Mapping the genetic tools of fungi for fuel production

Researchers explored the AA7 enzyme family, characterizing four fungal enzymes and uncovering a novel class of flavo-enzymes. The enzymes contribute to the process of plant degradation. The work offers promise for tuning the breakdown process of biomass for energy production. Read the full story

Modelling electrochemical potential for better Li-batteries

To understand the electrochemical potential of lithium-ion batteries, one should decipher the chemical processes at interfaces occurring during device activity. Using HIPPIE beamline, a research group investigated and modelled the influence of electrochemical potential differences in operando in these batteries. Read the full story

Tackling SARS-CoV-2 viral genome replication machinery using X-rays

An international research team performed biophysical and structural studies of three non-structural proteins from the novel coronavirus, SARS-CoV-2, the causative agent of COVID-19. In spring of 2020, they managed to solve and started to analyse one of these proteins, nsp10, using BioMAX beamline. Read the full story

Clues to block replication of SARS-CoV-2 found with FragMAX

Scientists identified four fragments that interact with the nsp10 protein of SARS-CoV-2 using the FragMAX platform and BioMAX beamline. The fragments could be used to develop inhibitors that supplant key nsp10 enzymes. The application holds potential to block viral replication. Read the full story

Riverine iron survives salty exit to sea

A Lund University study characterizes the role of salinity for iron-loading in estuarine zones, a factor which underpins intensifying seasonal algal blooms in the Baltic Sea. The study ties in with a trend of increased riverine iron concentrations over the last decade in North America, northern Europe and in particular, Swedish and Finnish rivers. Read the full story

Latest Events

Open Days, our exciting public visitation event at MAX IV will commence in September 2023! Stay tuned for more information on planned activities in the coming months on MAX IV’s OPEN DAYS site page.