12th International Conference on
Separation Techniques & Formulation
September 12-13, 2022 | Webinar
Volume: 13

A Complete Picture of the Disinfection By-products of Irbesartan after Hypochlorite Treatment and Eco toxic Risk Associated

Armando Zarrelli

University of Naples Federico II, Italy

Emerging contaminants (ECs) have long been an object of attention for the scientific community and, more recently, by planning and control organizations at both global and national levels, and new substances or classes of substances are being increasingly identified and added to the lists of ECs. ECs are chemical compounds that are found in very low concentrations (in the order of ng/L or a few g/L) in urban, agricultural and industrial waste and water bodies. However, these ECs are not yet subject to regulatory control, and data relating to their environmental persistence and their chemical transformations in biotic and abiotic conditions are scarce, and even less information is known about their relative toxicology. Traditional wastewater treatment plants (WWTP) have a limited capacity to remove many of these ECs because they have been designed and operate effectively to remove other types of pollutants. It is not clear whether and which degradation byproducts (DPs) are obtained from the methods traditionally adopted in WWTPs before the waters return to the environment. Irbesartan is part of the family of so-called Sartans, a class of ECs, used in the treatment of essential arterial hypertension and in the treatment of kidney disease in adult patients with type 2 diabetes mellitus.

Biography

Armando Zarrelli is Professor of Chemistry at the University of Naples. His current interest is aimed at studying the transformations associated with the use of sterilizing agents in urban wastewater treatment plants or abiotic environmental factors (e.g. light and water), on drugs, products for personal care and hygiene, antibiotics, endocrine disruptors and licit and illicit drugs, which have been identified in surface and waste water in recent years.