

Supporting Information

In Situ Raman Probing of Chlorphenol Degradation on Different Facets of $\text{K}_3\text{B}_6\text{O}_{10}\text{Br}$ Single Crystal

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High-performance Liquid Chromatography (HPLC) method for detecting 2,4-DCP.

The concentration of each chlorophenol was measured using HPLC (Ultimate 3000; Dionex) with an Supelco PAH column(4.6× 250 mm). A mixture of acetonitrile, water and Acetic Acid (60/39.75/0.25 (V/V/V)) was used as an effluent and the flow rate was 1.0 mL/min. The size of sample loop was 20 mL. The wavelength of the detector was set at 282 nm.

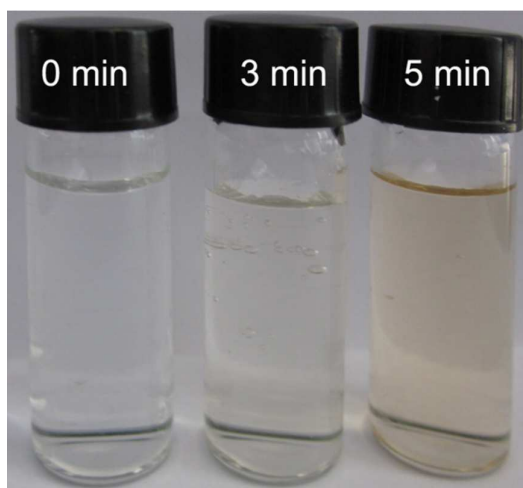


Figure S1. Colour change of the 2,4-DCP solution treated by KBB single crystal with (211) facet exposed.

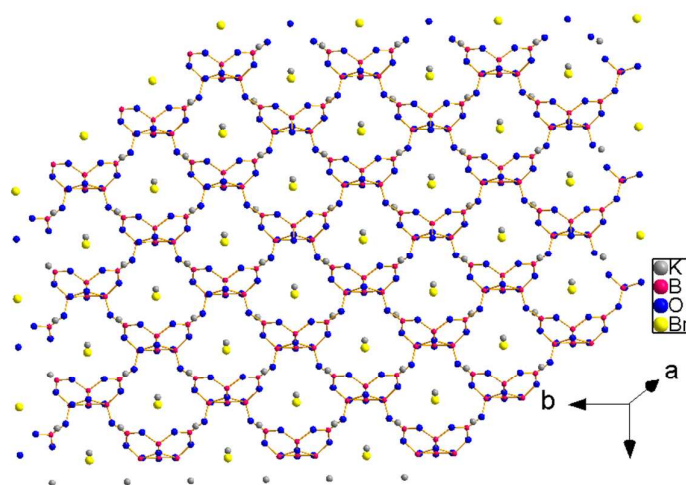


Figure S2. Fundamental building unit of KBB. View of the structure of KBB along the $\langle 211 \rangle$ direction.

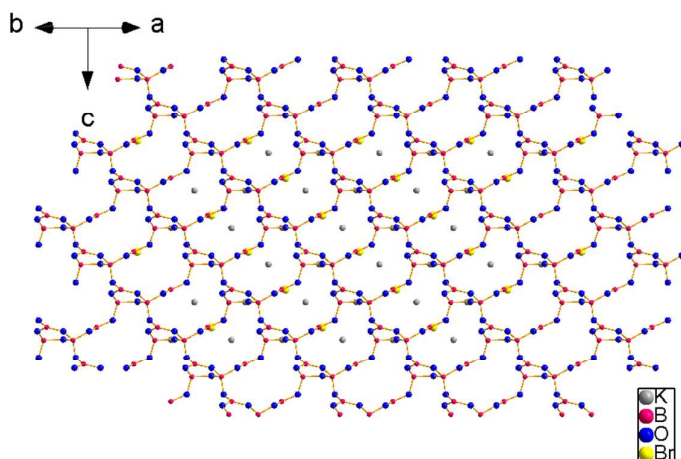


Figure S3. Fundamental building unit of KBB. View of the structure of KBB along the $\langle 110 \rangle$ direction.

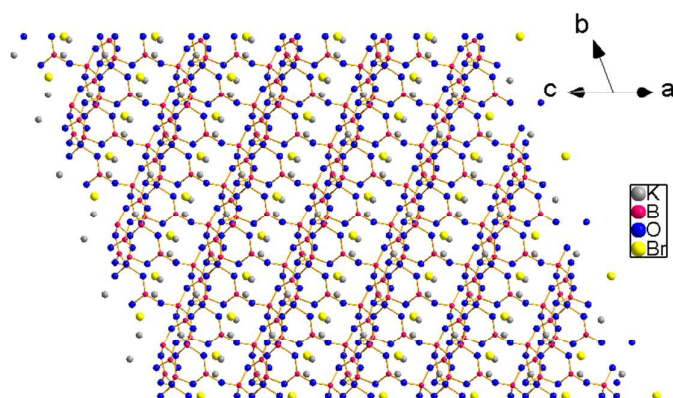


Figure S4. Fundamental building unit of KBB. View of the structure of KBB along the, $\langle 101 \rangle$ direction.