Recent Advances and Applications in Modern Synthetic Chemistry

Edited by: Dr. Satish Babulal Jadhav



RECENT ADVANCES AND APPLICATIONS IN MODERN SYNTHETIC CHEMISTRY

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Edited by

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ORIGIN OF GREEN CHEMISTRY

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ABSTRACT

Green chemistry is defined as chemical synthesis that is not harmful to the environment, whether carried out in education laboratories or in industries that produce no or few byproducts that pollute the environment. Green chemistry seeks to develop greener synthesis of required chemical products through the use of renewable resources (for example, biomass rather than petrochemical feedstock). It reduces the use of non-renewable resources (e.g., Crude oil).

KEYWORDS: Renewable energy, Environmental Protection Agency, Greener synthesis.

INTRODUCTION

Medicine, cosmetics, dyes, food items, nano particles, polymers, liquid crystal, paints, bio molecules and agrochemicals are all examples of useful chemistry. Various sophisticated goods can now be easily created. Nonetheless, the chemical process produces not only the desired product, but also the unwanted or undesirable and dangerous component in huge amounts as liquid, gas, or solid. This has turned into a major threat to chemistry. As a result, for synthetic chemists, reducing chemical pollution has become a crucial priority [Anastaset. al. 2002, Clark et. al. 2002, Matlack et. al. 2001, Lancaster et. al. 2002, Anastas et. al. 2000, Anastas et. al. 1994, Clark et. al. 1995, Trost et. al. 1995).

Green chemistry and sustainability are synonymous. Sustainable development is defined as fulfilling current requirements without jeopardising future generation's ability to satisfy their own needs. Green chemistry concepts are not new or untested; rather, they offer a novel method to achieve sustainability. Mistakes are caused mostly by the chemical and