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Correction: The applicability of proton transfer reaction-mass spectrometry (PTR-MS) for determination of isocyanic acid (ICA) in work room atmospheres

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Correction for 'The applicability of proton transfer reaction-mass spectrometry (PTR-MS) for determination of isocyanic acid (ICA) in work room atmospheres' by Mikolaj Jan Jankowski *et al.*, *Environ. Sci.: Processes Impacts*, 2014, 16, 2423–2431.

The reported isocyanic acid (ICA) ion-neutral collision rate (capture rate) was erroneously estimated using the PTR-MS drift tube temperature and not the effective temperature (T_{eff}) resultant of the electric field in the drift tube. Thus, the reported collision rate is too high resulting in an overestimation of the instrument response factor. However, volume mixing ratios for ICA are not affected by this error, as the PTR-MS was calibrated against an FT-IR spectrometer. An equation and two figures affected by this error are corrected using the correct collision rate. Also, text in the manuscript is updated. The error does not change the conclusion of the article.

- In the penultimate sentence of the “Quantum mechanical calculations of the theoretical capture rate coefficient for ICA” section (p. 2426), the correct k value for ICA is $1.68 \times 10^{-9} \text{ cm}^3 \text{ s}^{-1}$.
- In the second sentence of the fourth paragraph of the “PTR-MS response versus FT-IR response of ICA” section (p. 2428), the correct value is 45%. The revised phrase should read “the PTR-MS response was approximately 45% of the FT-IR response”.
- In the first sentence of the eighth paragraph of the “PTR-MS response versus FT-IR response of ICA” section (p. 2428), the correction factor f should read “= $0.4352 - 0.0126 \times \text{AH}$ ”. The revised phrase is “the correction factor f (the relative PTR-MS response in relation to the FT-IR reference response) = $0.4352 - 0.0126 \times \text{AH}$ ”.
- Corrected eqn (5):

$$\text{PTR-MS}_{\text{corrected}} = \frac{\text{PTR-MS}_{\text{measured}}}{0.4352 - 0.0126 \times \text{AH}}$$

- Fig. 3: linear fit is replaced by the equation: $y = 0.4352 - 0.0126 \times \text{AH}$.
- Fig. 4: uncorrected data points approximately 1.7 times higher with respect to PTR-MS.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

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