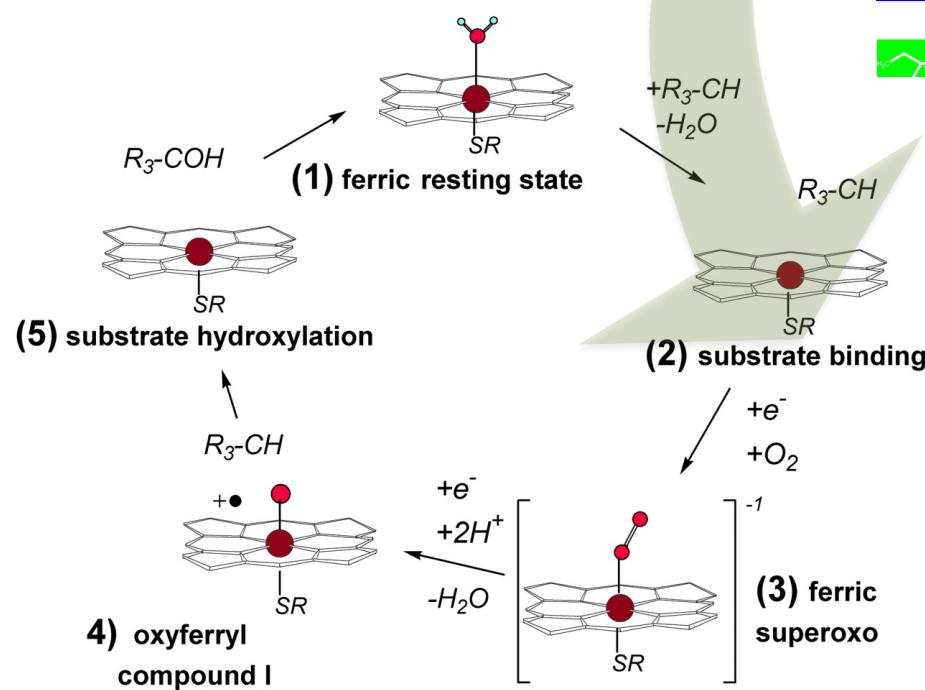
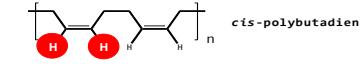
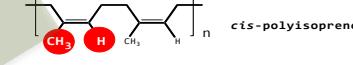
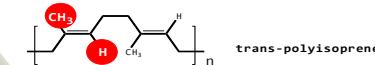
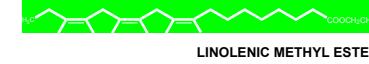
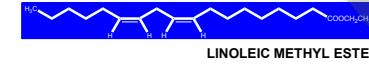
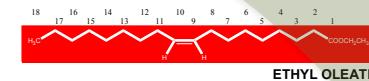


## Biomimetic Catalysis



Common catalytic cycle in most cytochromes P450. **1**, Resting state with water coordinated to iron; **2**, substrate binding displaces coordinated water and first electron-reduction results in  $O_2$  binding; **3**, second electron reduction and distal oxygen protonation liberates a water molecule and the active compound I; **4**, substrate (camphor in P450cam) hydroxylation and resting-state regeneration.

## The substrates



## The catalysts, the bases

