



ERRATUM

Editor

ABSTRACT

This erratum corrects the article: <https://doi.org/10.20985/1980-5160.2018.v13n3.1373>



The version of the article "**Removal of natural organic matter in water for human consumption by Homogeneous Fenton process**" published in Volume 13, Issue 3, 2018 (September), initially provided contained errors in relation to the text.

Current text:

angela.scordeiro@gmail.com

Corrected text:

scangela@ensp.fiocruz.br

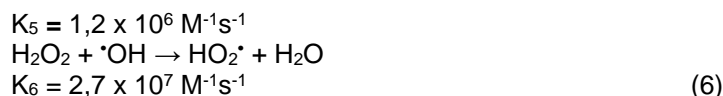
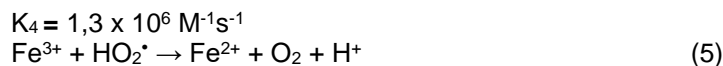
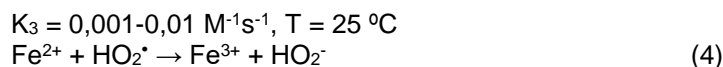
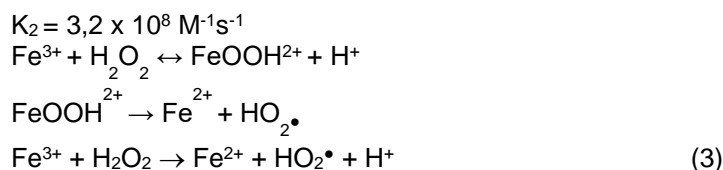
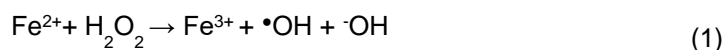
Current text:

Among the more than 600 DBPs already identified are trihalomethanes (THMs) and haloacetic acids (HAAs), which are the two groups found in higher concentrations and commonly in drinking water worldwide.

Corrected text:

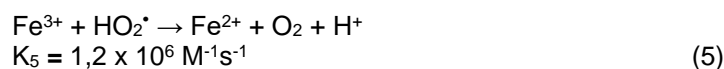
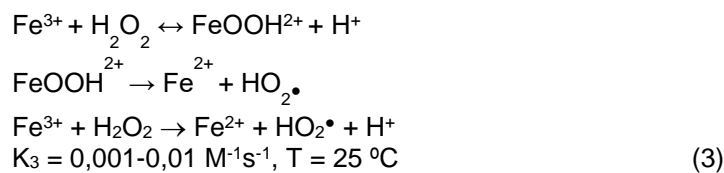
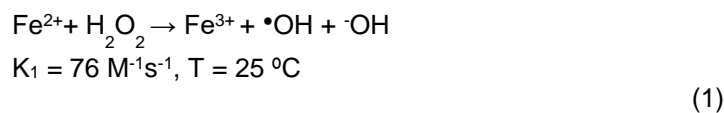
Among the more than 600 DBPs already identified are trihalomethanes (THMs) and haloacetic acids (HAA), which are the two groups found in higher concentrations and commonly in drinking water worldwide.

Current text:





Corrected text:



Current text:

According to Heller et Padua (2010), much research has shown that the reaction of chlorine with some substances, mainly humic substances, leads to the formation of THM, organochlorine compounds that can cause problems to human health.

Corrected text:

According to Heller et Pádua (2010), much research has shown that the reaction of chlorine with some substances, mainly humic substances, leads to the formation of THM, organochlorine compounds that can cause problems to human health.

Current text:

The equivalent population was calculated taking into account a consumption of 200 L/inhabitant;

Corrected text:

The equivalent population was calculated taking into account a consumption of 200 L/inhabitant.d;

Current text:

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Brasil (2007), Fundação Nacional de Saúde. Potenciais Fatores de risco à saúde decorrentes da presença de subprodutos de cloração na água utilizada para consumo humano, Funasa, Brasília, DF.

Brasil (2011), Ministério da Saúde, Portaria nº 2914 de 12 de dezembro de 2011, dispõe sobre os procedimentos de controle e de vigilância da qualidade da água para consumo humano e seu padrão de potabilidade, Ministério da Saúde, Brasília.

Burbano, A. A. et al. (2005), "Oxidation kinetics and effect of pH on the degradation of MTBE with Fenton reagent", *Water Research*, Vol. 39, No. 1, pp. 107–118.

De Julio, M. et al. (2006), "Emprego do reagente de Fenton como agente coagulante na remoção de substâncias húmicas de água por meio da flotação por ar dissolvido e filtração", *Engenharia Sanitária e Ambiental*, Vol. 11, No. 3, pp. 260-268.

Dezotti, M.; Bila, D. M.; Azevedo, E. B. (2008), *Processos e técnicas para o controle ambiental de efluentes líquidos*, E-papers, Rio de Janeiro.

Fabris, R. et al. (2008), "Comparison of NOM character in selected Australian and Norwegian drinking waters", *Water Research*, Vol. 42, No. 15, pp. 4188–4196.

Fairbanks, M. (2017), *H₂O₂ - Celulose garante expansão da oferta de peróxido de hidrogênio enquanto despontam novos usos*, *Química.com.br*, available at: <https://www.quimica.com.br/h2o2-celulose-garante-expansao-da-oferta-de-peroxido-de-hidrogenio-enquanto-despontam-novos-usos/>

Freire, R. S. et al. (2000), "Novas tendências para o tratamento de resíduos industriais contendo espécies organocloradas", *Química Nova*, Vol. 23, No. 4, pp. 504–511.

Heller, L.; Pádua, V. L. (Orgs) (2010), *Abastecimento de água para consumo humano*, 2 ed., Ed. UFMG, Belo Horizonte.

Jacangelo, J. G. et al. (1995), "Selected processes for removing NOM: An overview", *Journal American Water Works Association*, Vol. 87, No. 1, pp. 64–77.

Sargentini Junior, E. et al. (2001) "Substâncias húmicas aquáticas: fracionamento molecular e caracterização de rearranjos internos após complexação com íons metálicos", *Química Nova*, pp. 339–344, Vol. 24, No. 3, pp. 339-344, available at: <http://dx.doi.org/10.1590/S0100-40422001000300010>.

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Krasner, S. W. et al. (2006), "Occurrence of a New Generation of Disinfection By-Products", *Environmental science & technology*, Vol. 40, No. 23, pp. 7175–7185.

Latifoglu, A. (2003), "Formation of Trihalomethanes by the Disinfection of Drinking Water", *Indoor and Built Environment*, Vol. 12, No. 6, pp. 413-417.

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Matilainen, A. et al. (2011), "An overview of the methods used in the characterisation of natural organic matter (NOM) in relation to drinking water treatment", *Chemosphere*, Vol. 83, No. 11, pp. 1431–1442.

Matilainen, A.; Sillanpää, M. (2010), "Removal of natural organic matter from drinking water by advanced oxidation processes", *Chemosphere*, Vol. 80, No. 4, pp. 351–365.

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Murray, C. A.; Parsons, S. A. (2004), "Removal of NOM from drinking water: Fenton's and photo-Fenton's processes", *Chemosphere*, Vol. 54, No. 7, pp. 1017–1023.

Nogueira, R. F. P. et al. (2007), "Fundamentos e aplicações ambientais dos processos Fenton e foto-Fenton", *Química Nova*, Vol. 30, No. 2, pp. 400–408.

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Rossin, A. C. (1987), "Desinfecção", in Azevedo Netto, J. M. (Ed.), *Técnica de abastecimento de água*, CETESB/ASCETESB, São Paulo, pp. 275–302.

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Uyguner, C. S.; Bekbolet, M. (2005), "A comparative study on the photocatalytic degradation of humic substances of various origins", *Desalination*, Vol. 176, No. 1–3, pp. 167–176.

Wei, Q.-s.; Feng, C.-h.; Wang, D.-s.; Shi, B.-y.; Zhang, L.-t.; Wei, Q.; Tang, H.-x. (2008) "Seasonal variations of chemical and physical characteristics of dissolved organic matter and trihalomethane precursors in a reservoir: a case study", *Journal of Hazardous Materials*, Vol. 150, No. 2, pp. 257–264.

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