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1. Periodic Building Unit:

AHT can be built using the crankshaft chain (bold in Figure 1) running parallel to c . The repeat distance along a crankshaft chain varies between 8.4-9.9 Å. The repeat unit consists of 4 T atoms. A two-dimensional Periodic Building Unit (PerBU1) is obtained when crankshaft chains are connected into a layer of (fused) 6-rings as shown in Figure 1(left). A one-dimensional PerBU2, built from three crankshaft chains (or from 4-2 units or from 6-rings) is illustrated in Figure 1 (right).

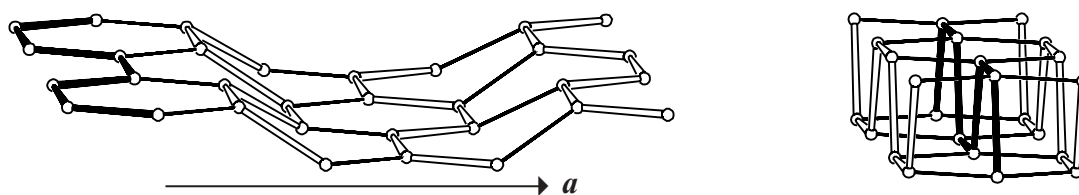


Figure 1. PerBU in AHT constructed from crankshaft chains connected into a 6-ring layer (left) or into a triple crankshaft chain (right). ▲

2. Connection mode:

Neighboring PerBU1s, related by a translation of $\frac{1}{2}(a + b)$, are connected along b through triple crankshaft chains as illustrated in Figure 2. Channels with 10-ring apertures are formed. The channel wall consists of (fused) 6-rings.

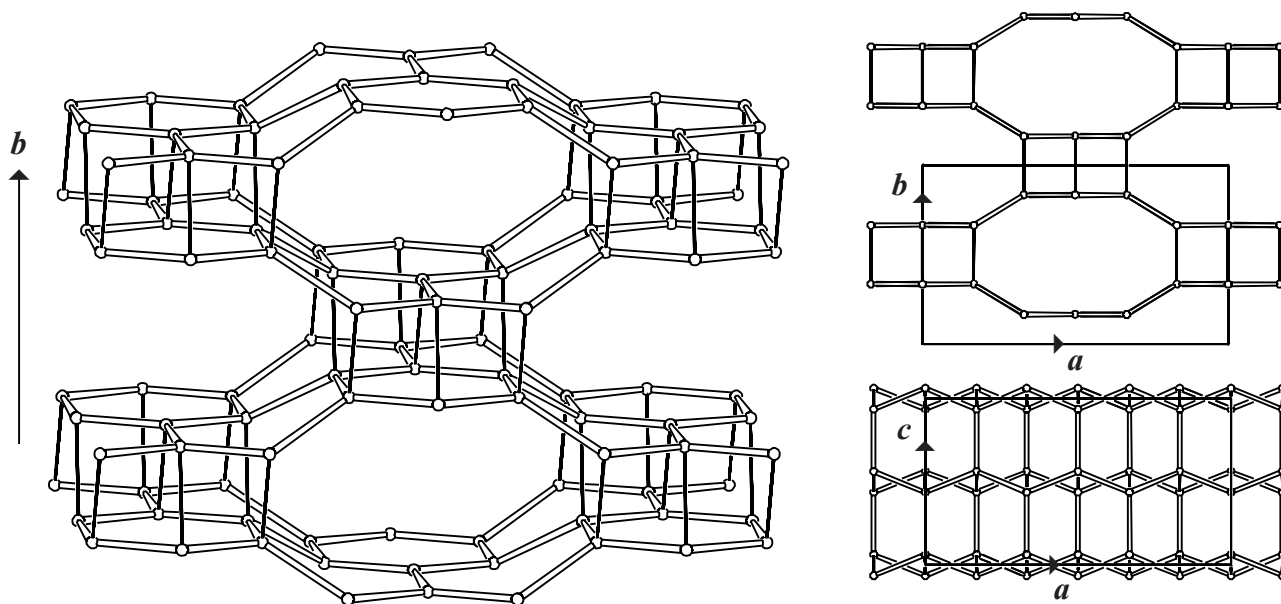


Figure 2. Connection mode viewed along c (left), and parallel projections of the unit cell content along c (top right) and along b (bottom right). For clarity, only $1\frac{1}{2}$ repeat units of the PerBUs along c are drawn. ▲

3. Projections of the unit cell content: See Figure 2. ▲

4. Channels and/or cages:

The non-interconnecting one-dimensional channels in **AHT**, parallel to c , are topologically equivalent to those in **AEL** and **AFO**. One channel is depicted in Figure 3 together with its **pore descriptor**.

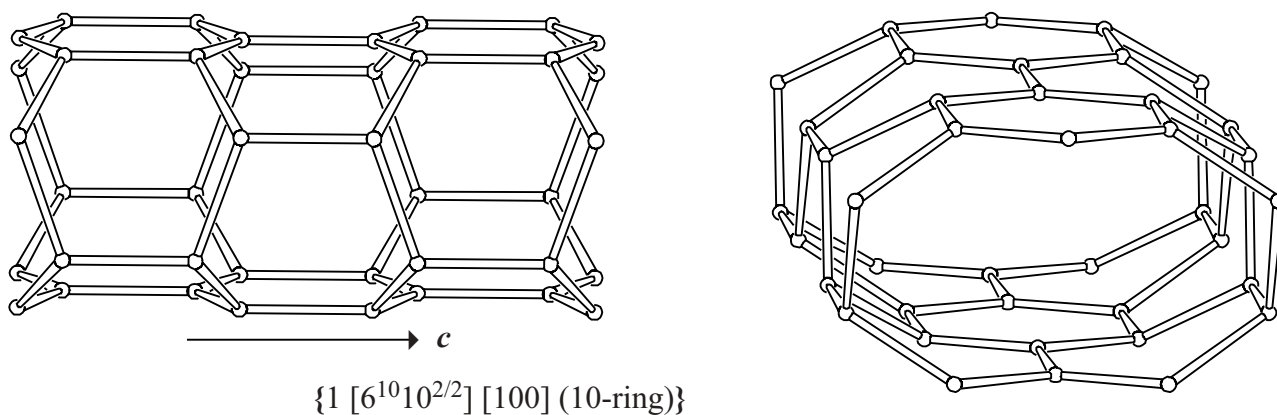


Figure 3. Channel in **AHT** in viewed perpendicular to the channel axis c (left), and along c (right). ▲

5. Supplementary information:

Other framework types containing crankshaft chains

In several framework types at least one of the unit cell dimensions is between 8.4 and 9.9 Å. In many cases this indicates the presence of crankshaft chains.

In the **INTRO** pages links are given to detailed descriptions of these framework types (choose: **Crankshaft chains**). There is also a link provided to a summary of the Periodic Building Units used in the building schemes of these framework types (choose: **Appendix; Figure 3**). ▲