

GREEN SYNTHETIC PROCEDURES OF ACTIVE PHARMACEUTICAL INGREDIENTS AND THEIR INDUSTRIAL SCALE-UP ACCORDING TO GMP

Introduction

As a result of the rapidly evolving needs of our society (both economic and environmental) since the end of the last century, new challenges relating not only to productivity but also to ecological concerns must be overcome today so as to produce new chemicals and materials in a **more efficient manner from a sustainable standpoint**.

Solvents are ubiquitous in chemistry and are used massively in a typical pharmaceutical/ fine chemical operational process.

Thus, the solvent itself is often a critical parameter in **drug product manufacturing** and is also responsible for most waste generated in the chemical industries and laboratories.



Industrial partner

Laboratori Alchemia is involved in the field of the production of **high quality active ingredients** for the pharmaceutical industry for more than 60 years.

Their goal is to offer products manufactured to the **highest standards of excellence** and with environmentally friendly manufacturing methods.

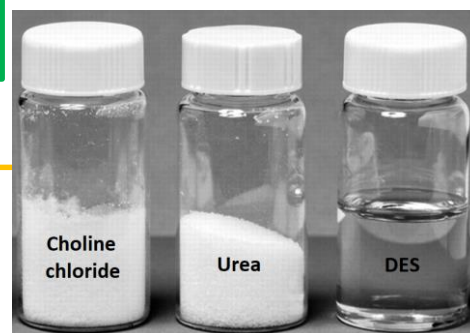


The aim of the project

✓ Set up a **green and environmentally friendly synthetic procedures** of Active Pharmaceutical Ingredients (APIs).



✓ Involving the use of inexpensive, green and bio-renewable reaction media like **water** and **Deep Eutectic Solvents (DESs)**.



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