

CORRECTION

View Article Online  
View Journal | View Issue



Cite this: *Environ. Sci.: Processes Impacts*, 2018, 20, 417

DOI: 10.1039/c8em90008f

rsc.li/espi

# Correction: Comparison of air samplers for determination of isocyanic acid and applicability for work environment exposure assessment

Mikolaj Jan Jankowski, \* Raymond Olsen, Yngvar Thomassen and Paal Molander

Correction for 'Comparison of air samplers for determination of isocyanic acid and applicability for work environment exposure assessment' by Mikolaj Jan Jankowski *et al.*, *Environ. Sci.: Processes Impacts*, 2017, 19, 1075–1085.

The reported ion-neutral collision rates (capture rate) were erroneously estimated using the PTR-MS drift tube temperature and not the effective temperature ( $T_{\text{eff}}$ ) resultant of the electric field in the drift tube. Thus, the reported collision rates for polar compounds are too high resulting in an overestimation of the instrument response factors and consequently leading to an underestimation of volume mixing ratios. However, volume mixing ratios for ICA are not affected by this error as the PTR-MS was calibrated against an FT-IR spectrometer. But, the correction formulae (eqn (2) and (4)) are only valid if the incorrect collision rate is used. The error does not change the conclusion of the article.

- In the fourth sentence of the first paragraph of the "PTR-MS measurements" section (p. 1078), the values for reaction rates  $k$  should read " $1.68$  and  $2.64 \times 10^{-9} \text{ cm}^3 \text{ s}^{-1}$ ".
- In the penultimate sentence of the "PTR-MS measurements" section (p. 1078), the equation should read " $= 0.4352 - 0.0126 \times \text{AH}$ ".
- Corrected eqn (2):

$$[\text{ICA}]_{\text{AH corrected}} = \frac{[m/z \ 44]_{\text{ppb}}}{0.4352 - 0.0126 \times \text{AH}}$$

- Corrected eqn (4):

$$\text{LOD}_{\text{ICA}} = \frac{[m/z \ 44]_{\text{background,ppb}} + 2 \times \text{SD}_{\text{background,ppb}}}{0.4352 - 0.0126 \times \text{AH}}$$

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

