

Table 1. 49 hypothetical zeolites with frameworks similar to the real zeolites.

No.	Hypothetical zeolite	CN	CP	Topology	Stuffing tiles	Channels and their dimension
Formed from <i>t-hpr</i> tiles						
1.	166_3_6775	6	Trigonal prism Octahedron	stb	<i>t-hpr</i> <i>t-gme</i> <i>t-sfw</i> <i>t-hpr</i>	8r3D
2.	166_4_452028	6	Trigonal prism Octahedron	stc	<i>t-sfw</i> <i>t-hpr</i> <i>t-cha</i> <i>t-gme</i>	8r3D
3.	166_5_30850739	6	Trigonal prism Octahedron	new	<i>t-hpr</i> <i>t-cha</i> <i>t-aft</i> <i>t-gme</i>	8r3D
4.	194_4_47045	6	Trigonal prism Octahedron	new	<i>t-hpr</i> <i>t-cha</i> <i>t-aft</i> <i>t-gme</i>	8r3D
5.	194_5_1577459	6	Trigonal prism Octahedron	new	<i>t-hpr</i> <i>t-gme</i> <i>t-sfw</i>	8r3D

					<i>t-aft</i>	
6.	194_5_1577965	6	Trigonal prism Octahedron	new	Unknown: 72/38:[4 ²¹ .6 ² .8 ¹⁵] <i>t-hpr</i> <i>t-cha</i> <i>t-gme</i>	8r3D
7.	194_5_1577966	6	Trigonal prism Octahedron	new	<i>t-hpr</i> <i>t-cha</i> <i>t-aft</i> <i>t-gme</i>	8r3D
8.	227_3_593	6	Trigonal prism Octahedron	new	Unknown: 20/10:[4 ⁷ .8.10 ²] Unknown: 36/14:[4 ⁶ .6 ² .10 ⁶] <i>t-grc</i> <i>t-hpr</i> <i>t-toc</i>	8r10r3D
9.	SiO2PCOD8323843	6	Trigonal prism Octahedron	5-layered acs polytype/chhcc	<i>t-gme</i> <i>t-cha</i> <i>t-hpr</i> <i>t-sfw</i>	8r3D

10.	SiO2PCOD8326505	6	Trigonal prism Octahedron	4-layered NiAs polytype/chch = 8- layered acs polytype/chccchcc	<i>t-gme</i> <i>t-cha</i> <i>t-hpr</i> <i>t-aft</i>	8r3D
Formed from <i>t-can</i> tiles						
1.	194_5_3722022	8	Hexagonal bipyramid	tck	Unknown: 36/20:[4 ⁹ .6 ⁸ .8 ³] <i>t-can</i> <i>t-toc</i> <i>t-eri</i> <i>t-hpr</i>	8r3D (2 layers)
		10	Ten-vertex polyhedron			
2.	194_5_3713581	8	Hexagonal bipyramid	tck	<i>t-eri</i> <i>t-hpr</i> Unknown: 60/32:[4 ¹² .6 ¹⁴ .8 ⁶] <i>t-can</i>	8r3D
		10	Ten-vertex polyhedron			
3.	166_3_8899	10	Ten-vertex polyhedron	tcd	<i>t-can</i> Unknown: 36/20:[4 ⁹ .6 ⁸ .8 ³] <i>t-hpr</i> <i>t-toc</i>	8r2D (4 layers)

4.	194_5_3713591	12	Cuboctahedron	tck	Unknown: 48/26:[4 ⁶ .6 ²⁰] <i>t-lio</i> <i>t-can</i>	
5.	194_5_3722027	12	Cuboctahedron	hcp	<i>t-los</i> <i>t-can</i> <i>t-toc</i> <i>t-lio</i>	
6.	194_5_3920382	10	Ten-vertex polyhedron	hcp	t-can Unknown: 36/20:[4 ⁹ .6 ⁸ .8 ³] <i>t-hpr</i> <i>t-lio</i>	8r2D
		12	Cuboctahedron			
7.	194_5_3713580	8	Hexagonal bipyramid	tck	<i>t-gme</i> <i>t-kno</i> <i>t-hpr</i> <i>t-can</i> <i>t-ato</i>	8r12r3D
		10	Ten-vertex polyhedron			
8.	194_5_3722023	8	Hexagonal bipyramid	tck	<i>t-can</i> <i>t-toc</i>	8r2D (3 layers)

		10	Ten-vertex polyhedron		<i>t-gme</i> <i>t-hpr</i> Unknown: 66/35:[4 ¹² .6 ¹⁷ .8 ⁶]	
9.	194_5_3920386	8	Hexagonal bipyramid	hex	<i>t-can</i> <i>t-gme</i> <i>t-hpr</i> Unknown 78/41:[4 ¹⁸ .6 ¹¹ .8 ¹²]	8r3D
10.	166_3_6806	10	Cuboctahedron	fcu	<i>t-can</i> <i>t-toc</i> Unknown 48/26: [4 ⁶ .6 ²⁰]	
11.	166_3_8899	10	Ten-vertex polyhedron	tcd	<i>t-can</i> <i>t-toc</i> Unknown: 36/20:[4 ⁹ .6 ⁸ .8 ³]	8r2D (4 layers)
12.	166_3_8908	10	Ten-vertex polyhedron	tcd	<i>t-can</i> Unknown: 60/32: [4 ¹² .6 ¹⁴ .8 ⁶] <i>t-hpr</i>	8r3D

13.	194_3_1140	10	Ten-vertex polyhedron	hex	<i>t-hpr</i> Unknown 60/32: [4 ¹⁵ .6 ⁸ .8 ⁹] <i>t-can</i> <i>t-gme</i>	8r3D
14.	194_3_858	10	Ten-vertex polyhedron	tca	<i>t-can</i> <i>t-gme</i> <i>t-hpr</i> <i>t-kno</i> <i>t-ato</i>	8r12r3D
15.	194_3_867	10	Ten-vertex polyhedron	tca	Unknown: 48/26: [4 ⁹ .6 ¹⁴ .8 ³] <i>t-can</i> <i>t-toc</i> <i>t-gme</i> <i>t-hpr</i>	8r2D (2 layers)
16.	194_5_3713587	12	Cuboctahedron	hcp	<i>t-los</i> <i>t-can</i> Unknown: 60/32: [4 ⁶ .6 ²⁶]	
17.	194_5_3713592	12	Cuboctahedron	tck	<i>t-toc</i> <i>t-los</i>	

					Unknown: 48/26: $[4^6.6^{20}]$	
18.	194_5_3722034	12	Cuboctahedron	tck	Unknown: 36/20: $[4^6.6^{14}]$ <i>t-toc</i> <i>t-can</i> <i>t-los</i>	
19.	194_5_3920375	10	Ten-vertex polyhedron	tck	Unknown: 42/23: $[4^9.6^{11}.8^3]$ <i>t-hpr</i> <i>t-can</i> <i>t-los</i>	8r2D (3 layers)
		12	Cuboctahedron			
20.	194_5_3920376	10	Ten-vertex polyhedron	tck	Unknown: 78/41: $[4^{12}.6^{23}.8^6]$ <i>t-hpr</i> <i>t-can</i>	8r3D
		12	Cuboctahedron			
21.	194_5_3920380	10	Ten-vertex polyhedron	tck	Unknown: 36/20: $[4^9.6^8.8^3]$ <i>t-hpr</i> <i>t-toc</i> <i>t-los</i> <i>t-can</i>	8r2D (3 layers)
		12	Cuboctahedron			

22.	PCOD8327034	8	Hexagonal bipyramid	hex	<i>t-eri</i> <i>t-can</i> <i>t-gme</i> <i>t-hpr</i> Unknown: 60/32: [4 ¹⁵ .6 ⁸ .8 ⁹];	8r3D
23.	PCOD8327036	8	Hexagonal bipyramid	new	<i>t-los</i> <i>t-eri</i> <i>t-hpr</i> <i>t-can</i> Unknown: 42/23:[4 ⁹ .6 ¹¹ .8 ³]	8r3D (2 layers)
		10	Ten-vertex polyhedron			
		12	Cuboctahedron			
24.	PCOD8327038	8	Hexagonal bipyramid	new	<i>t-hpr</i> <i>t-eri</i> Unknown: 78/41:[4 ¹² .6 ²³ .8 ⁶] <i>t-can</i>	8r3D
		10	Ten-vertex polyhedron			
		12	Cuboctahedron			
25.	PCOD8327040	8	Hexagonal bipyramid	new	<i>t-eri</i> <i>t-toc</i> <i>t-can</i> <i>t-los</i>	8r3D (2 layers)
		10	Ten-vertex polyhedron			

		12	Cuboctahedron		Unknown: 36/20: $[4^9 \cdot 6^8 \cdot 8^3]$ <i>t-hpr</i>	
26.	PCOD8327041	8	Hexagonal bipyramid	new	<i>t-can</i> <i>t-lio</i> <i>t-eri</i> <i>t-hpr</i> Unknown: 36/20: $[4^9 \cdot 6^8 \cdot 8^3]$	8r3D (1 layer)
		10	Ten-vertex polyhedron			
		12	Cuboctahedron			
27.	PCOD8327146	10	Ten-vertex polyhedron	new	<i>t-can</i> <i>t-gme</i> <i>t-hpr</i> <i>t-lio</i> Unknown: 48/26: $[4^9 \cdot 6^{14} \cdot 8^3]$	8r2D (1 layer)
		12	Cuboctahedron			
28.	PCOD8327068	8	Hexagonal bipyramid	new	<i>t-hpr</i> <i>t-gme</i> Unknown: 78/41: $[4^{12} \cdot 6^{23} \cdot 8^6]$ <i>t-can</i> <i>t-los</i>	8r3D (1 layer)
		10	Ten-vertex polyhedron			
		12	Cuboctahedron			
29.	PCOD8327072	8	Hexagonal bipyramid	new	<i>t-can</i>	8r12r3D

		10	Ten-vertex polyhedron		<i>t-gme</i>	
		12	Cuboctahedron		<i>t-hpr</i> <i>t-kno</i> <i>t-ato</i>	
30.	PCOD8327143	10	Ten-vertex polyhedron	new	<i>t-los</i> Unknown: 48/26: [4 ⁹ .6 ¹⁴ .8 ³]	8r2D (2 layers)
		12	Cuboctahedron		<i>t-can</i> <i>t-toc</i> <i>t-gme</i> <i>t-hpr</i>	
31.	PCOD8327180	10	Ten-vertex polyhedron	new	Unknown: 60/32: [4 ⁹ .6 ²⁰ .8 ³]	8r2D (1 layer)
		12	Cuboctahedron		<i>t-can</i> <i>t-los</i> <i>t-gme</i> <i>t-hpr</i>	
32.	PCOD8327183	10	Ten-vertex polyhedron	new	<i>t-can</i> <i>t-gme</i> <i>t-hpr</i>	8r12r3D
		12	Cuboctahedron		<i>t-kno</i> <i>t-ato</i>	

33.	PCOD8330642	8	Hexagonal bipyramid	hex	<i>t-hpr</i> Unknown: 60/32: [4 ¹⁵ .6 ⁸ .8 ⁹] <i>t-can</i> <i>t-gme</i> <i>t-hpr</i>	8r3D
34.	PCOD8330668	10	Ten-vertex polyhedron	tca	Unknown: 48/26: [4 ⁹ .6 ¹⁴ .8 ³] <i>t-can</i> <i>t-toc</i> <i>t-gme</i> <i>t-hpr</i>	8r2D (2 layers)
35.	PCOD8330680	10	Ten-vertex polyhedron	tca	<i>t-can</i> <i>t-gme</i> <i>t-hpr</i> <i>t-kno</i> <i>t-ato</i>	8r12r3D
36.	PCOD8322800	12	Hexagonal bipyramid	hcp	<i>t-can</i> <i>t-toc</i> <i>t-los</i>	
37.	PCOD8321510	12	Hexagonal bipyramid	fcu	<i>t-can</i> Unknown:	

					36/20:[4 ⁶ .6 ¹⁴]	
Formed from <i>t-lio</i> tiles						
1.	194_4_80618	12	Cuboctahedron	hcp	<i>t-can</i> <i>t-lio</i> Unknown: 36/20: [4 ⁶ .6 ¹⁴]	
2.	194_4_85336	8	Hexagonal bipyramid	hex	<i>t-lev</i> <i>t-lio</i> <i>t-hpr</i> <i>t-can</i>	8r2D (3 layers)