Scientists succeed in soaking protein guests into host crystals

A group has soaked proteins into large protein crystals, an unprecedented achievement. Data from BioMAX beamline indicates that guest proteins likely follow some of the hosts’ structures. The insights could lead to major advances in biotech, material science, and structural studies. Read the full story

Unusual electronic properties taking shape at Bloch beamline

Researchers investigated the one-dimensional material, tantalum selenide iodide, with Bloch beamline to observer electronic properties that had only been theoretically predicted. Evaporating iodine atoms turns out to drive unforeseen electronic changes. Read the full story

Sticky situation for molecules in MAX IV vacuum systems

The MAX IV 3 GeV storage ring vacuum system is the first of its kind, with the inner surface of the chambers coated with a non-evaporable getter material. A paper in the Journal of Synchrotron Radiation summarises the results of this unique and successful design choice. Read the full story

Understanding quinoa’s extrusion process in Peruvian foods

A team from the Swedish University of Agricultural Sciences found that extrusion processing of quinoa increased its protein crosslinking and specific fiber type solubility. The results could aid in nutrient preservation efforts. Read the full story

Mapping the genetic tools of fungi for fuel production

Scientists explored the auxiliary activities 7 enzyme family, characterizing four fungal enzymes and uncovering a novel class of flavo-enzymes. The Nature Communications study offers promise for tuning the efficiency of enzymatic breakdown processes of biomass feedstocks used in energy and biomaterial production. Read the full story

SCIENTÍFika seminar series

The MAX IV SCIENTÍFika series is in full swing for 2022! Join us for new speakers and topics on Mondays. Our running schedule is updated by the host, MAX IV’s User Office.