

Organotextile Catalysis

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Throughout human history, textiles have been integral to daily life, but their exploration in catalysis has been neglected. We demonstrated a facile and permanent immobilization of organocatalysts on the textile nylon using ultraviolet light, which doesn't require chemical modification for the immobilization. A Lewis basic, a Brønsted acidic, and a chiral organocatalyst immobilized on textile display excellent stability, activity, and recyclability for various reactions. High enantioselectivity (>95:5 er) can be maintained for more than 250 cycles of asymmetric catalysis. Practical and straightforward applications of textile organocatalysis may be beneficial for various fields by providing inexpensive and accessible functionalized catalytic materials.

