

1. Periodic Building Unit – 2. Connection mode – 3. Projections of the unit cell content  
4. Channels and/or cages – 5. Supplementary information

## 1. Periodic Building Unit:

The Building Unit in The interrupted framework of **-PAR** can be built using units of 16 T atoms. This T16-unit (bold in Figure 1) consists of four 4-rings that are connected in such a way that a 6-ring chair is formed. A Periodic Building Unit (PerBU) is obtained when neighboring T16-units, related by a shift of  $\frac{1}{2}(\pm a \pm b)$ , are connected into the *ab* layer as shown in Figure 1.

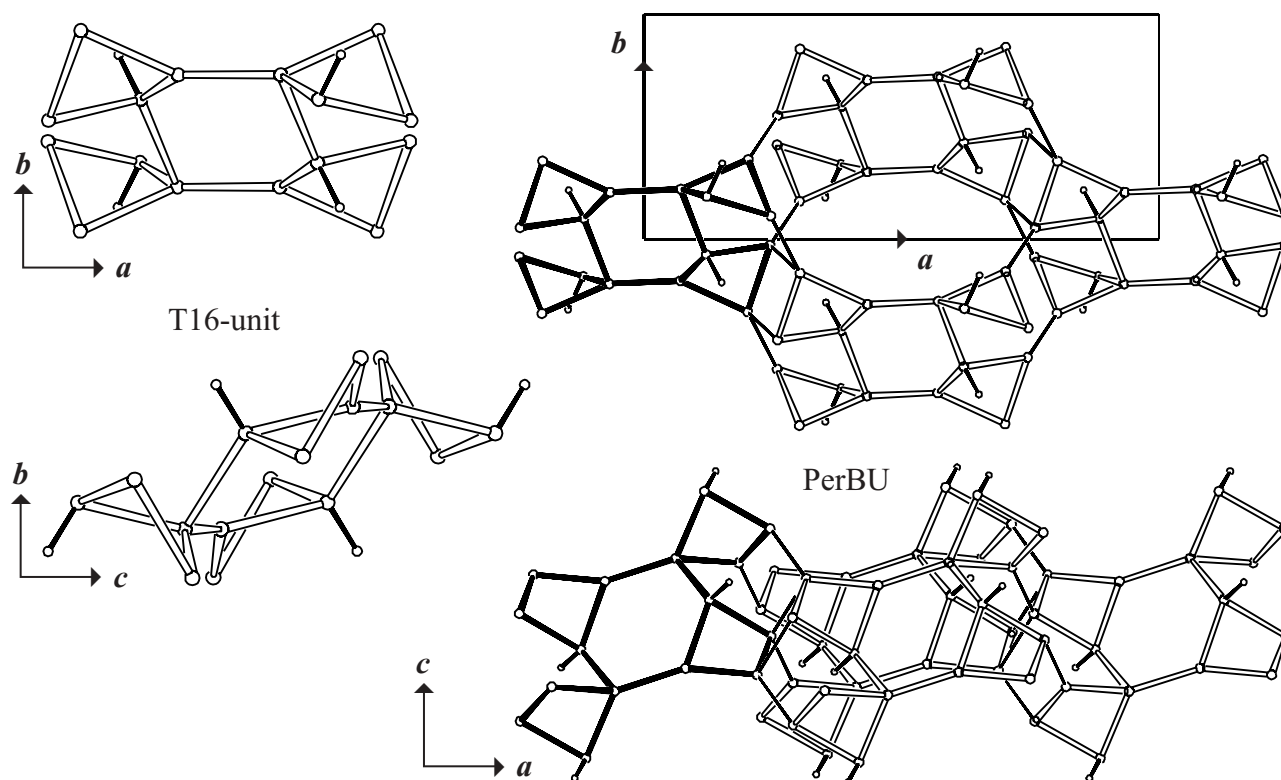


Figure 1. Left: T16-unit, composed of four 4-rings, viewed along *c* (top) and along *a* (bottom); Right: PerBU viewed along *c* (top) and along *b* (bottom). One T16-unit is drawn in bold. The four independent terminal oxygen atoms are indicated by (bold bonded) small circles.



## 2. Connection mode:

Neighboring PerBUs, related by a pure translation along *c*, are connected along *c* as shown in Figure 2 on next page.

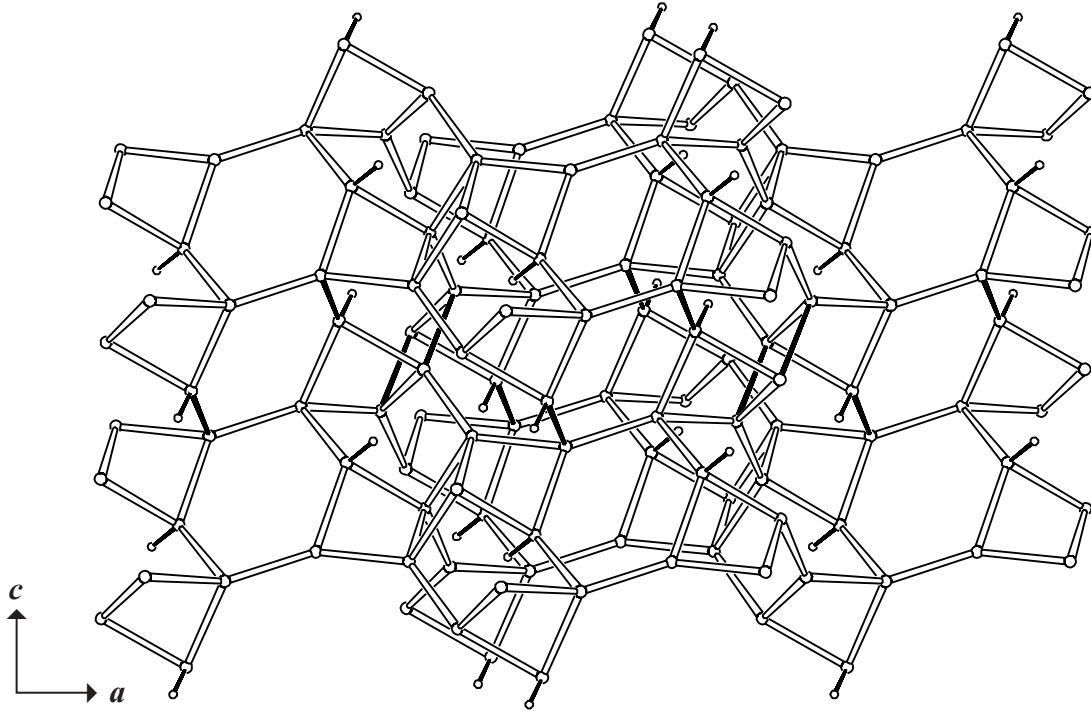


Figure 2. Connection mode viewed along  $b$ . For clarity, T-T connections between the PerBUs are in heavy bold. ▲

---

**3. Projections of the unit cell content:** See Figure 3.

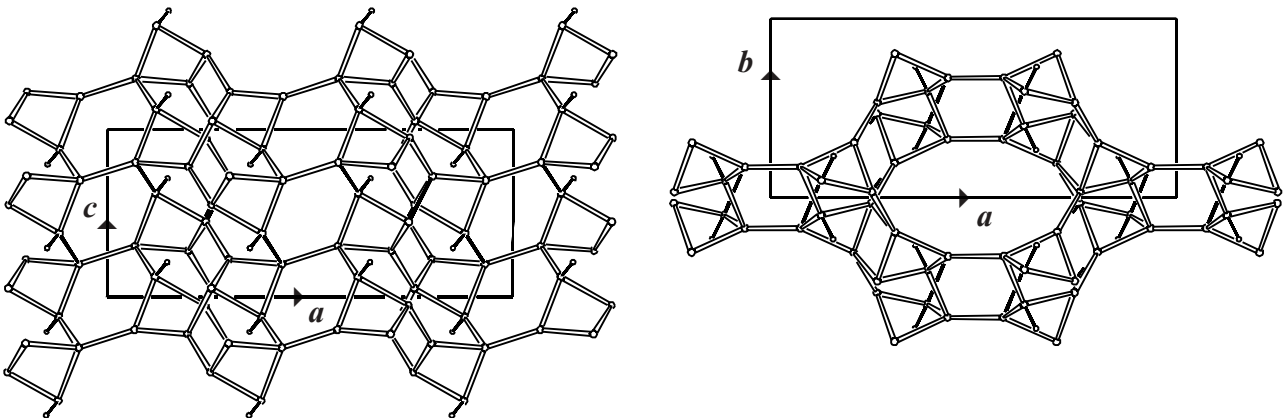


Figure 3. Projections of the unit cell content along  $b$  (left) and along  $c$  (right). ▲

---

**4. Channels and/or cages:**

The cavity in **-PAR** is shown in Figure 4(a) on next page. The **pore descriptor** is added. 10-Ring channels parallel to  $[001]$  are formed when cavities are linked along  $c$ . The fusion of cavities along  $c$  is illustrated in Figure 4(b) on next page.

---

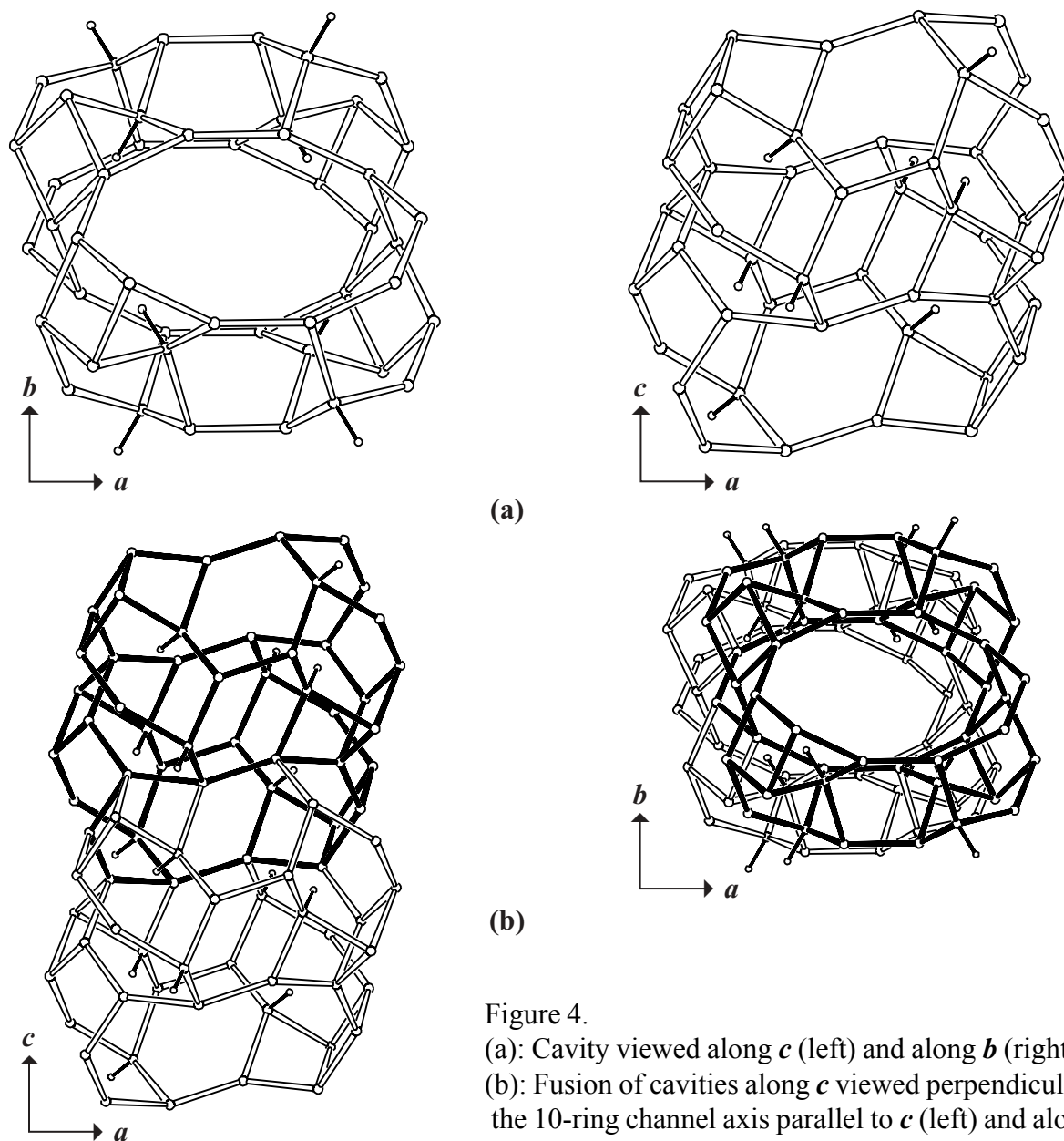


Figure 4.  
 (a): Cavity viewed along  $c$  (left) and along  $b$  (right);  
 (b): Fusion of cavities along  $c$  viewed perpendicular to the 10-ring channel axis parallel to  $c$  (left) and along the 10-ring channel axis (right).

## 5. Supplementary information:

### *Other framework types containing (modified) single 3- and/or 4-rings*

Single 3- and/or 4-rings can be connected in several other ways. In several cases additional T atoms are needed to build the framework.

In the **INTRO**-pages links are given to a detailed description of a sub-set of framework types that contain (modified) single 3- and/or 4-rings (choose: **Single 3- and/or 4-rings**). There is also a link to a summary of the Periodic Building Units used in the building schemes of these framework types (choose: **Appendix; Figure 4**).