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Author's reply to comments by A.K. Biñ

Versteeg, G.F.

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Dear Sirs,

In the comment of Dr Biń interesting points on mass transfer through gas–liquid interfaces have been raised.

In our paper (Versteeg *et al.*, 1987) we tried to find a simple model that would allow us to translate measurements in chemically reactive systems from one condition to the other. The King model was clearly very practical for this purpose as it was not our aim to relate the mass transfer to fundamental and detailed hydrodynamics with varying conditions at every point of the interface. Also working with ultra clean interfaces was not interesting for our work as we had to cope with chemical reactants present in the different solvent combinations. As indicated in the comment of Dr Biń such ultra clean surfaces may even give a different interface condition which

would be less relevant or even misleading for our purposes.

G. F. VERSTEEG

*Department of Chemical Engineering
Twente University of Technology
PO Box 217, 7500 AE Enschede
Netherlands*

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Versteeg, G. F., Blauwhoff, P. M. M. and Swaaij, W. P. M. van, 1987, The effect of diffusivity on gas–liquid mass transfer in stirred vessels. Experiments at atmospheric and elevated pressures. *Chem. Engng Sci.* **42**, 1103–1119.