«The key elements for success are dedication to the problem and team spirit. And if an idea that seemed great doesn’t work out, stay cool and think about alternatives.»

Professor Christoph Müller
We research novel approaches for a more efficient and sustainable production of fuels, electricity and chemicals. Our laboratory offers a unique environment for the synthesis and in-situ/operando characterization of new catalysts and CO₂ sorbents. We also work with highly advanced experimental and numerical tools to gain a better understanding of complex phenomena occurring in granular systems.

Focus
- Carbon dioxide capture
- Catalysis
- Experimental granular physics
- Numerical modelling of granular flows

Tools and methods
- X-ray diffraction, X-ray absorption spectroscopy
- Infrared and raman spectroscopy
- Magnetic resonance and high speed camera imaging
- (Photo)electrochemistry
- Thermogravimetry and material synthesis

Further details online: www.ese.mavt.ethz.ch