

## WS "Corrosion challenges in the Chemical Process Industry towards sustainability"

The Chemical Process Industry (CPI) is a mature industry continuing to play an important role in modern society. On the other hand, it also faces new challenges resulting from the continuous striving towards reduced environmental footprint, conscious energy utilisation and circular economy.

In the various chemical processes, there are a variety of corrosive environments where many corrosion problems occur. Corrosion prevention, control and management must take into account these different corrosive conditions to ensure a high level of safety, equipment integrity and plant reliability in handling corrosive mixtures at different temperatures and pressures. Corrosion challenges towards sustainability may arise from, for example, novel processes with reduced carbon footprints and/or economical recycling of waste process streams, novel less energy intensive processes, and process changes to improve the wastewater quality.

Important corrosion topics in the CPI are the selection and development of corrosion resistant materials for environments containing acids, alkalis, chlorides and other corrosive substances. This is extended by the new circularity aspects in terms of recyclates and/or varying impurities in educts, which are also challenging in terms of corrosion protection and material selection.

This workshop focuses on the knowledge and learnings from the field on corrosion, protection mechanisms, corrosion resistant materials and their application for reliable and sustainable processes in the CPI.