Reply to Comments by van Noort on *J. Chem. Eng. Data* 2001, *46*, 286–298

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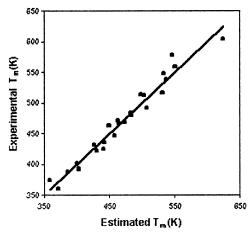


Figure 1. Experimental versus estimated melting temperatures for PCDDs. The line is the y = x line.

The correlation suggested by van Noort¹ in his Comment on our paper² is an improvement of the Simamura correlation.³ Unfortunately, there is not sufficient information in our paper² to compare both approaches. The uncertainties cited in ref 2 are not statistical but an expert's estimation of the uncertainties of unknown melting points. The average deviations of experimental and estimated values from our correlation are 10 K for 61 chlorine-substituted dioxins (PCDDs) and 15 K for 59 chlorine-substituted dibenzofurans (PCDFs). The corresponding graphs are presented as Figures 1 and 2. So, our correlation is considerably better for PCDDs and the same for PCDFs.

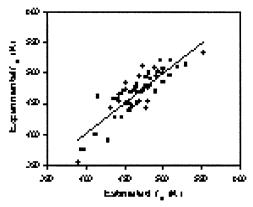


Figure 2. Experimental versus estimated melting temperatures for PCDFs. The line is the y = x line.

Literature Cited

- van Noort, P. C. M. Comments on "Thermodynamic Properties of Dibenzo-p-dioxin, Dibenzofuran, and Their Polychlorinated Derivatives in the Gaseous and Condensed Phases. 2. Thermodynamic Properties of Condensed Compounds". J. Chem. Eng. Data 2002, 47, 1558.
- (2) Iorish, V. S.; Dorofeeva, O. V.; Moiseeva, N. F. Thermodynamic Properties of Dibenzo-p-dioxin, Dibenzofuran, and Their Polychlorinated Derivatives in the Gaseous and Condensed Phases. 2. Thermodynamic Properties of Condensed Compounds. J. Chem. Eng. Data 2001, 46, 286–298.
- (3) Simamura, P.; Yalkowsky, S. H. Group Contribution Method for Predicting the Melting Points and Boiling Points of Aromatic Compounds. *Ind. Eng. Chem. Res.* 1994, 33, 1405–1409.

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