

The research within the CDS

The research within the CDS is focused on the analysis, synthesis and control of complex dynamic systems in the fields of renewable energies, renewable raw materials, new products and digitalisation. Main objectives are: the development of new environmentally friendly chemical processes on the basis of residuals and renewable resources, the chemical conversion and storage of electrical energy from renewable resources in the frame of the energy revolution and the development of new pharmaceutically active compounds for biomedical applications.

Mathematical models are the key to reach these goals. They are used for example for computer aided simulation and optimization. This allows to explore in silico different hypotheses and scenarios and thereby reduce the experimental effort.



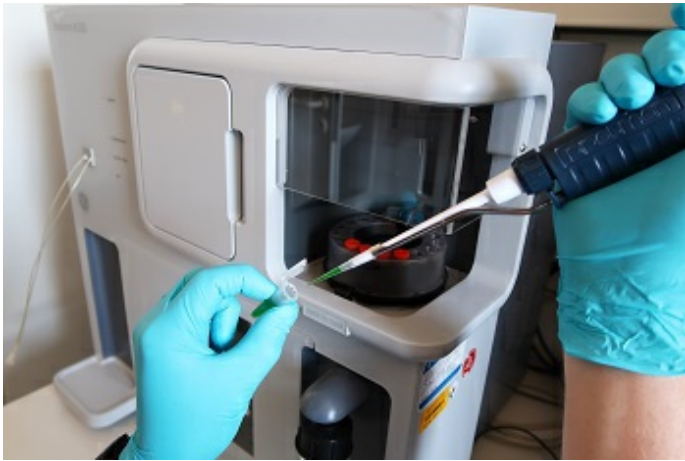
Renewable Energies



Renewable Raw Materials



New Products



Digitalisation

