CLAIMS

1. A method for preparing zeolite SSZ-70, comprising contacting under crystallization conditions (1) at least one source of at least one oxide of a tetravalent element; (2) optionally, one or more sources of one or more oxides selected from the group consisting of oxides of trivalent elements, pentavalent elements, and mixtures thereof; (3) optionally, at least one source of an element selected from Groups 1 and 2 of the Periodic Table; (4) at least one source of a mineralizing agent selected from hydroxide ions and fluoride ions; (5) an imidazolium cation selected from the group consisting of a 1,3-diisopropylimidazolium cation, a 1,3-diisobutylimidazolium cation, and a 1,3-dicyclohexylimidazolium cation; and (6) a polyethyleneimine,
wherein the zeolite has, after calcination to remove any organic material, an external surface area of at least 55 m^2/g.

2. The method of claim 1, wherein the zeolite has an external surface area of from 55 to 120 m^2/g.

3. The method of claim 1, wherein the imidazolium cation is a 1,3-diisobutylimidazolium cation.

4. The method of claim 1, wherein the polyethyleneimine is a branched polyethyleneimine.

5. The method of claim 4, wherein the branched polyethyleneimine has a molecular weight of from 500 to 2000 g/mol.

6. The method of claim 1, wherein the zeolite is prepared from a reaction mixture comprising, in terms of mole ratios, the following:

YO_2/X_2O_n	≥ 2
Q/YO_2	0.05 to 0.80
A/YO_2	0.005 to 0.5
M/YO_2	0 to 0.40
OH^-/YO_2	0.1 to 0.80
F/YO_2	0 to 0.80
H_2O/SiO_2	30 to 80

wherein

(a) Y is selected from the group consisting of tetravalent elements from Groups 4-14 of the Periodic Table, and mixtures thereof;

(b) X is selected from the group consisting of trivalent elements and pentavalent elements from Groups 3-13 of the Periodic Table, and mixtures thereof;

(c) n equals the valence state of X;

(d) Q is an imidazolium cation selected from the group consisting of a 1,3-diisopropylimidazolium cation, a 1,3-diisobutylimidazolium cation, and a 1,3-dicyclohexylimidazolium cation;

(e) A is a polyethyleneimine; and

(f) M is selected from the group consisting of elements from Groups 1 and 2 of the Periodic Table.

7. The method of claim 6, wherein Y is Si and X is B or Al.

8. The method of claim 6, wherein the zeolite is prepared from a reaction mixture comprising, in terms of mole ratios, the following:

YO_2/X_2O_n	10 to 60
Q/YO_2	0.10 to 0.30
A/YO_2	0.01 to 0.30
M/YO_2	0 to 0.25
OH^-/YO_2	0.2 to 0.30
F/YO_2	0 to 0.60
H_2O/SiO_2	35 to 45.

9. A SSZ-70 zeolite having a composition, as-synthesized and in its anhydrous state, in terms of mole ratios as follows:

YO_2/X_2O_n	20 to 60
$(Q + A)/YO_2$	0.02 to 0.05
F/YO_2	0 to 0.08
M/YO_2	0 to 0.03

wherein:

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(b) X is selected from the group consisting of trivalent and pentavalent elements from Groups 3-13 of the Periodic Table, and mixtures thereof;

(c) n equals the valence state of X;

(d) Q is an imidazolium cation selected from the group consisting of a 1,3-diisopropylimidazolium cation, a 1,3-diisobutylimidazolium cation and a 1,3-dicyclohexylimidazolium cation, and $Q > 0$;

(e) A is a polyethyleneimine, and $A > 0$; and

(f) M is selected from the group consisting of elements from Groups 1 and 2 of the Periodic Table.

10. The zeolite of claim 9, wherein Y is Si and X is B or Al.

11. The zeolite of claim 9, wherein Q is a 1,3-diisobutylimidazolium cation.

12. The zeolite of claim 9, wherein A is a branched polyethyleneimine.

13. The zeolite of claim 12, wherein the branched polyethyleneimine has a molecular weight of from 500 to 2000 g/mol.

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wherein the zeolite has, after calcination to remove any organic material, an external surface area of at least 55 m^2/g, as measured by nitrogen adsorption.

2. The method of claim 1, wherein the zeolite has an external surface area of from 55 to 120 m^2/g, as measured by nitrogen adsorption.

3. The method of claim 1, wherein the imidazolium cation is a 1,3-diisobutylimidazolium cation.

4. The method of claim 1, wherein the polyethyleneimine is a branched polyethyleneimine.

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6. The method of claim 1, wherein the zeolite is prepared from a reaction mixture comprising, in terms of mole ratios, the following:

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wherein

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(c) n equals the valence state of X;

(d) Q is an imidazolium cation selected from the group consisting of a 1,3-diisopropylimidazolium cation, a 1,3-diisobutylimidazolium cation and a 1,3-dicyclohexylimidazolium cation, and $Q > 0$;

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