CLAIMS

1. A molecular sieve material having, in its as-calcined form, an X-ray diffraction pattern including the following peaks in Table 1:

Table 1

d-spacing (Å)	Relative Intensity [100 x I/I(o)]
17.5-16.3	60-100
10.6-10.1	5-50
9.99-9.56	20-70
6.23-6.06	1-10
5.84-5.69	1-10
5.54-5.40	1-10
4.29-4.21	1-10
3.932-3.864	1-10
3.766-3.704	5-40
3.735-3.674	1-10
3.657-3.598	1-10
3.595-3.539	1-20

2. The material of claim 1, and having a composition comprising the molar relationship

$$X_2O_3:(n)YO_2,$$

wherein n is at least about 10, X is a trivalent element, and Y is a tetravalent element.

3. The material of claim 2, wherein X includes one or more of B, Al, Fe, and Ga, and Y includes one or more of Si, Ge, Sn, Ti, and Zr.

4. The material of claim 2, wherein X includes aluminum, and Y includes silicon and/or germanium.

5. ~~A~~ The molecular sieve material of claim 1 having, in its as-synthesized form, an X-ray diffraction pattern including the following peaks in Table 2:

Table 2

d-spacing (Å)	Relative Intensity [100 x I/I(o)]
17.6-16.3	60-100
11.0-10.5	5-40
10.04-9.60	20-70
4.51-4.42	1-20
4.32-4.24	1-20
4.11-4.04	1-20
3.958-3.889	5-40
3.805-3.742	20-70
3.766-3.705	5-40
3.635-3.577	1-20
3.498-3.445	1-20
3.299-3.252	1-20

6. The material of claim 5, and having a composition comprising the molar relationship:

$$kF:mQ:X_2O_3:(n)YO_2,$$

wherein $0 \leq k \leq 0.2$, $0 < m \leq 0.2$, n is at least about 10, F is a source of fluoride, Q is an organic structure directing agent, X is a trivalent element, and Y is a tetravalent element.

7. The material of claim 6, wherein X includes aluminum, and Y includes silicon.

8. The material of claim 6, wherein X includes one or more of B, Al, Fe, or Ga, and Y includes one or more of Si, Ge, Sn, Ti, or Zr.

9. The material of claim 6, wherein F includes one or more of F, HF, NH_4F, and NH_4HF_2.

10. The material of claim 6, wherein Q comprises 1,5-bis(N-propylpyrrolidinium)pentane dications and/or 1,6-bis(N-propylpyrrolidinium)hexane dications.

11. A process for producing ~~the~~ said molecular sieve material of claim 6, the process comprising the steps of:

(i) preparing a synthesis mixture capable of forming said crystalline molecular sieve material, said mixture comprising water, a source of hydroxyl ions, a source of an oxide of a tetravalent element Y, ~~optionally~~ a source of a trivalent element X, optionally a source of fluoride ions, and a directing agent (Q) comprising 1,5-bis(N-propylpyrrolidinium)pentane dications and/or 1,6-bis(N-propylpyrrolidinium)hexane dications, and said mixture having a composition, in terms of mole ratios, within the following ranges:

YO_2/X_2O_3	at least 10;
H_2O/YO_2	about 0.5 to about 30;
OH^-/YO_2	about 0.1 to about 1.0;
F/YO_2	about 0.0 to about 0.25; and
Q/YO_2	about 0.05 to about 0.5;

(ii) heating said mixture under crystallization conditions including a temperature of from about 100°C to about 200°C and a time from about 1 to about 14 days until crystals of said molecular sieve material are formed; and

(iii) recovering said ~~crystalline~~ crystals of said molecular sieve material from step (ii) wherein said molecular sieve material having, in its as-synthesized form, said X-ray diffraction pattern including the peaks shown in Table 2, and in its as-calcined form, said X-ray diffraction pattern including the following peaks in Table 1.

12. The process of claim 11 where said mixture having a composition, in terms of mole ratios, within the following ranges:

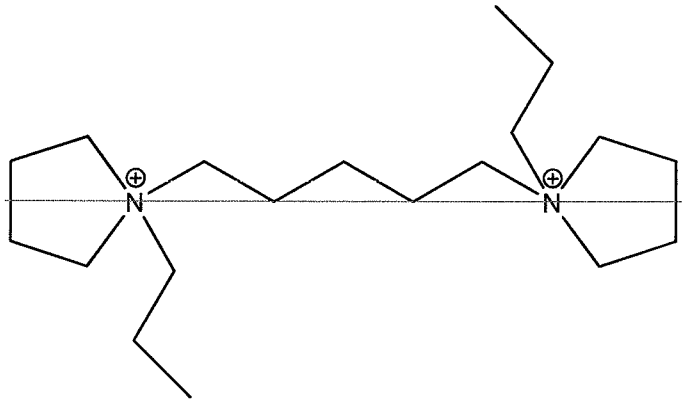
YO_2/X_2O_3	at least 100;
H_2O/YO_2	about 2 to about 10;
OH^-/YO_2	about 0.2 to about 0.5;
F/YO_2	about 0.0; and
Q/YO_2	about 0.1 to about 0.25.

13. A molecular sieve material produced by the process of claim 11, wherein said molecular sieve material having, in its as-synthesized form, said X-ray diffraction

pattern including the peaks shown in Table 2, and in its as-calcined form, said X-ray diffraction pattern including the following peaks in Table 1.

14. A process for converting a feedstock comprising an organic compound to a conversion product which comprises the step of contacting said feedstock with a catalyst, at organic compound conversion conditions, said catalyst comprising an active form of ~~the~~ said molecular sieve material of claim 1, wherein said molecular sieve material having, in its as-calcined form, said X-ray diffraction pattern including the following peaks in Table 1.

~~15. An organic nitrogen compound comprising a dication having one of the following structures:~~



~~or~~

