

Supplementary information

A miniaturized microplasma excitation source coupled with the photochemically-induced volatile species generation as a cost-effective tool for *in situ* mercury pollution analyses

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Characterization of the UV radiation source

The emission spectra of the PURITEC HNS S 9W UVC lamp (Osram) used in the photochemical vapour generation microreactor are shown in Fig. S1. The emission spectrum of the UV lamp was obtained with a 0.01 s integration time and 1800 grooves mm⁻¹ holographic gratings, using the same optical emission spectrometer (Andor SR500i) and CCD detector (Newton DU-920P-OE) as in the experiment.

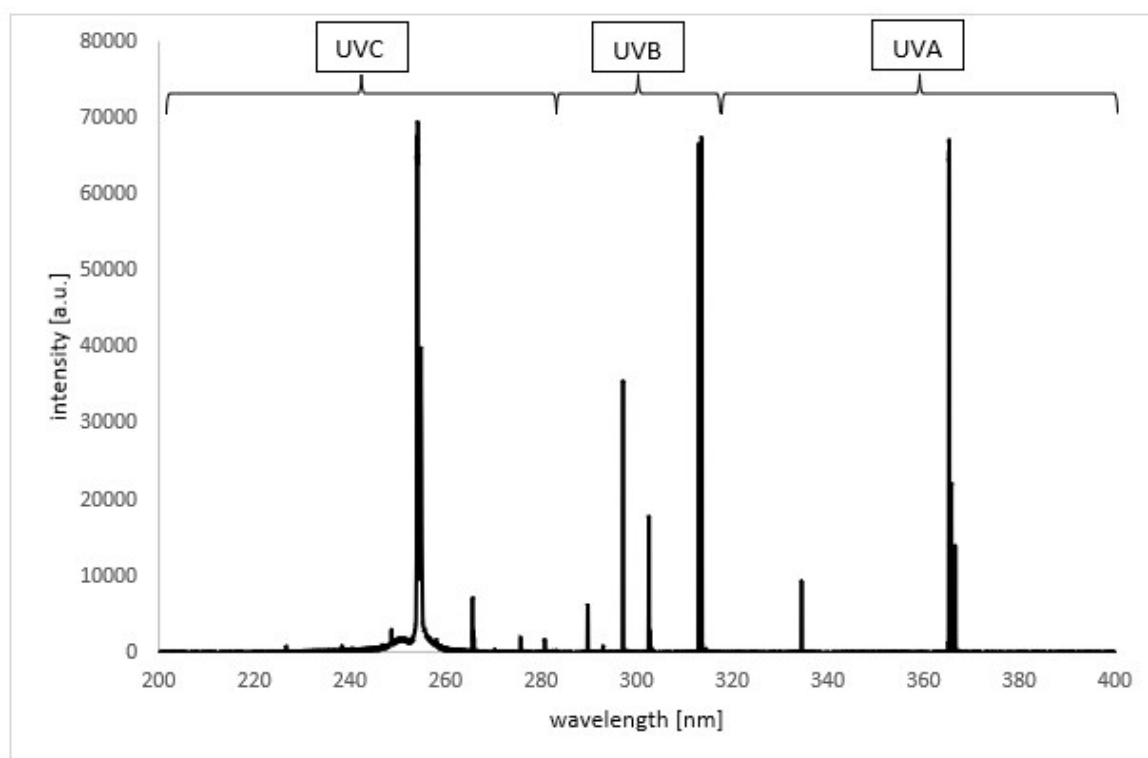


Fig. S1. The corrected emission spectra of the UV lamp used here (200-400 nm range)

In the UV region (Fig. S1), the most intense radiation is emitted in the UVC area (approximately 50%), followed by UVA (29%) and UVB (21%). The values are expressed as the sum of the measured intensities within each specific region relative to the total intensities of the emission bands and lines present in the spectrum.