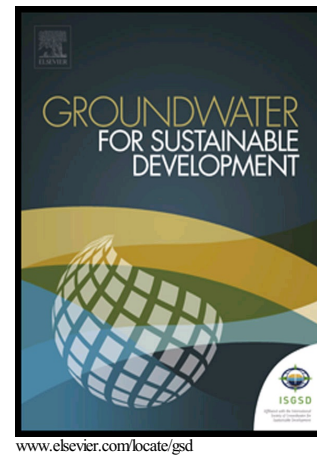


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# Occurrence and Fate of Emerging Contaminants in Water Environment: A Review

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## ABSTRACT

Emerging contaminants (ECs), such as personal care products (PCPs), endocrine disrupting compounds (EDCs), pharmaceuticals (PhACs) and their transformation products, whose occurrence at trace levels in treated wastewater is of concern for human health and the aquatic ecosystem. Due to the relatively new introduction or detection of these pollutants, there exists a gap in the knowledge on their fate, behaviors and effects, as well as on treatment technologies for their efficient removal. Furthermore, despite the advances in treatment technologies, the design of existing treatment plants are not suited to remove these ECs, in addition to there being a lack of published health standards that provide guideline in treating these pollutants. Many new ECs are being introduced into the environment without detection. In these context, this paper reviews existing research that provide reliable and quantitative information on pharmaceuticals, PCPs and EDCs and their concentrations in surface water, ground water, drinking water and treated

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