$H_{21}W_{39}B_3O_{132}[H_2O]_{69}$	*hP*384	(176) $P6_3/m$ – $i^{27}h^{10}$

$H_{21}[B_3W_{39}O_{132}]\cdot 69H_2O$ [1]
Structural features: $B_3W_{39}O_{132}$ units (three Keggin-related units consisting of eleven edge- and vertex-linked WO_6 octahedra sharing vertices with a central BO_4 tetrahedron, are interconnected via six vertex-linked WO_6 octahedra) in a Mg-type (h.c.p.) arrangement; H_2O between the units. See Fig. IV.86.

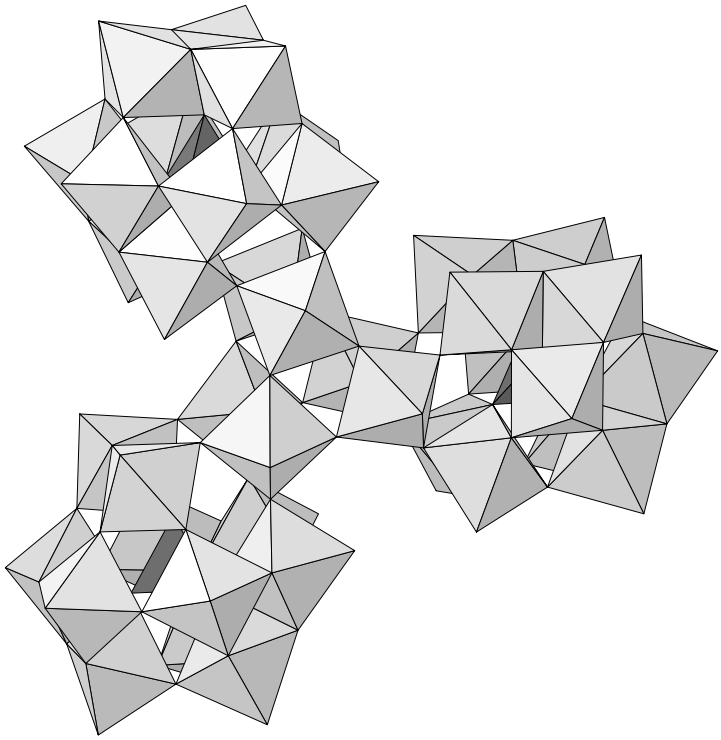

Fig. IV.86. **$H_{21}[B_3W_{39}O_{132}]\cdot 69H_2O$**

$B_3W_{39}O_{132}$·unit: three Keggin-related units (a BO_4 tetrahedron (dark) surrounded by eleven WO_6 octahedra (light)) interconnected via six WO_6 octahedra.

Tézé A. et al. (1997) [1]
$B_3H_{36}O_{150}W_{39}$
a = 2.1626, c = 2.146 nm, c/a = 0.992, V = 8.6919 nm^3, Z = 2

site	Wyck.	sym.	x	y	z	occ.	atomic environment
O1	12*i*	1	0.017	0.271	0.0902		non-colinear W_2
O2	12*i*	1	0.0183	0.5674	0.1218		single atom W
O3	12*i*	1	0.024	0.156	0.133		single atom W
O4	12*i*	1	0.0239	0.3737	0.0089		single atom W
W5	12*i*	1	0.03354	0.36577	0.08667		octahedron O_6
W6	12*i*	1	0.03384	0.51389	0.17061		octahedron O_6
W7	12*i*	1	0.03478	0.23383	0.16453		octahedron O_6
O8	12*i*	1	0.052	0.4565	0.1145		non-colinear W_2
O9	12*i*	1	0.0562	0.347	0.1924		single atom B
O10	12*i*	1	0.1323	0.3971	0.0887		non-colinear W_2
O11	12*i*	1	0.1326	0.2944	0.1535		non-colinear W_2
O12	12*i*	1	0.1376	0.5728	0.1776		non-colinear W_2

W13	12*i*	1	0.17945	0.39737	0.16524	octahedron O_6
O14	12*i*	1	0.1905	0.486	0.1812	non-colinear W_2
O15	12*i*	1	0.2021	0.5603	0.0736	single atom W
W16	12*i*	1	0.2265	0.58669	0.1607	octahedron O_6
O17	12*i*	1	0.2608	0.4194	0.1352	single atom W
O18	12*i*	1	0.2653	0.0619	0.192	non-colinear W_2
O19	12*i*	1	0.3171	0.5897	0.143	non-colinear W_2
(OH_2)20	12*i*	1	0.332	0.475	0.023	non-colinear $(OH_2)O$
O21	12*i*	1	0.3941	0.0631	0.1181	non-colinear W_2
O22	12*i*	1	0.4015	0.1661	0.1885	non-colinear W_2
W23	12*i*	1	0.46074	0.12573	0.17246	octahedron O_6
O24	12*i*	1	0.4944	0.0567	0.1764	non-colinear W_2
(OH_2)25	12*i*	1	0.511	0.354	0.095	single atom (OH_2)
O26	12*i*	1	0.522	0.187	0.1232	single atom W
(OH_2)27	12*i*	1	0.532	0.073	0.013	non-coplanar triangle $(OH_2)_3$
B28	6*h*	*m*..	0.027	0.36	$^1/_4$	tetrahedron O_4
O29	6*h*	*m*..	0.027	0.551	$^1/_4$	non-colinear W_2
O30	6*h*	*m*..	0.051	0.226	$^1/_4$	non-colinear W_2
O31	6*h*	*m*..	0.058	0.445	$^1/_4$	single atom B
O32	6*h*	*m*..	0.19	0.381	$^1/_4$	non-colinear W_2
O33	6*h*	*m*..	0.2485	0.6027	$^1/_4$	non-colinear W_2
O34	6*h*	*m*..	0.306	0.194	$^1/_4$	single atom W
W35	6*h*	*m*..	0.3267	0.1242	$^1/_4$	octahedron O_6
O36	6*h*	*m*..	0.379	0.052	$^1/_4$	single atom B
O37	6*h*	*m*..	0.509	0.165	$^1/_4$	non-colinear W_2

Transformation from published data: *y*,*x*,-*z*; origin shift 0 0 $^1/_2$
Experimental: single crystal, diffractometer, X-rays, R = 0.049, T = 294 K

Remarks: Part of H_2O not located. Hydrogen atoms are not taken into consideration for Pearson symbol, Wyckoff sequence and atomic environments.

References: [1] Tézé A., Michelon M., Hervé G. (1997), Inorg. Chem. 36, 505-509.