SUPPORTING INFORMATION

Zeolite-Catalysed Isomerisation of Erythrose in Aqueous Medium

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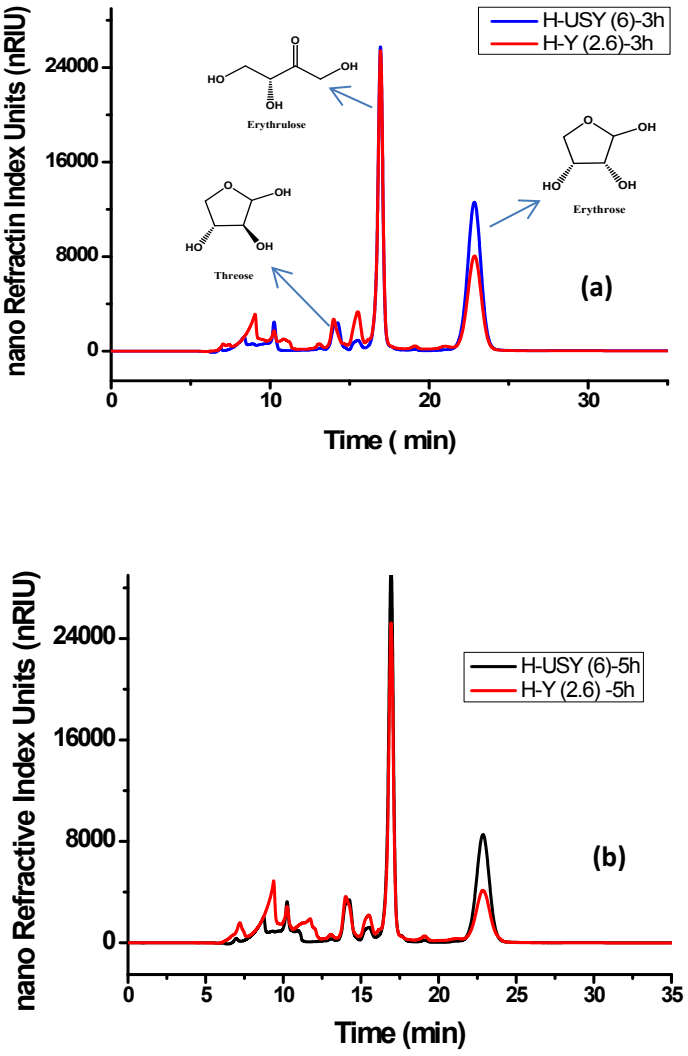
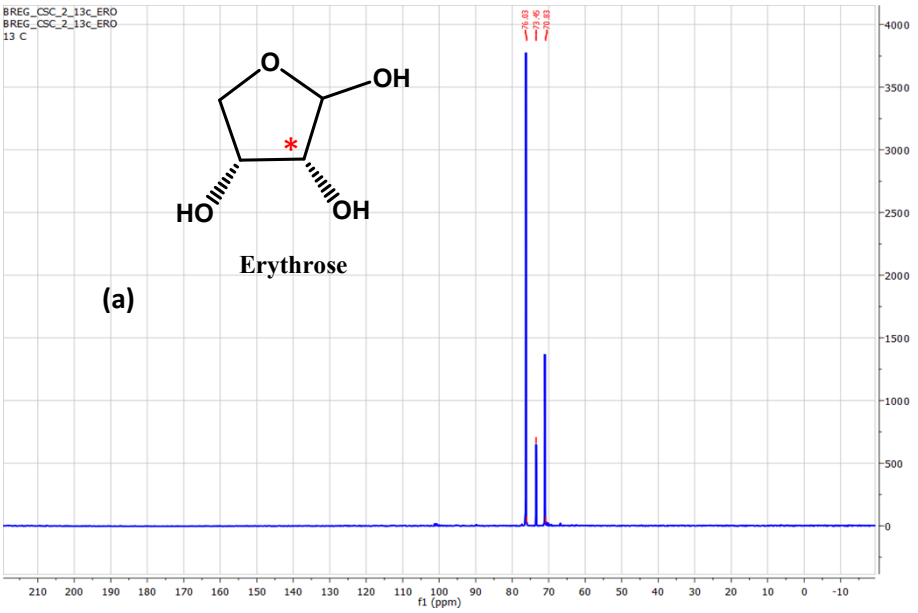


Figure S1. HPLC chromatogram of ERO reacted in water with H-Y(2.6) and H-USY(6) after a) 3 h and b) 5 h.



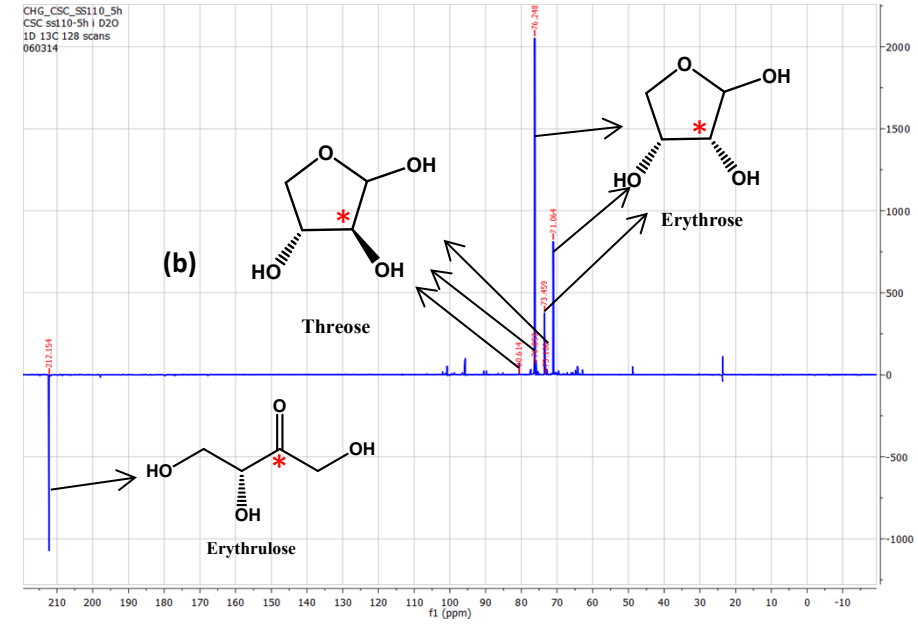


Figure S2. ^{13}C-NMR spectra of ERO a) before and b) after reaction with H-USY(6) in D_2O.

NH_3- TPD measurement

The number of acid sites present in the zeolites was measured using an AutoChem II 2920. 100 mg of the sample was placed in a quartz reactor and degassed at 500 ^oC for 1 h in a flow of helium at the rate of 50 ml/min. The reactor was then cooled to 100 ^oC and ammonia (50 ml/min) was allowed to get adsorbed at the same temperature for 2 h. Before the ammonia desorption measurement, the sample was flushed with helium at the rate of 50 ml/min to remove the physisorbed ammonia. Ammonia desorption was measured each second from 100 to 500 ^oC at a ramp of 10 ^oC/min.

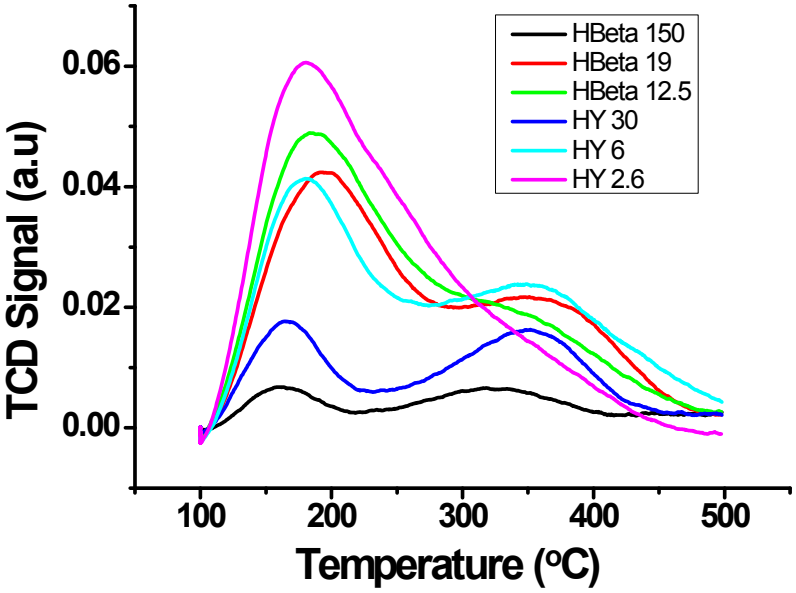


Figure S3. NH_3-TPD profile of Y, Beta and ZSM-5 zeolites

Table S1. Product distribution and total yield of tetroses

Time (h)	ERO as substrate				ERU as substrate				THO as substrate			
	Product distribution (%)			Total tetroses (%)	Product distribution (%)			Total tetroses (%)	Product distribution (%)			Total tetroses (%)
	ERO	ERU	THO		ERO	ERU	THO		ERO	ERU	THO	
0.5	89.4	5.9	<0.1	95.4	1.8	92.1	1.4	95,3	0.3	5	91.1	96.4
1	82.1	11.6	0.3	94.3	3	86.4	2.8	92.2	0.5	9.8	84.1	94.4
2	66.7	21.9	0.5	89.1	4.9	74.9	5.2	85	1.1	18.0	69.3	88.4
4	45.4	33.4	1.6	80.4	6.2	57.3	6.9	70,4	2.4	26.0	49.4	77.8
6	32.7	37.4	2.6	72.7	5.3	45.6	7.6	58.5	3.4	31.6	36.3	71.3
19	3.1	21.5	4.6	29.2	1.9	15.6	4.4	21.9	2.1	31.6	6.3	40
24	1.3	12.1	2.6	16	1.2	9.6	3	13.8	2.1	15.8	5.1	23
30	0.9	7.8	1.6	10.3	1.3	9.9	3	14.2	1.3	10.5	2.8	14.6
36	0.5	4.2	1.3	6	0.8	6	1.9	8.7	0.7	5.5	1.7	7.9