

**substance:**  $V_nO_{2n-1}$ :  $n \geq 3$

**property:** crystal structure of  $V_6O_{11}$ ,  $V_7O_{13}$ ,  $V_8O_{15}$ ,  $V_9O_{17}$

The higher members have not been refined though structural aspects of the metal-insulator transition (MIT) in  $V_6O_{11}$  have been investigated [74D]. They are all triclinic, space group  $C_1^1 - P\bar{1}$ .

**lattice parameters**

$a$	5.448 Å	for $V_6O_{11}$ , RT	$Z = 2$ , $T_{tr} = 170$ K	76H
$b$	6.998 Å			
$c$	30.063 Å			
$\alpha$	41.0°			
$\beta$	72.5°			
$\gamma$	108.9°			
$V$	338.58 Å <sup>3</sup>			
$a$	5.439 Å	for $V_7O_{13}$ , RT	$Z = 2$	76H
$b$	7.005 Å			
$c$	35.516 Å			
$\alpha$	40.9°			
$\beta$	72.6°			
$\gamma$	109.0°			
$V$	398.32 Å <sup>3</sup>			
$a$	5.42 Å	for $V_8O_{15}$ , RT	$Z = 2$ , $T_{tr} = 68$ K	71H
$b$	7.02 Å			
$c$	40.65 Å			
$\alpha$	40.8°			
$\beta$	73.2°			
$\gamma$	109.5°			
$V$	456.0 Å <sup>3</sup>			
$a$	5.418 Å	for $V_9O_{17}$ , RT	$Z = 2$	81K
$b$	7.009 Å			
$c$	45.213 Å			
$\alpha$	39.3°			
$\beta$	74.5°			
$\gamma$	108.9°			

## References:

- 71H     Horiuchi, H., Tokonami, M., Nagasawa, K., Morimoto, N., Bando, Y., Takada, T.: Mater. Res. Bull. 6 (1971) 833.
- 74D     Dernier, P. D.: Mater. Res. Bull. 9 (1974) 955.
- 76H     Horiuchi, H., Morimoto, N., Tokonami, M.: J. Solid State Chem. 17 (1976) 407.
- 81K     Kuwamoto, H., Otsuka, N., Sato, H.: J. Solid State Chem. 36 (1981) 133.