



Correction to: A literature review and novel theoretical approach on the optical properties of whole blood

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Original text, taken from the on-line version:

Following the method of Duysens, adapting only the terminology, we arrive at:

$$\mu_{a,blood} = \left(\frac{1 - e^{(\mu_{a,Hb} \cdot d_{RBC})}}{\mu_{a,Hb} \cdot d_{RBC}} \right) \mu_{a,HB} \quad (3)$$

where $\mu_{a,blood}$ and $\mu_{a,Hb}$ are the absorption coefficient of a blood sample and haemoglobin solution, respectively. The length d_{RBC} is a typical dimension of a red blood cell.

There are two issues:

- There is a minus-sign missing within the exponential.
- The subscripts of the absorption coefficients within the parenthesis (..) are incorrect, and accordingly, the first sentence after the Eq. is incomplete.

The correct version should read:

Following the method of Duysens [32], adapting only the terminology, we arrive at:

$$\mu_{a,blood} = \left(\frac{1 - e^{-\mu_{a,RBC} \cdot d_{RBC}}}{\mu_{a,RBC} \cdot d_{RBC}} \right) \mu_{a,Hb} \quad (3)$$

where $\mu_{a,blood}$ and $\mu_{a,Hb}$ are the absorption coefficient of a blood sample and haemoglobin solution, respectively, and $\mu_{a,RBC}$ is the absorption coefficient of the hemoglobin solution *inside* the red blood cell. The last two absorption coefficients are related through the haematocrit, $\mu_{a,Hb} = Hct \cdot \mu_{a,RBC}$. The length d_{RBC} is a typical dimension of a red blood cell.

The original article has been corrected.

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