

## Golden Age of Green Chemistry

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This is the golden age of Green Chemistry. Many analytical optimizations have made relevant differences to the community, as well as the chemical industries and the environment. The presence of pharmaceutical residues or chemical solvents in the environment has become a recent research issue. In fact, tons of them are annually produced around both the developing and developed countries. In this scenario we have to think about it. Could we be done research and the improvements better? In face of pressures to reduce the amount of residues produced, the researchers carry out green techniques.

The human and environmental contamination of chemical substances has been noticed in academic and social websites and consequently compelling these scientific committees as a potential topic meriting concern.

Pharmaceutical and chemical industries obviously differ concerning the residues produced or the amount of residues. Apart from the potential for soil contamination and consequently groundwater, the waste reaches first the man or the analyst who has direct contact every day with solvents and reagents. This affects the health and consequently quality of life of them. Residues contaminate plantations, fish and animals and are further disseminated through the food chain. Green chemistry comes to avoid neglect with the operator, animals, vegetation and everything that lives on our planet. It comes to bring quality!

Analytical methods aims to propose a rapid, sensitive, easy to perform and reproducible procedure able to quantify the active pharmaceutical ingredients (API) in both raw material and pharmaceutical products [1-3]. An example of a green method is the infrared (IR) spectrophotometry.

IR is a relatively new and ecological quantitative technique that makes the resolution possible in significantly less residue production because of its very small quantity of KBr spend (approx. mg) with significantly lower consumption of material. Usually infrared spectrophotometric analysis are conducted to qualitative characterization of drugs, such can be accessed in many pharmacopeias or other official compendia. However, the infrared spectrophotometry could be studied in detail, in order to exactly quantify drugs and pharmaceuticals, such can be found in the literature [4-18]. These methods aimed the quantification of pharmaceuticals quickly, cheaply and without toxic solvents. This contemplates the thought of ecologically correct method.

In the near future, the validation of green methods should be set out as a priority for the academy as well as the general society. Additionally, it is very important to validate new analytical methods and divulgate these protocols around the world in order to protect the future generations, animals and our planet. This is the future for chemical-pharmaceutical analyzes. The one-dimensional thinking of just validating methods to obtain an effective result has become outdated. Currently the thought must be multi-dimensional; methods must be validated to get an effective, cheap, fast and green result [19].

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