

## Corrigendum to “H-driven degradation of PFAS in the gas/liquid interface using electrochemistry configuration of cold plasma” (DOI: 10.31281/vab52w73)

A. Mota-Lima<sup>1</sup>

<sup>1</sup>Chemical Engineering Department, Polytechnical School, University of São Paulo, Av. Prof. Lineu Prestes, 580 - Butantã, São Paulo - SP, 05508-0001, Brazil

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[mota@usp.br](mailto:mota@usp.br)

In this corrigendum we correct the following typos in Ref. [1]:

**Page 203:** “In agreement to that, the rate constant of 108 and 109 L mol<sup>-1</sup> s<sup>-1</sup> (...)” must be replaced by “In agreement to that, the rate constant of 10<sup>8</sup> and 10<sup>9</sup> L mol<sup>-1</sup> s<sup>-1</sup> (...)”.

**Page 204:** The rate constant of the reaction 7 was obtained from [2] (which was not mentioned in the original paper).

**Page 205:** Reaction 9, 10 and 15 must be read respectively as:

$$\frac{d[P]}{dt} = -k_1[e][P] \quad (9)$$

$$\frac{d[H^+]}{dt} = -k_4[e][H^+] \quad (10)$$

$$\frac{d[H\bullet]}{dt} = k_4[e][H^+] - \{k_5[e][H\bullet] + 2k_6[H\bullet]^2 + k_7[H\bullet][PFOA]\} \quad (15)$$

Further, Table 1 in [1] displays values of k<sub>3</sub> to k<sub>6</sub> obtained from [3] (Ref. [24] in the original paper), and not from [4] and [5] (Refs. [12] and [13] in the original paper). The rate constant k<sub>7</sub> obtained from [2] (which was not mentioned in the original paper), and not from [4] (Ref 12 in the original paper).

**Page 213:** “According to reaction 17, (...), being the latter measured by Schröter et al. [6] (Ref. [35] in the original paper)” must be read as “According to reaction 19, (...) being the latter measured by Schröter et al. [6] (Ref. [35] in the original paper)”.

None of the errors mentioned above affect the main conclusions of the paper.

### I. References

- [1] A. Mota-Lima, (2025). H-driven degradation of PFAS in the gas/liquid interface using electrochemistry configuration of cold plasma. *J. Technol. and Space Plasmas*, 202-217. <https://doi.org/10.31281/vab52w73>
- [2] T. Szreder, J. Kisała, A. Bojanowska-Czajka, M. Kasperkowiak, D. Pogocki, K. Bobrowski, et al. High energy radiation – Induced cooperative reductive/oxidative mechanism of perfluorooctanoate anion (PFOA) decomposition in aqueous solution, *Chemosphere* 2022 Vol. 295 Pages 133920 <https://doi.org/10.1016/j.chemosphere.2022.133920>

- [3] A. Mota-Lima, J.F. do Nascimento, O. Chiavone-Filho, C.A.O. Nascimento, "Electrosynthesis via Plasma Electrochemistry: Generalist Dynamical Model to Explain Hydrogen Production Induced by a Discharge over Water," J. Phys. Chem. C, vol. 123, no. 36, 2019, pp. 21896-21912. <https://doi.org/10.1021/acs.jpcc.9b04777>
- [4] W.A. Maza, V.M. Breslin, J.C. Owrutsky, B.B. Pate, A. Epshteyn, "Nanosecond Transient Absorption of Hydrated Electrons and Reduction of Linear Perfluoroalkyl Acids and Sulfonates," Environ. Sci. Technol. Lett., vol. 8, no. 7, 2021, pp. 525-530. <https://pubs.acs.org/doi/10.1021/acs.estlett.1c00383>
- [5] R. Akolkar, R.M. Sankaran, "Charge transfer processes at the interface between plasmas and liquids," J. Vac. Sci. Technol. A, vol. 31, no. 5, 2013, 050811. <https://doi.org/10.1116/1.4810786>
- [6] S. Schröter, A. Wijaikhum, A.R. Gibson, A. West, H.L. Davies, et al., "Chemical kinetics in an atmospheric pressure helium plasma containing humidity," Phys. Chem. Chem. Phys., vol. 20, no. 37, 2018, pp. 24263-24286. <https://doi.org/10.1039/C8CP02473A>



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