Reaction Chemistry & Engineering

CORRECTION

View Article Online
View Journal | View Issue

Cite this: *React. Chem. Eng.*, 2019, 4, 954

Correction: Role of enhanced solubility in esterification of 2,5-furandicarboxylic acid with ethylene glycol at reduced temperatures: energy efficient synthesis of poly(ethylene 2,5-furandicarboxylate)

Anup S. Joshi,[a] Niloofar Alipourasiabi,[a] Yong-Wah Kim,[b] Maria R. Coleman[a] and Joseph G. Lawrence*[a]

DOI: 10.1039/c9re90014d

rsc.li/reaction-engineering

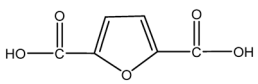
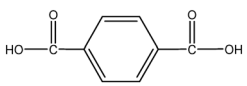
Correction for 'Role of enhanced solubility in esterification of 2,5-furandicarboxylic acid with ethylene glycol at reduced temperatures: energy efficient synthesis of poly(ethylene 2,5-furandicarboxylate)' by Anup S. Joshi *et al.*, *React. Chem. Eng.*, 2018, **3**, 447–453.

The authors regret an error in calculation of the published values of solubility parameters in Table 2. The correct version of Table 2 is as below. Additionally, on page 448, second column, paragraph 2, the sentence beginning 'Although the calculated overall solubility parameters of FDCA (25.2 $(MJ\ m^{-3})^{1/2}$) and TPA (25.6 $(MJ\ m^{-3})^{1/2}$) were similar' should be changed to 'Although the calculated overall solubility parameters of FDCA (26.9 $(MJ\ m^{-3})^{1/2}$) and TPA (25.3 $(MJ\ m^{-3})^{1/2}$) were similar'.

Explanation of the error:

Errors	Correction
Inconsistencies in molar volumes from literature	This error is corrected by theoretically determining the molar volumes using group contribution by using Fedors' method
Did not consider plane of symmetry in the structures	δ_p values are corrected for plane of symmetry as per Van Krevelen method

Table 2 Solubility parameters of ethylene glycol (EG), terephthalic acid (TPA) and 2,5-furandicarboxylic acid (FDCA) calculated using Hoftyzer and Van Krevelen group contribution method using molar volume measurements based on Fedors' method[47]

Component	Structure	δ $(MJ\ m^{-3})^{1/2}$	δ_d $(MJ\ m^{-3})^{1/2}$	δ_p $(MJ\ m^{-3})^{1/2}$	δ_h $(MJ\ m^{-3})^{1/2}$
EG	HO—CH_2—CH_2—OH	31.1	16.5	3.0	26.2
FDCA		26.9	21.4	2.0	16.1
TPA		25.3	21.3	1.4	13.5

These changes do not affect the conclusions of the manuscript.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

[a] *Department of Chemical Engineering, University of Toledo, OH 43606, USA. E-mail: joseph.lawrence@utoledo.edu*
[b] *Department of Chemistry and Biochemistry, University of Toledo, OH 43606, USA*