

## Reply:

In his Letter to the Editor,<sup>1</sup> Vera offers no supporting arguments that go beyond those already presented in <sup>2</sup> and omits to mention my subsequent, critically enlightening article,<sup>3</sup> made available to him in November 2005 (i.e., before he dispatched the revised version of his additional article<sup>4</sup>), in which the arguments and conclusions of article<sup>2</sup> are proved to be inconsistent. I warmly invite those interested in this discussion to read the article,<sup>3</sup> as it develops the exact equations that apply to any kind of real or ideal cells -including those used by Vera and collaborators — in terms of complete electrolytes, rather than of constituent ions. These equations prove conclusively that cell emfs *do not contain any information* about the activity coefficients of separate ionic species. That is, the desired information is lacking in *all* cases, and not — in contrast with the unsupported assertions of Vera<sup>1,2</sup> — only in the particular cases exemplified by my previous articles, or only as a consequence of the fact that “Malatesta starts from a definite conclusion, and sets

up a thought experiment with a very simple system to collect synthetic data, and demonstrate that his conclusion was right ” or that “ instead of using real data, Malatesta generates imaginary data” using an equation “that is not an exact thermodynamic relation”.

As for the discussion about the ancient opinions of Lewis and Randall, and Brönsted, which are opposed to those of Guggenheim, these are all things that are quite unrelated to the point at issue. Indeed, if I affirm that the “ion activity coefficients” of the Vera school are not real, this is not because I agree with Guggenheim’s conceptions — rather than those of Brönsted — as regards the debatable question of the separation into ionic components of the chemical potential of an electrolyte. More simply, I realize that cell emfs contain no information whatsoever about the activity coefficients of ions. I do not need a historical re-examination of past and present ideas about the nature of gravity, to exclude that a Montgolfier balloon may be a suitable means to reach the moon.

## Literature Cited

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3. Malatesta F. On the experimental determinations of ionic activity coefficients. *Fluid Phase Equil.* 2006;239: 120-124.
4. Wilczec-Vera G, Rodil E, Vera JH. Towards accurate values of individual ion activities: Additional data for NaCl, NaBr and KCl, and new data for NH<sub>4</sub>Cl. *Fluid Phase Equil.* 2006; 241: 59–69.

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# Erratum

For “Model Prediction of Hot Spots Formation in Shallow Adiabatic Packed-Bed Reactors” by Ganesh A. Viswanathan and Dan Luss (DOI: 10.1002/aic.10734, pp. 1533-1538, April 2006), the authors request the following Erratum:

This article includes Supplementary Material available from the authors upon request or via the Internet at <http://www.interscience.wiley.com/jpages/0001-1541/suppmat/>.

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For “Removal of a Model Protein Foulant from Model Surfaces” by Chen et al. (DOI:10.1002/aic.10149, pp. 1961-1973, August 2004), the authors request the following erratum:

The area A should not appear in Eqs. 17, 18, 20, 21, and 22. None of the results shown in the figures have used this A.

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