

Showcasing research on the development of stable and versatile mixed oxide catalysts for CCU from Professor Karin Föttinger's laboratory, Institute of Materials Chemistry, Technische Universität Wien, Vienna, Austria.

Hydrothermal synthesis of  $\rm ZnZrO_x$  catalysts for  $\rm CO_2$  hydrogenation to methanol: the effect of pH on structure and activity

The catalytic hydrogenation of carbon dioxide into methanol is one of the key strategies for the utilization of captured  ${\rm CO}_2$ . For this reason, the development of stable catalysts such as  ${\rm ZnZrO}_{\rm x}$  has attracted considerable interest. In this paper,  ${\rm ZnZrO}_{\rm x}$  has been produced by a hydrothermal method. Altering the synthesis pH significantly impacts both the structural and catalytic properties of the material. Different reaction selectivity was correlated with the presence of different phases and variations in Zn distribution.



