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Corrigendum: Separation Performance of Improved PERVAP™ Membrane and Its Dependence on Operating Conditions

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Corrections on Figure 5 and Table 1

The natural log form of Equation (6) in the article is:

$$\ln(J) = \ln(J_0) - \frac{E_a}{RT}$$

Therefore, by plotting ln(J) vs. (1/T), the slop is negative, and thus, the values (E_a/R) in Figure 5 are positive because they are the apparent activation energy.

By dividing these values by "R" value (gas constant), one can calculate the activation energy.

So, the legend of "y" axis in Fig. 5 must be corrected by (E_a/R), as presented below. In addition, this correction also apply for Table 1, where -E_a/R has to be corrected by E_a/R.

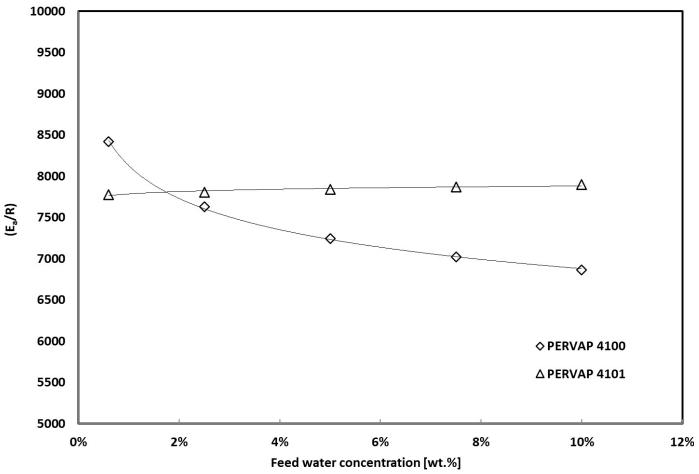

Figure 5. Activation energy devided by R as a function of feed water concentration.

The values of J_0 in Table 1 must be also corrected, since the reported values correspond to ln(J_0). Thus, the corrected Table 1 is as follow:

Table 1. Apparent activation energy, pre-exponential coefficient from Arrhenius-type equation for PERVAP™ 4100 and 4101, and estimated water flux and permeance.

Parameter		PERVAP™ 4100		PERVAP™ 4101	
		10 wt.%	0.6 wt.%	10 wt.%	0.6 wt.%
E_a/R	[°K]	6861	8418	7898	7775
J_o	[g/m²h]	1.77×10^{11}	4.35×10^{11}	2.38×10^{12}	7.96×10^{10}
$J_{105°C}$	[g/m²h]	2400	90	1960	95
$J_{60°C}$	[g/m²h]	202	4.5	120	6.0
$P/l_{105°C}$	[GPU]	2309	1308	1886	1386
$P/l_{60°C}$	[GPU]	1156	-	687	-

Now, by using the apparent activation energy (E_a/R) and the pre-exponential coefficient (J_o), the readears can calculate the fluxes at different temperatures.

We apologize for the errors in Figure 5 and Table 1, and we hope now these issues are clarified for the redears.

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