Supporting information

Organic Template Free Synthesis of Aluminosilicate

Zeolite ECR-1

*Jiangwei Song, Lei Dai, Yanyan Ji, and Feng-Shou Xiao**

State Key Laboratory of Inorganic Synthesis and Preparative Chemistry, Jilin University, Changchun

130023, P. R. China.

Fax: +86-431-5168624; Tel: +86-431-5168590; E-mail: fsxiao@mail.jlu.edu.cn

Figure S1. XRD pattern of samples synthesized at the higher temperature of 160 °C for 1 day (A) and 140 °C for 5 days (B) with molar ratio $\text{SiO}_2/\text{Al}_2\text{O}_3/\text{Na}_2\text{O}/\text{H}_2\text{O}$ at 10/1.0/2.5/200 in the starting gel: the impurity with peaks at 15.9, 18.3, 26.0° is still unidentified.

Figure S2. SEM image of the sample synthesized at the temperature of 160 °C for 1 day with molar ratio of $\text{SiO}_2/\text{Al}_2\text{O}_3/\text{Na}_2\text{O}/\text{H}_2\text{O}$ at 10/1.0/2.5/200 in the starting gel.

Figure S3. Simulated and experimental XRD patterns of zeolite ECR-1.

Table S1. Tabulation of *d*-values and relative intensities for the ECR-1 synthesized from the starting gel with molar ratio of SiO₂/Al₂O₃/Na₂O/H₂O at 10/1.0/2.0-3.3/200 for 14 days at 100°C

2 theta	<i>d</i> -value	Relative intensity
5.94	14.8678	9.5
6.78	13.0315	1.2
8.34	10.5929	18.5
9.74	9.0727	61.3
11.24	7.8648	33.4
13.08	6.7629	70.8
13.48	6.5635	20
14.10	6.2756	4.8
15.02	5.8936	14.9
15.58	5.6823	2
16.24	5.454	3.5
16.68	5.3109	9.5
17.70	5.0065	12.8
18.78	4.7217	6
19.99	4.4361	11.8
20.46	4.3371	7
21.00	4.2266	19.6
23.40	3.7985	36.2
24.14	3.6834	23.2
24.88	3.5758	12.6
25.42	3.501	100
26.04	3.4191	26
27.42	3.25	35.2
28.14	3.1686	75.4
29.06	3.0701	5.7
29.62	3.0133	16.6

30.68	2.9117	40.7
32.28	2.771	4.2
33.46	2.676	8.8
34.36	2.6077	6.4
34.70	2.5832	8
35.96	2.4954	3.7
36.92	2.4326	6
38.08	2.3613	1.6
39.40	2.2849	2.9
39.82	2.2619	7.2