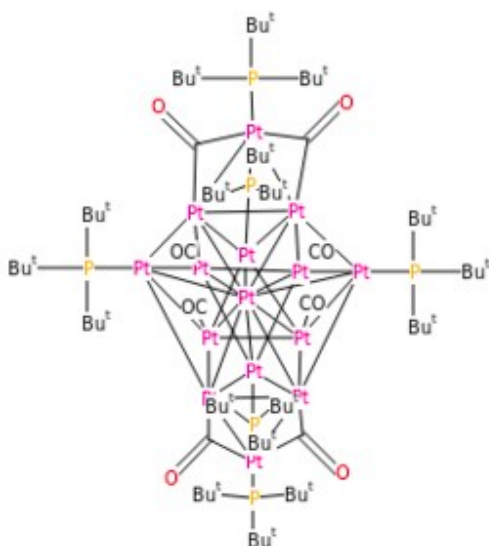


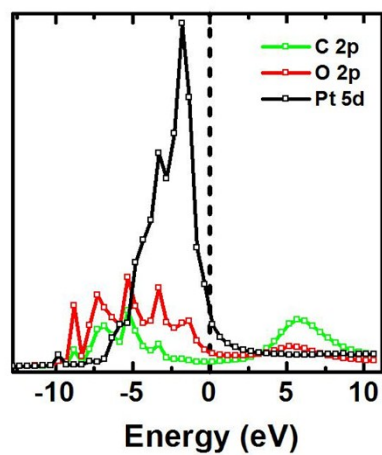
Supplementary information:

## Controlling dark catalysis with quasi half-cycle terahertz pulses

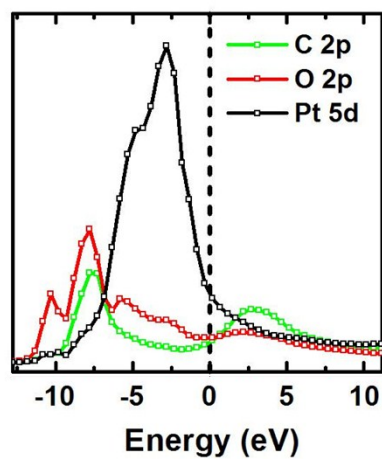
Jacinto Sá,<sup>a,b†</sup> Daniel L. A. Fernandes,<sup>a</sup> Mariia V. Pavliuk,<sup>a</sup> and Jakub Szlachetko<sup>b,c†</sup>



**Figure S1:** Schematic representation of original cluster used for the experiments.<sup>i</sup>



**Figure S2:** Ground-state LDOS for Pt cluster with 1 CO molecule adsorbed on atop position.



**Figure S3:** Ground-state LDOS for Pt cluster with 4 CO molecules adsorbed on atop position and 4 CO molecules on bridge position.

#### References:

<sup>i</sup> J. A. K. Howard, J. L. Spencer, D. G. Turner, *J. Chem. Soc. Dalton Trans.* **1987**, 259.