



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:

SFG can be built using units of 37 T atoms (bold in Figure 1): five finite "zigzag" chains (each containing 5 T atoms) are connected around a 5-fold axis and three additional 4-rings are linked to four "zigzag" chains (or: two 6-2 units, two 5-[1,1] units and one 1-5-1 unit). T37-units, related by a rotation of 180° about a , are connected into a wavy chain along a as shown in Figure 1. Chains of T37-units, related by pure translations along c , are connected into the ac layer by a system of (fused) 6- and 7-rings. The two-dimensional Periodic Building Unit (PerBU) equals this ac layer depicted in Figure 2 on next page.

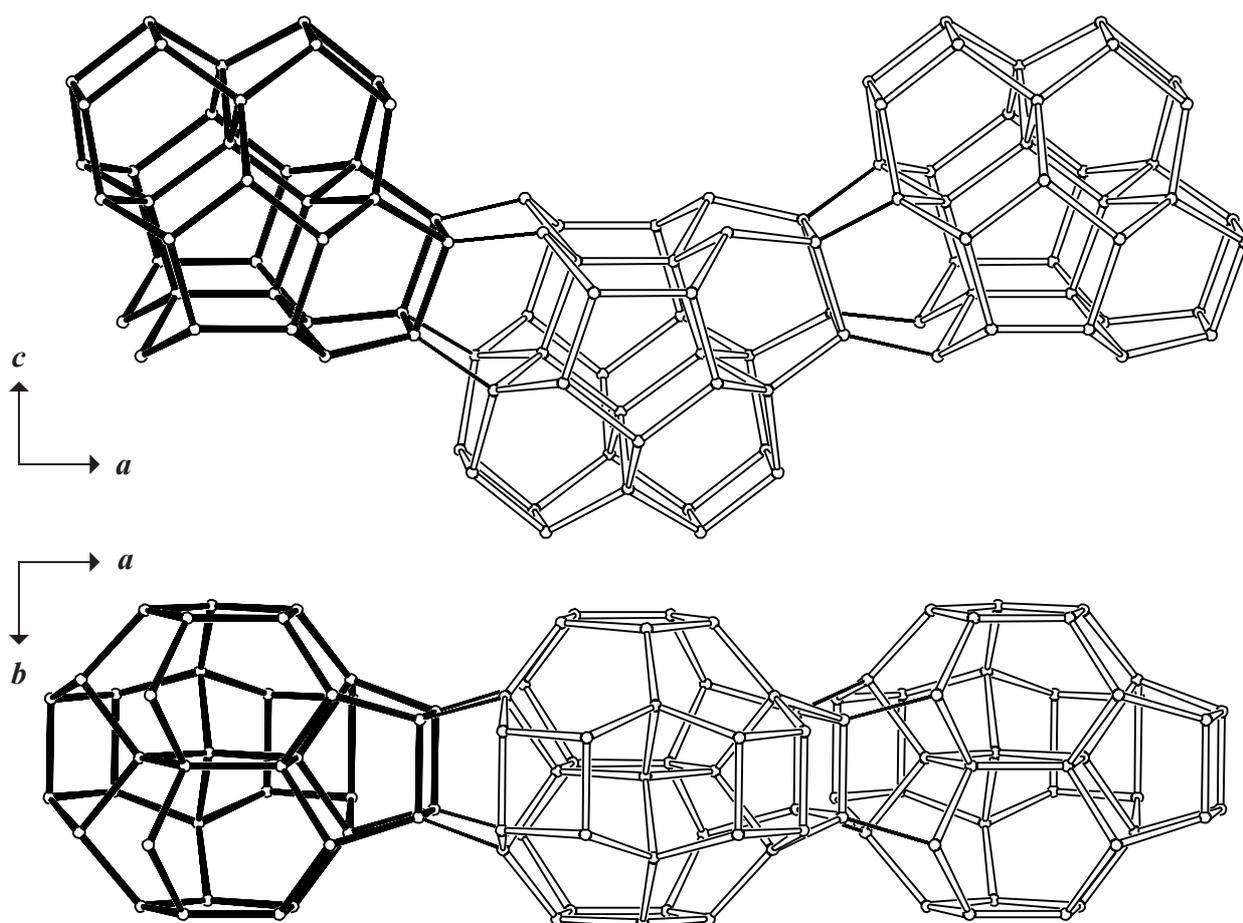


Figure 1. Chain of T37-units viewed along b (top) and along c (bottom).
[Figure 2 is on next page]

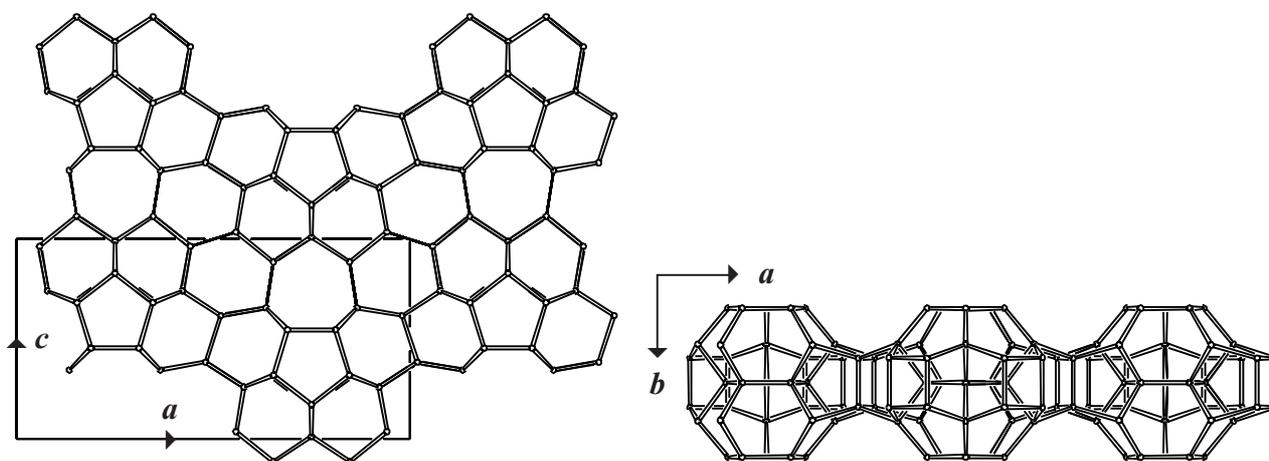
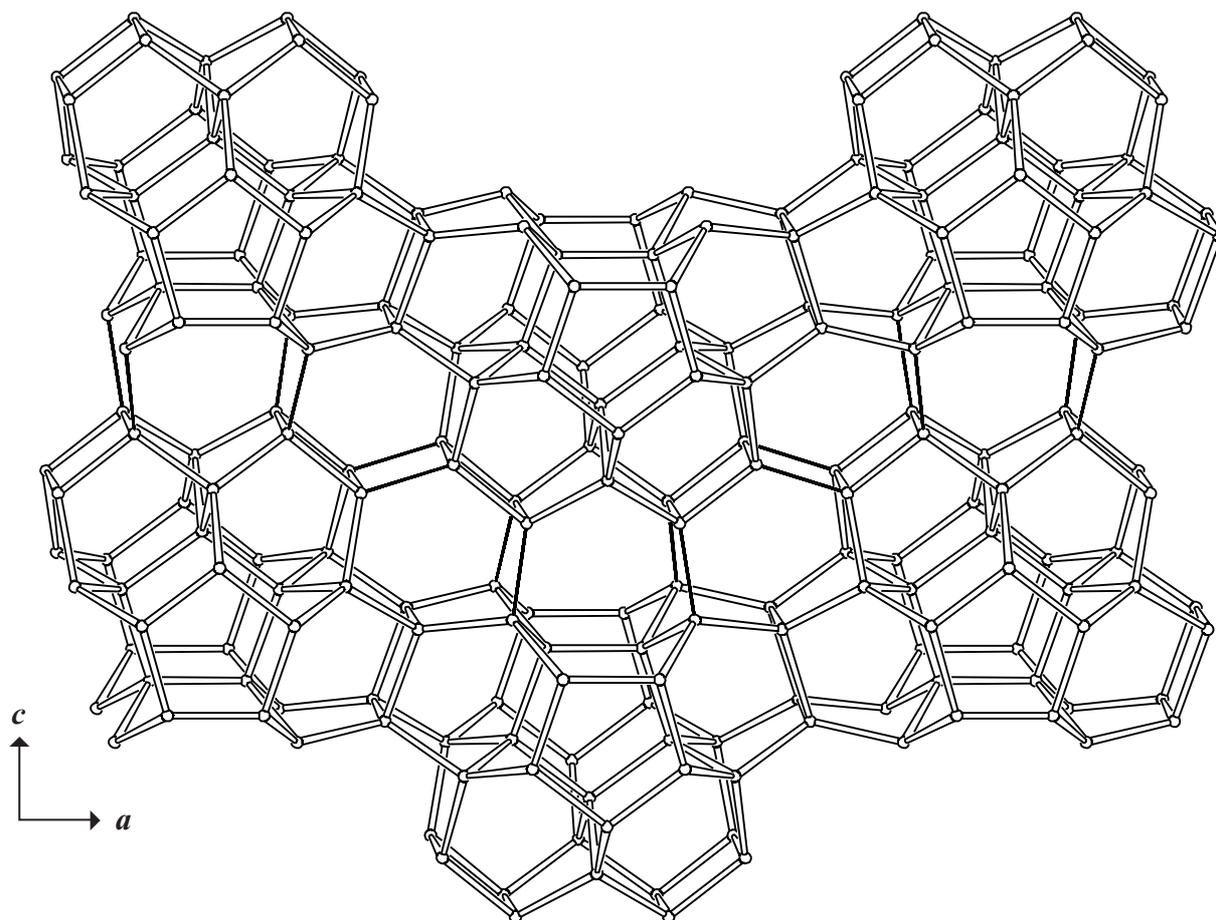


Figure 2. PerBU in SFG viewed in perspective along b (top) and in projection along b (bottom left) and along c (bottom right).



2. Connection mode:

Neighboring PerBUs, related by pure translations along b , are connected along b through double 5-rings as shown in Figure 3 on next page.

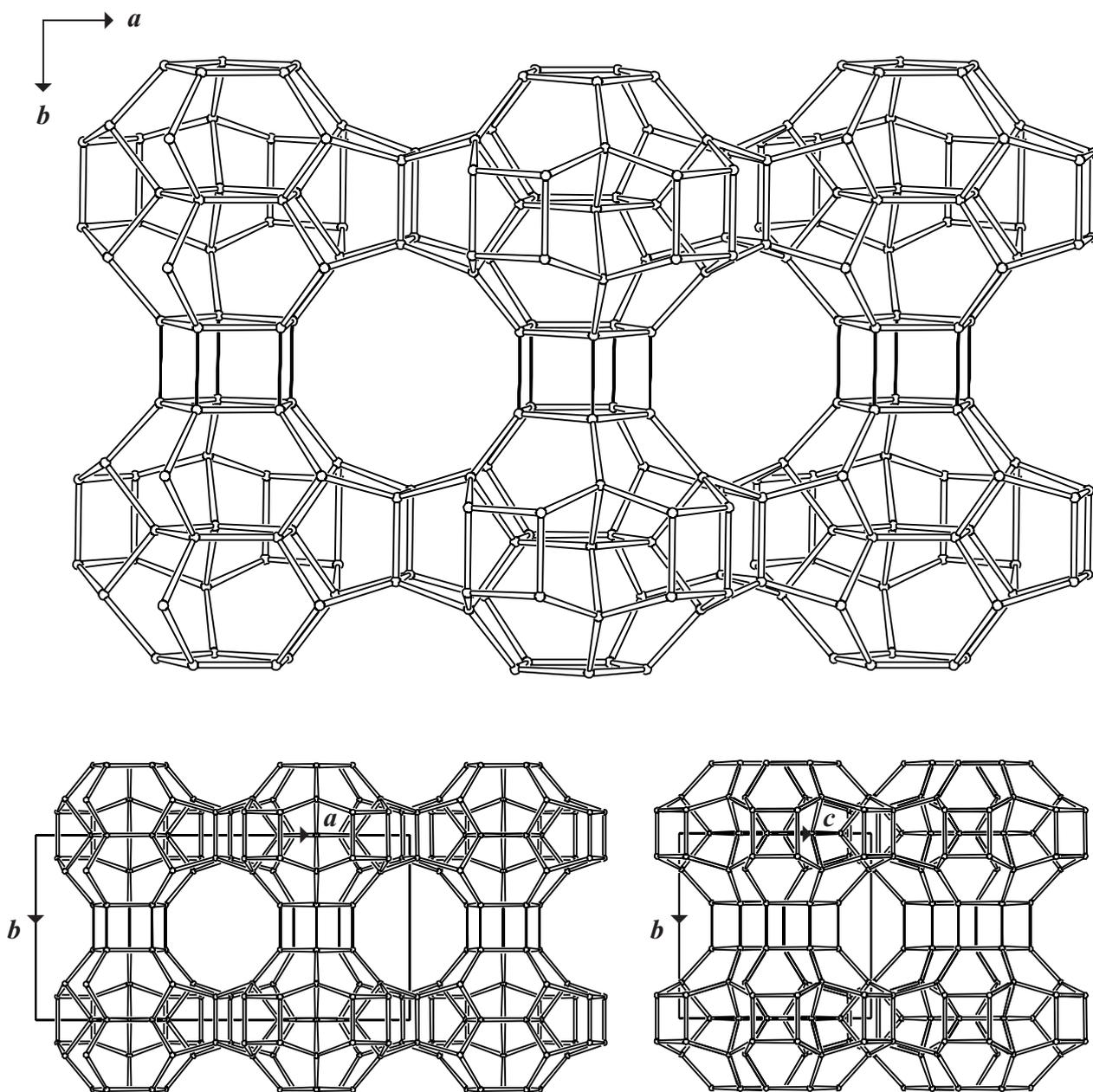


Figure 3. Connection mode (top) viewed along c and projection of the unit cell content along c (bottom left) and along a (bottom right). In the perspective drawing only one chain in each PerBU is shown for clarity. ▲

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

4. Channels and/or cages:

Straight 10-ring channels parallel to c and sinusoidal 10-ring channels parallel to a do intersect and form a two-dimensional channel system. The cavity, formed by the intersection of channels, is shown in Figure 4 on next page. The **pore descriptor** is added. The fusion of cavities along a , and c (through common 10-rings) is illustrated in Figure 5 on next page.

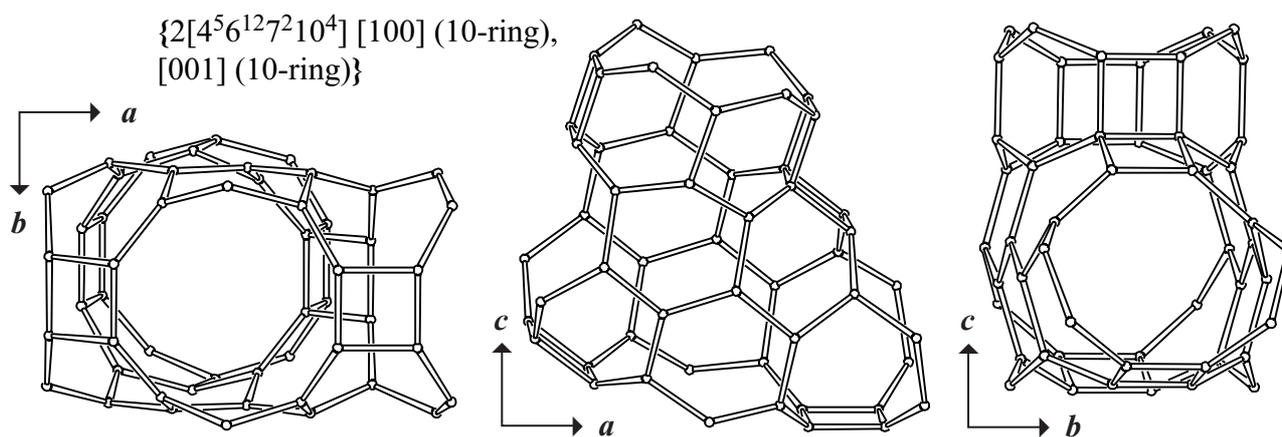


Figure 4. Channel intersection in SFG viewed (from left to right) along c , b and a .

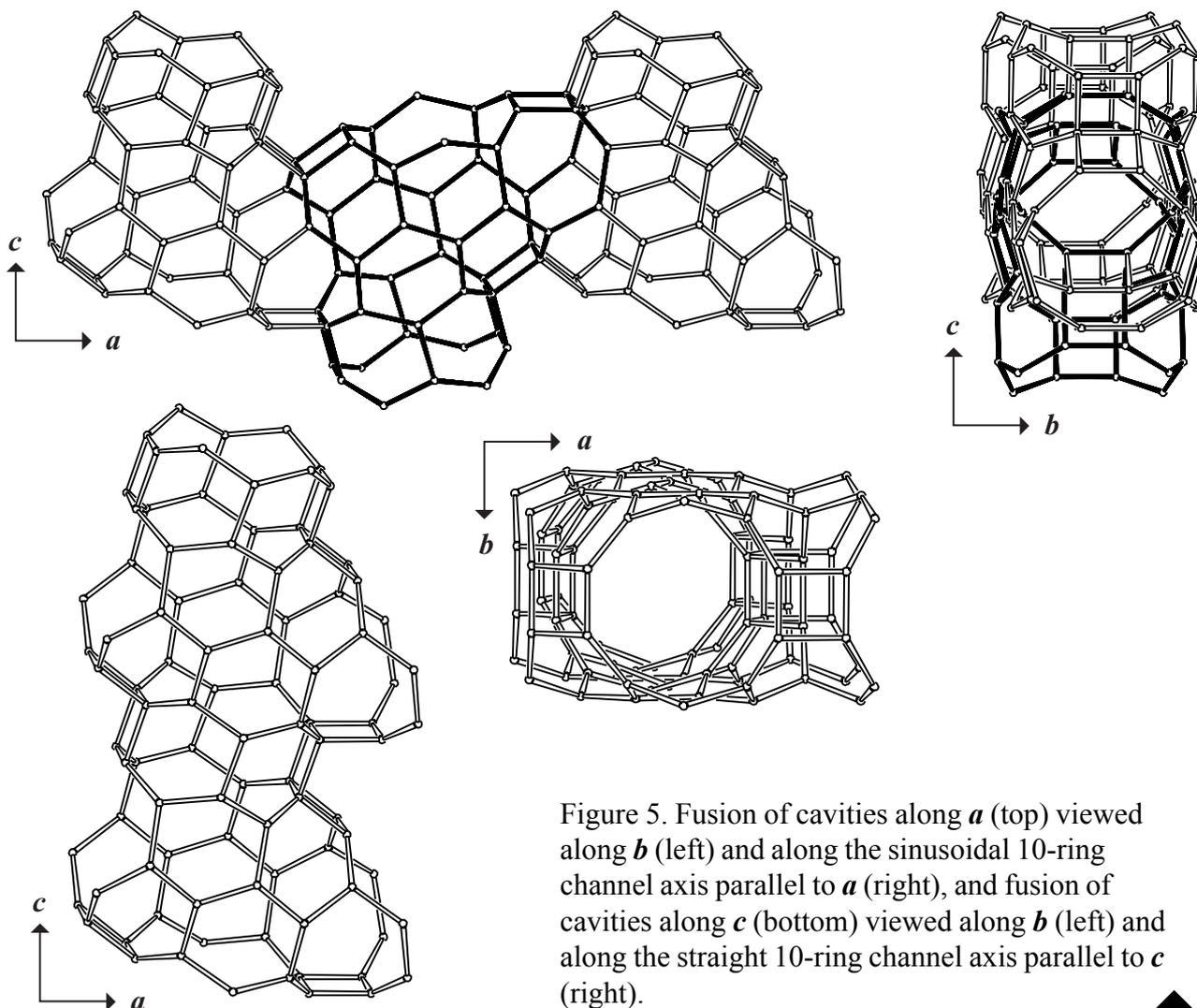


Figure 5. Fusion of cavities along a (top) viewed along b (left) and along the sinusoidal 10-ring channel axis parallel to a (right), and fusion of cavities along c (bottom) viewed along b (left) and along the straight 10-ring channel axis parallel to c (right). ▲

5. Supplementary information:

Other miscellaneous framework types

In the [INTRO](#) pages links are given to detailed descriptions of these framework types (choose: **Miscellaneous**). 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 12**). ▲