

Electronic Supplementary Information (ESI) for:

A new three-dimensional metal–organic framework constructed from 9,10-anthracene dibenzoate and Cd (II) as a highly active heterogeneous catalyst for oxidation of alkylbenzenes[†]

Dabin Shi,^{ab} Yanwei Ren,^a Huanfeng Jiang,^{*a} Jiaxian Lu^a and Xiaofei Cheng^a

^a School of Chemistry and Chemical Engineering, South China University of Technology, Guangzhou 510640, China

^b School of Pharmaceutical Sciences, Zunyi Medical College, Zunyi 563003, China

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* Corresponding author: Prof. Huanfeng Jiang; Fax: +86 20-22236518;

E-mail: jianghf@scut.edu.cn

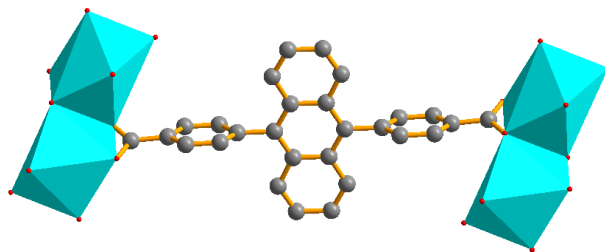


Fig. S1 Representation of coordination modes of **L** ligand.

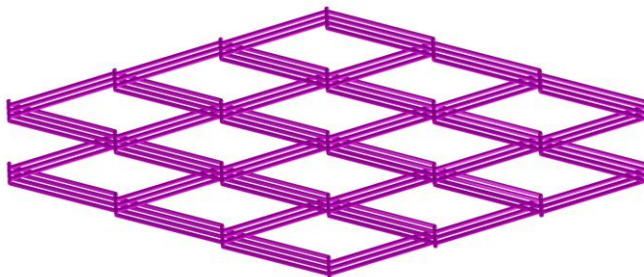


Fig. S2 The topological structure of **1**.

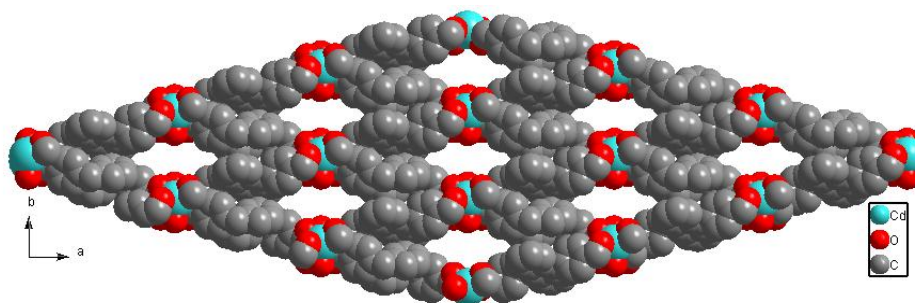


Fig. S3 Space-filling model of **1** as viewed along the *c* axis. Cd (light blue), carbon (gray), and oxygen (red). Hydrogen atoms are omitted for clarity.

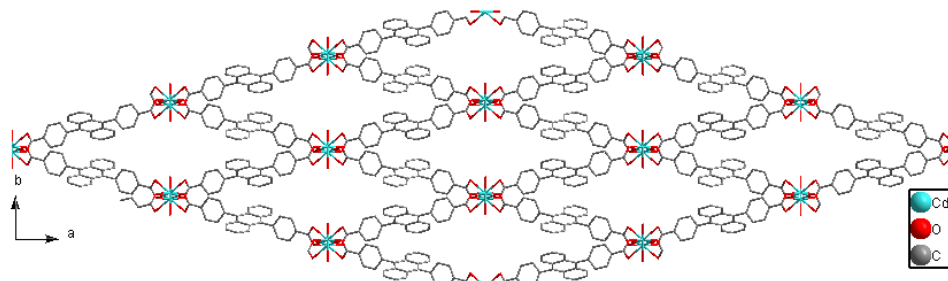


Fig. S4 Sticks model of **1** as viewed along the *c* axis. Cd (light blue), carbon (gray), and oxygen (red). Hydrogen atoms are omitted for clarity.

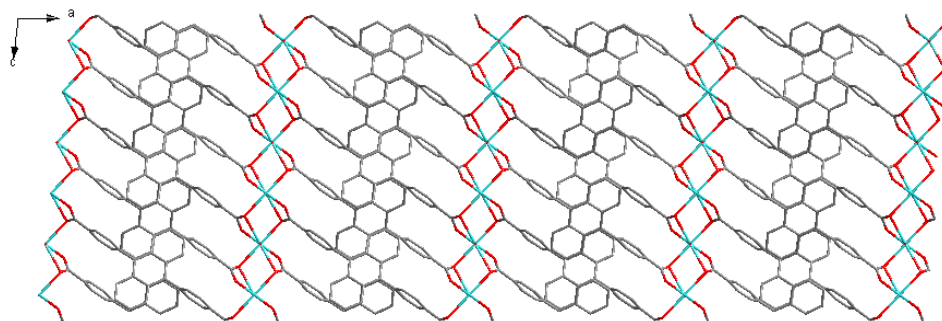


Fig. S5 Sticks model model of **1** as viewed along the b axis. Cd (light blue), carbon (gray), and oxygen (red). Hydrogen atoms are omitted for clarity.

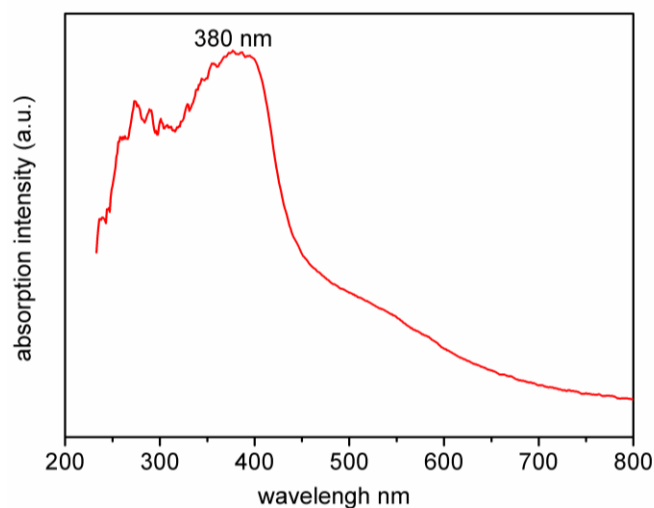


Fig. S6 Room-temperature UV/vis spectra of **1** in the solid state.

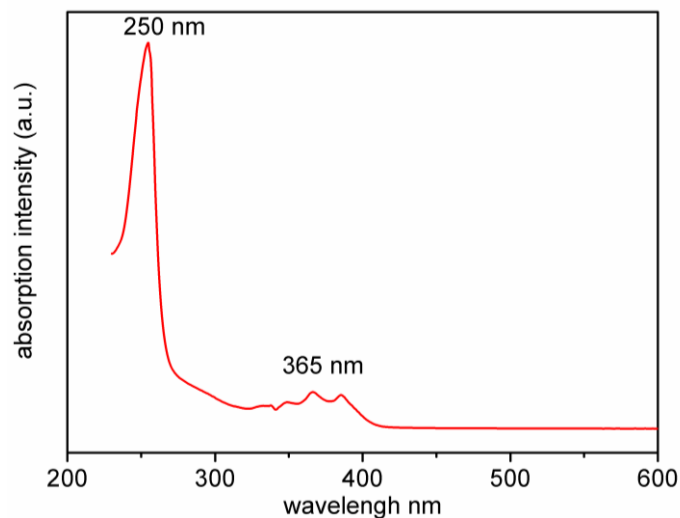


Fig. S7 Room-temperature UV/vis spectra of the free **L-Na₂** ligand in aqueous solution (1.0 × 10⁻⁵ M).

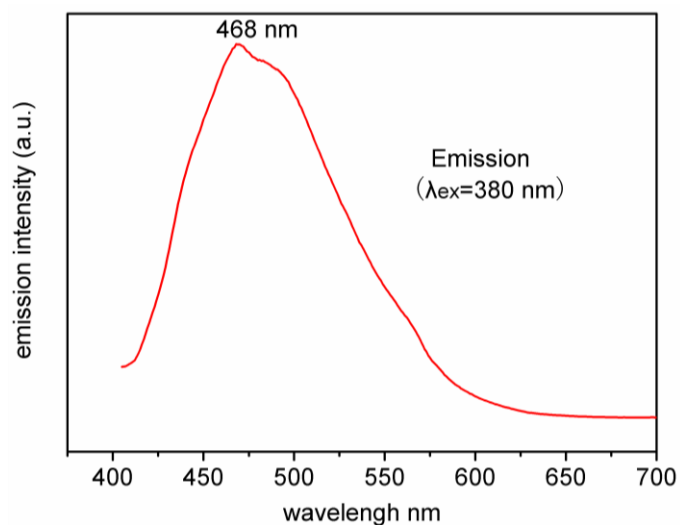


Fig. S8 Room-temperature photoluminescence spectra of **1** in the solid state.

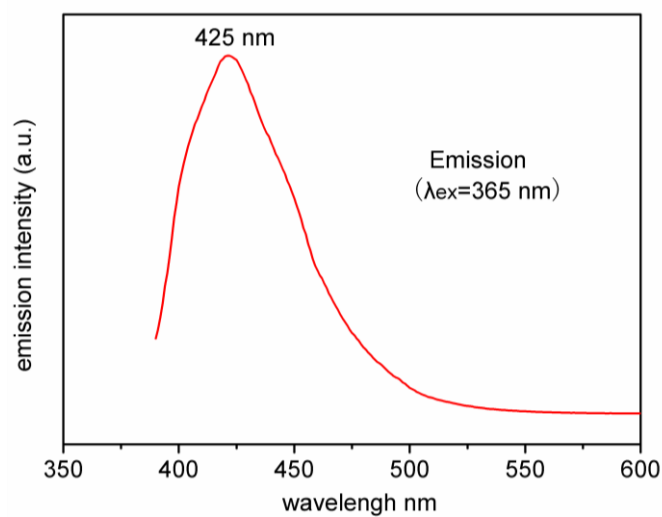


Fig. S9 Room-temperature photoluminescence spectra of the free **L-Na₂** ligand in aqueous solution. (1.0×10^{-5} M).

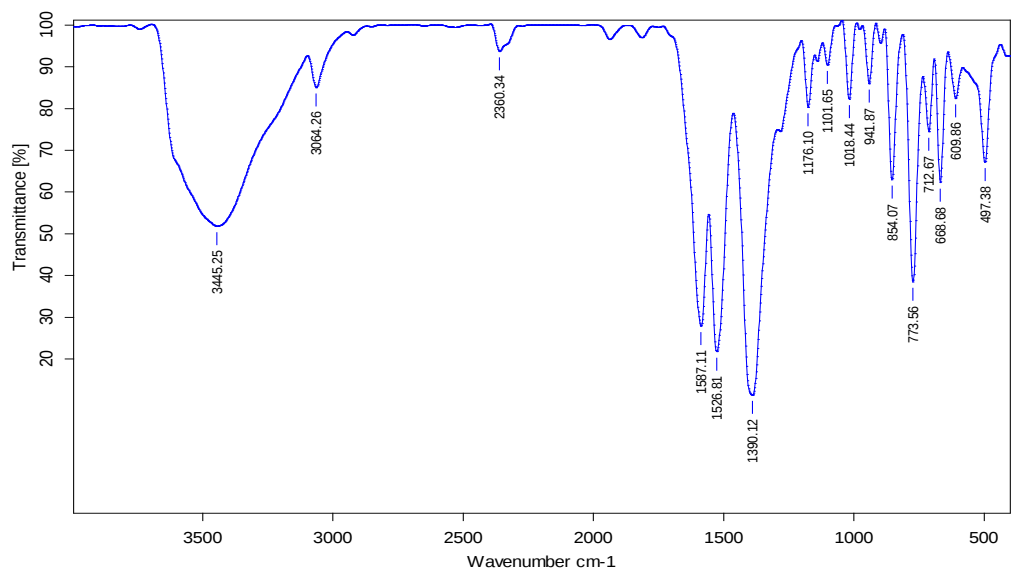


Fig. S10 IR spectra of compound **1**.