

ERRATUM TO: ACTIVITY AND DIFFUSIVITY OF OXYGEN IN THE LIQUID DILUTE $\text{Bi}_x\text{Sb}_{1-x}$ SOLUTIONS

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This erratum concerns a correction in the author name, in the abstract and in the text of the original article [1].

It states incorrectly in the author name on page 261 and 270:

D. Jendrzeczyk-Handzlik

It should state instead:

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It states incorrectly in the abstract on page 261:

The diffusivity in pure metals (in cm^2/s) is:

It should state instead:

The diffusivity in pure metals (in cm^2/s) is:

It states incorrectly in the text on page 262, first paragraph in the part 2. Experimental:

The fully stabilized $\text{ZrO}_2+\text{Y}_2\text{O}_3$ (YSZ) electrolyte tubes, closed at one end YSZ electrolyte tubes (length 400 mm, outside diameter 8 mm), were supplied by Yamari, Japan. The iridium, tungsten, rhenium and platinum wires (diameter 0.5 mm) were 99.99 mass.% obtained from Alfa Aesar, Germany (Ir, Re, W) and from the Polish Mint, Poland (Pt), respectively.

It should state instead:

The fully stabilized $\text{ZrO}_2+\text{Y}_2\text{O}_3$ (YSZ) electrolyte tubes, closed at one end (length 400 mm, outside diameter 8 mm), were supplied by Yamari, Japan. The iridium, tungsten, rhenium and platinum wires (diameter 0.5 mm) were 99.99 mass.% pure obtained from Alfa Aesar, Germany (Ir, Re, W) and from the Polish Mint, Poland (Pt), respectively.

It states incorrectly in the text on page 263, second sentence after Figure 2.:

Next, the difference in voltage DE was applied to the cell by the circuit 2.

It should state instead:

Next, the difference in voltage ΔE was applied to the cell by the circuit 2.

It states incorrectly in the text on page 263, first paragraph in the part 3. Results and discussion:

Emf values produced by the cell (I) were corrected by thermo-emf's (Pt-Re+kanthal, Pt-Ir+kanthal and Pt-W+kanthal, respectively, using previously determined ($E_{\text{Re}}=-0.2363-5.458 \cdot 10^{-3}T+1.41 \cdot 10^{-5}T^2$ (mV), $E_{\text{Ir}}=-2.3636 \cdot 10^{-4}-5.458 \cdot 10^{-7}T+8.32 \cdot 10^{-9}T^2$ (mV) and $E_{\text{W}}=-0.2363-5.458 \cdot 10^{-4}T+8.32 \cdot 10^{-6}T^2$ (mV)) functions [17].

It should state instead:

Emf values produced by the cell (I) were corrected by thermo-emf's (Pt-Re+kanthal, Pt-Ir+kanthal and Pt-W+kanthal, respectively, using previously determined ($E_{\text{Re}}=-0.2363-5.458 \cdot 10^{-4}T+8.32 \cdot 10^{-6}T^2$ (mV), $E_{\text{Ir}}=-2.3636 \cdot 10^{-4}-5.458 \cdot 10^{-7}T+8.32 \cdot 10^{-9}T^2$ (mV) and $E_{\text{W}}=-4.5855+6.524 \cdot 10^{-4}T+1.41 \cdot 10^{-5}T^2$ (mV)) functions [17].

It states incorrectly in the text on page 263, first word after equation 4:

DE

It should state instead:

ΔE

It states incorrectly in the text on page 266, first word after table 1:

compositin.

It should state instead:

composition.

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It states incorrectly in the text on page 267, first sentence after table 2:

In order to describe oxygen activity coefficients $\gamma_{O(Me)}^0$ the binary Bi-Sb alloy we used Wagner's model [18].

It should state instead:

In order to describe oxygen activity coefficients $\gamma_{O(Me)}^0$ of the binary Bi-Sb alloy we used Wagner's model [18].

It states incorrectly in the text on page 267, the first line of text in the second colony:

with $h=841$ ($J \times mol^{-1}$) gave a satisfactory

It should state instead:

with $h=841$ ($J \cdot mol^{-1}$) gave a satisfactory

It states incorrectly in the text on page 268, after equation 12:

Activation energies are expressed in $J \times mol^{-1}$.

It should state instead:

Activation energies are expressed in $J \cdot mol^{-1}$.

It states incorrectly in the text on page 268, second paragraph after equation 12:

The comparison of the literature data with those from the present work showed that $\ln D_o^{Bi}$ and $\ln D_o^{Sb}$ obtained in the present work are a little lower than those taken from the literature.

It should state instead:

The comparison of the literature data with those from the present work showed that $\ln D_o^{Bi}$ and $\ln D_o^{Sb}$ obtained in the present work are a little lower than those taken from the literature.

It states incorrectly in the text on page 269, second paragraph:

Results obtained in the present work were described with Wagner's model to calculate the as a function of the alloy composition. Calculations were performed at chosen temperature 1085 K. As can be seen from Fig. 5b, the calculations performed with parameter $h=841$ ($J \times mol^{-1}$) gave a satisfactory representation of the data obtained in the present work.

It should state instead:

Results obtained in the present work were described with Wagner's model to calculate the $\ln \gamma_{O(Me)}^0$ as a function of the alloy composition. Calculations were performed at chosen temperature 1085 K. As can be seen from Fig. 5b, the calculations performed with parameter $h=841$ ($J \cdot mol^{-1}$) gave a

satisfactory representation of the data obtained in the present work.

It states incorrectly in the text on page 269, in the part 4. Conclusions:

It was found that this dependence can be described with Wagner's model with one constant parameter $h=841$ ($J \times mol^{-1}$).

It should state instead:

It was found that this dependence can be described with Wagner's model with one constant parameter $h=841$ ($J \cdot mol^{-1}$).

We would like to apologise for any inconvenience caused.

Reference

- [1] D. Jendrzeczyk-Handzlik, P. Handzlik, K. Fitzner, Activity and Diffusivity of Oxygen in the Liquid Dilute BiSb1-x Solutions, J. Min. Metall. Sect. B-Metall. 54 (2) B (2018) 261-270. DOI: 10.2298/JMMB180311014J

