



Development of Monitoring and Removal Strategies of Emerging Micropollutants in wastewaters

NEWSLETTER



















🖊 MOREM

Sorption Behavior of Antibiotics on Virgin and Aged PLA and PET Microplastics in Aqueous Matrices

Dimitrios Kalaronis, Eleni Evgenidou, George Z. Kyzas, Dimitrios N. Bikiaris, Dimitra A. Lambropoulou



Participation in conferences















MOREM





Publications

Fate and Removal of Microplastics from Industrial Wastewaters

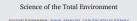
Despina A. Gkika ^{1,4}0, Athanasia K. Tolkou ¹0, Eleni Evgenidou ²0, Dimitrios N. Bikiaris ²0,
Dimitra A. Lambropoulou ², Athanasios C. Mitropoulos ¹, Ioannis K. Kalavrouziotis ³ and George Z. Kyzas ^{1,8}0

- Department of Chemistry, International Hellenic University, 65404 Kavala, Greec tolkatha@chem.ihu.gr (A.K.T.); amitrop@chem.ihu.gr (A.C.M.)
 Department of Chemistry, Aristotle University of Thessaloniki, 54124 Thessaloni
- Department of Chemistry, Artistotic University of Tressationists, 34:24-110-388001
 evgenidoßenauthy gr (E. E.) deließchem.auth.gr (D.A.B.); dahmbredßehm.aut
 School of Science and Technology, Hellenic Open University, 26335 Patras, Greec
 Correspondence: dgkika@chem.ihu.gr (D.A.G.); kyzas@chem.ihu.gr (G.Z.K.); Tel.: *
 Review
- Abstract: Industrial sites are typically located in close proximity to bodies of wastewater a prevalent source of pollution. Microplastics, which are plastic fr wastewater a prevalent source of pollution. Microplastics, which are plastic fr everyday activities or industrial operations and are smaller than 5 mm in si Nina Maria Ainali ^{a,b}, Dimitrios Kalaronis*, Eleni Evgenidou*, George Z. Kyzas ^d, Dimitra C. Bobori*, way into wastewater treatment plants (WWIPs). The objective of this resear insight into the fate of microplastics in industrial WWPs worldwide, a seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of diverse advanced treatment technologies in eliminating microscopic and seffectiveness of the seff of microplastics and their negative impact on aquatic environments has been years. The progressive discharge of plastic waste, insufficient detection pr elimination methods and a sluggish disposal rate have led to the continuous in various ecosystems worldwide, such as domestic wastewater and industr outcomes have revealed that they can adsorb a variety of pathogens, hear substances that are commonly used in production processes. Microplasti aquatic life, which might lead them up the food chain to human bodies, result tract blockage, digestion disturbance and diminished reproductive growth. become a growing threat and cause for concern, demanding the containment work offers a critical evaluation of current and developing techniques for m separation from industrial wastewater, which are the most challenging en

standard that minimizes the potential hazardous effects of microplastics in Keywords: microplastics; industrial wastewater; fate; size; shape; color; re-

systems containing microplastics. A review of the effect of microplastics on a human health is also conducted. This analysis offers a comprehensive view detection and removal strategies and their related concerns in order to es







Abstract: Industrial sites are typically located in close proximity to bodies of dynamic towards a myster course (all the course of the course





check for updates

nability **2023**, 15, 6969.

n: Gkika, D.A.; Tolkou, A.K.;



Ευρωπαϊκή Ένωσι

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ ΥΠΟΥΡΓΕΙΟ ΑΝΑΠΤΥΞΗΣ ΚΑΙ ΕΠΕΝΔΥΣΕΩΝ ΕΠΑνΕΚ 2014-2020 ΕΠΙΧΕΙΡΗΣΙΑΚΟ ΠΡΟΓΡΑΜΜΑ



Με τη συγχρηματοδότηση της Ελλάδας και της Ευρωπαϊκής Ένωσης