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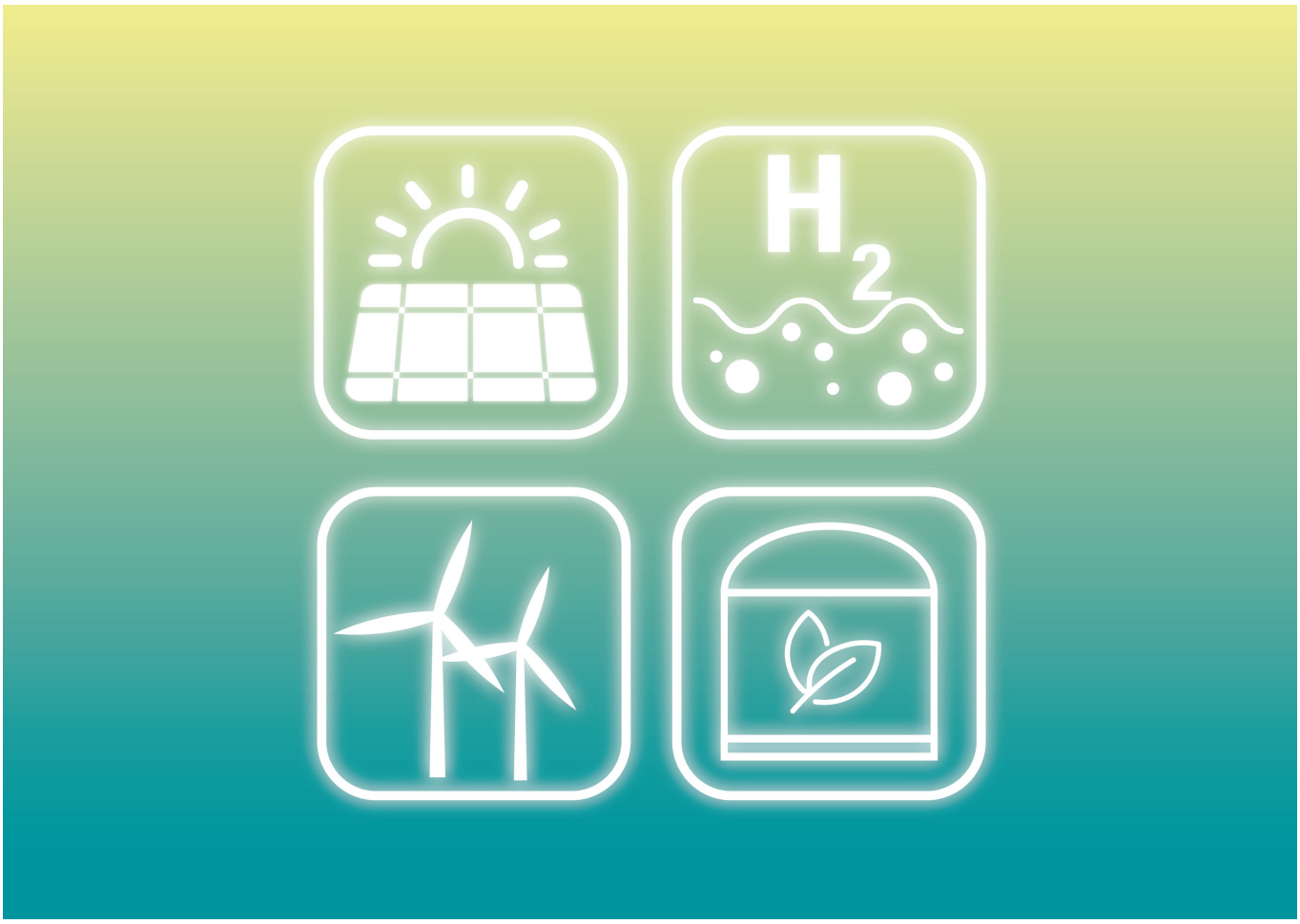
CDS
RESEARCH CENTER DYNAMIC SYSTEMS
SYSTEMS ENGINEERING

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 energy conversion, chemical production and biomedicine. 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 renweable resources in the frame of the energy revolution and the development of new pharmaceutically active compounds for biomedical applications.

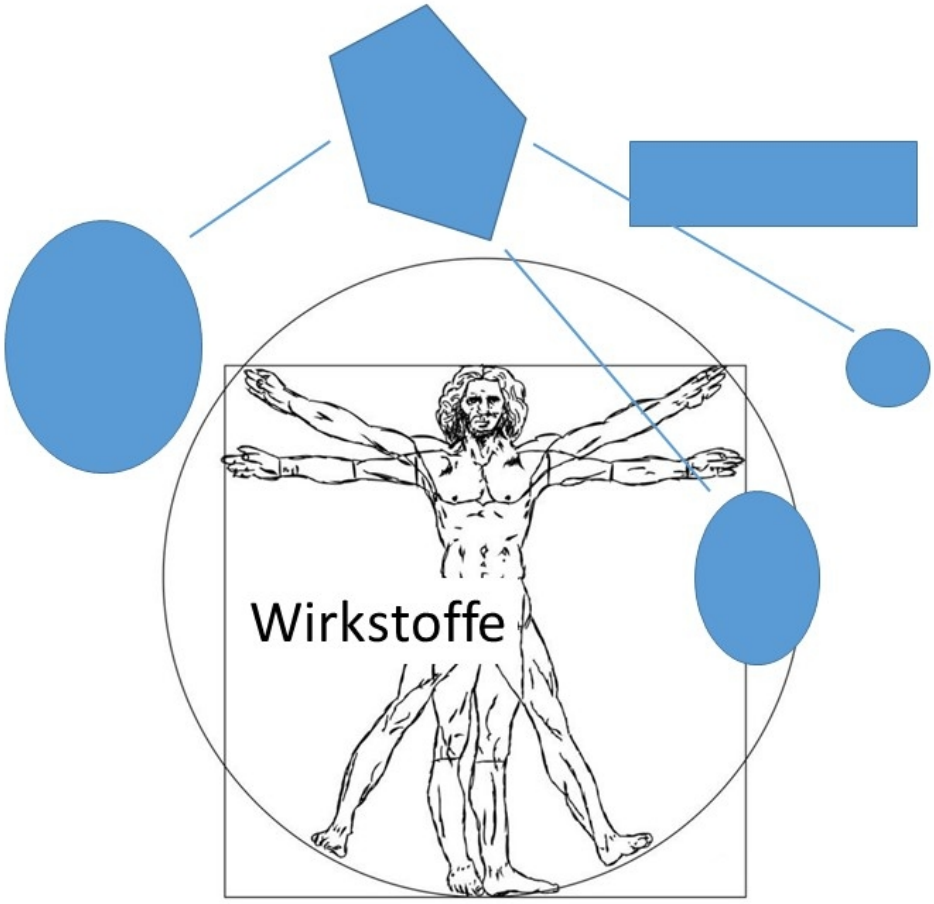
Mathematical models are the key to reach these goals. They are used for example for computer aided simulation and optimization. This allows to explore in sil different hypotheses and scenarios and thereby reduce the experimental effort.

Energy Conversion



Chemical Production

Active Substances



Key Technologies