

Showcasing research by Associate Professor Dejin Zang from Shandong First Medical University, China, and Professor Yongge Wei *et al.* from Tsinghua University, China. Image designed and illustrated Miss Qinqin Wei from the Quinn Studio.

A bifunctional molecular catalyst built up of L-proline grafted polyoxometalate for one-pot three-component green synthesis of heterocycles

The covalent combination of the catalytically active Anderson-type polyoxometalate with an organo-catalyst, proline, was used as a protocol to construct the organic-inorganic hybrid bifunctional molecular catalyst in one-pot multistep tandem synthesis, enabling one-pot alcohol oxidation/three-component continuous catalytic syntheses of pharmacological heterocyclic compounds in high yields and selectivity.



