



Showcasing research from Professor Anming Wang, College of Materials, and Professor Tian Xie, College of Pharmacy, Hangzhou Normal University, Hangzhou, China, in collaboration with Professor Roger A. Sheldon, School of Chemistry, University of the Witwatersrand, South Africa.

Designing an enzyme assembly line for green cascade processes using bio-orthogonal chemistry

An enzyme assembly line, for catalysing green cascade processes for asymmetric reduction of aromatic ketones, was designed using bio-orthogonal chemistry. The orderly combi-crosslinked enzymes (O-CLEs), formed by simply mixing the two supernatants to precipitate the assembled ADH-AKR rosary, in a seamless combination of enzyme purification and immobilization, exhibited high catalytic efficiency and enantioselectivity (ee >99.99%).

As featured in:



See Tian Xie, Roger A. Sheldon, Anming Wang *et al.*, *Green Chem.*, 2023, 25, 7547.