Supporting information

The importance of Measuring Diffusion Coefficients in Reactor Design and Simulation

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Experimental conditions

Table S.1. Operative conditions for the determination of infinite dilution diffusion coefficients for glucose and sorbitol.

T [°C]	Feed	C_i [mol·L^{-1}]
25-30-35-45-65	Water with a conductivity of 1.6 μS	0.100
		0.081
		0.050

Table S.2. Operative conditions for the diffusion coefficients determination of glucose-water binary systems.

T [°C]	C_{flow} [mol·L^{-1}]	C [mol·L^{-1}]
25-35-45-65	0.0250	0.0448
		0.0349
		0.0150
		0.0050
25-35-45-65	0.0500	0.0700
		0.0600
		0.0400
		0.0300
25-35-45-65	0.0753	0.0773
		0.0733
		0.0793
		0.0713
25	0.1000	0.0800
		0.1202
		0.0900
		0.1100
35-45-65	0.0953	0.0762
		0.1143
		0.0857
		0.1049

Table S.3. Operative conditions for the diffusion coefficients determination of sorbitol-water binary systems.

T [°C]	C_{flow} [mol·L^{-1}]	C [mol·L^{-1}]
25-35-45-65	0.0256	0.0452
		0.0358
		0.0155
		0.0051
25-35-45-65	0.0490	0.0686
		0.0588
		0.0392
		0.0294
25-35-45-65	0.0722	0.0915
		0.0821
		0.0626
		0.0530
25	0.0956	0.1149
		0.1051
		0.0861
		0.0765
35-45-65	0.0956	0.1147
		0.1047
		0.0861
		0.0765

Table S.4. Operative conditions for the diffusion coefficients determination of glucose-sorbitol-water ternary systems.

T [°C]	C_{flow} [mol·L^{-1}] (glucose-sorbitol-water)	C [mol·L^{-1}]
25-65	0.0248-0.0742	0.0454-0.0755
		0.0254-0.0950
		0.0051-0.0751
		0.0253-0.0552
		0.0350-0.0750
		0.0252-0.0851
		0.0201-0.0749
		0.0252-0.0650
45	0.0248-0.0742	0.0451-0.0756
		0.0256-0.0951
		0.0052-0.0755
		0.0262-0.0572
		0.0350-0.0747
		0.0250-0.0650
		0.0202-0.0745
		0.0250-0.0849
25-65	0.0496-0.0496	0.0696-0.0498
		0.0508-0.0715
		0.0310-0.0503
		0.0502-0.0302
		0.0601-0.0495
		0.0500-0.0601
		0.0402-0.0499
		0.0542-0.0401
45	0.0496-0.0496	0.0702-0.0503
		0.0509-0.0701
		0.0310-0.0503
		0.0505-0.0302
		0.0602-0.0497
		0.0502-0.0603
		0.0404-0.0503
		0.0504-0.0400
25-65	0.0743-0.0248	0.0949-0.0251
		0.0745-0.0447
		0.0547-0.0249
		0.0755-0.0054
		0.0847-0.0259
		0.0746-0.0351
		0.0649-0.0250
		0.0752-0.0154
45	0.0762-0.0254	0.0935-0.0248
		0.0748-0.0449
		0.0547-0.0249
		0.0747-0.0051
		0.0850-0.0250
		0.0750-0.0349
		0.0649-0.0250
		0.0742-0.0150

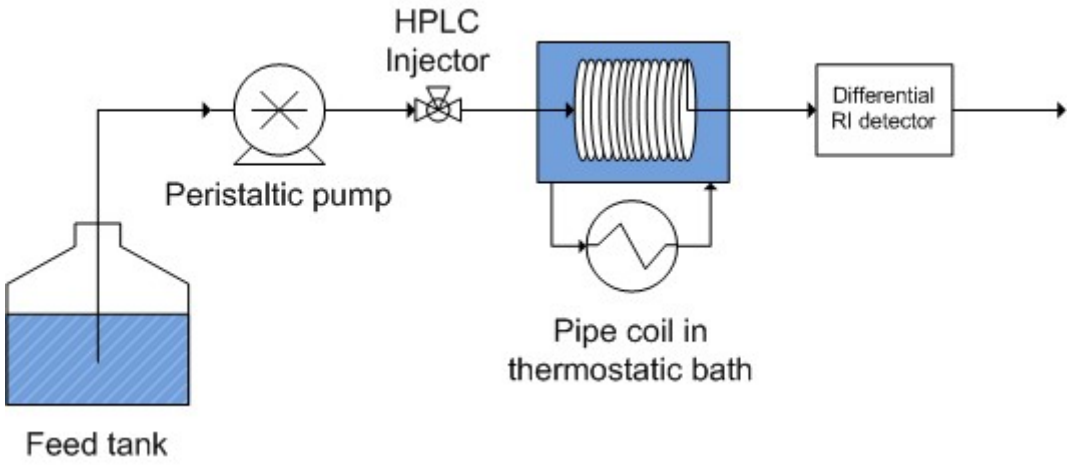

Figure S.1. Sketch of the experimental system used to measure the diffusion coefficients.