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APPENDIX

Table A1 Effect of reaction time on the styrene oxidation using 0.1 g of catalyst, containing 7.0% titanium content, at 80 °C

Reaction time (h)	Styrene conversion (%)	Selectivity (%)	
		Benzaldehyde	Styrene oxide
1	5.95	54.57	45.4
2	13.83	60.46	39.5
3	15.54	64.49	35.5
4	25.82	65.82	34.5
6	24.03	72.54	27.5

Table A2 Effect of reaction temperature on the styrene oxidation using 0.1 g of catalyst, containing 7.0% titanium content, for 4 h

Reaction temperature (°C)	Styrene conversion (%)	Selectivity (%)	
		Benzaldehyde	Styrene oxide
70	25.14	76.14	23.9
80	25.82	65.80	34.2
90	26.19	81.09	18.9

Table A3 Effect of amount of catalyst, containing 7.0% titanium content, used on the styrene oxidation at 80 °C for 4 h

Catalyst used (g)	Styrene conversion (%)	Selectivity (%)	
		Benzaldehyde	Styrene oxide
0.05	11.21	59.69	40.3
0.10	25.82	65.80	34.2
0.15	22.61	71.74	28.3
0.20	24.00	73.20	26.8

Table A4 Effect of titanium content on the styrene oxidation using 0.1 g of catalyst at 80 °C for 4 h

% Ti loaded	Styrene conversion (%)	Selectivity (%)	
		Benzaldehyde	Styrene oxide
0.0	4.01	53.44	46.6
3.0	14.35	57.87	42.1
5.0	13.91	63.16	36.8
7.0	25.82	65.82	34.2
10.0	12.36	69.89	30.1

CURRICULUM VITAE

Name: Ms. Supattra Aungkutranont

Date of Birth: August, 1977

Nationality: Thai

University Education:

1995–1998 Bachelor Degree of Chemistry, Faculty of Science, Silpakorn University, Bangkok, Thailand

Proceedings:

1. Aungkutranont, S.; Samran, B.; Chaisuwan, T.; and Wongkasemjit, S.; (2010, April 22) Synthesis of Fe-, Mo-, and Ti-SBA-15 via sol-gel process of silatrane and activity study of Ti-SBA-15. Proceedings of The 1st National Research Symposium on Petroleum, Petrochemicals, and Advanced Materials and The 16th PPC Symposium on Petroleum, Petrochemicals, and Polymers, Bangkok, Thailand.

Presentations:

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2. Aungkutranont, S.; Samran, B.; Chaisuwan, T.; and Wongkasemjit, S.; (2010, April 22) Synthesis of Fe-, Mo-, and Ti-SBA-15 via sol-gel process of silatrane and activity study of Ti-SBA-15. Paper presented at the 1st National Research Symposium on Petroleum, Petrochemicals, and Advanced Materials and The 16th PPC Symposium on Petroleum, Petrochemicals, and Polymers, Bangkok, Thailand.

