An Organo Porous Polymer Catalyst for Asymmetric Alkylation with Et$_2$Zn

**Significance:** A chiral $\alpha,\alpha',\alpha',\alpha''$-tetraaryl-1,3-dioxolane-4,5-dimethanol-based chiral porous polymer (TADDOL-CPP) was prepared and applied to the asymmetric alkylation of aromatic aldehydes with Et$_2$Zn in the presence of [Ti(O-i-Pr)$_4$] to give the corresponding products 1a-i in up to 96% yield with up to 94% ee.

**Comment:** The TADDOL-CPP as well as the TADDOL-CPP/Ti catalysts were characterized by $^{13}$C CP/MAS NMR spectroscopy, TGA, BET, XRD, TEM and ICP analyses. TADDOL-CPP was recovered by centrifugation and reused ten times to give 1a with slight loss of the catalytic activity (91% ee to 75% ee).

**Preparation of the TADDOL-CPP catalyst:**

\[
\begin{align*}
\text{TADDOL-CPP (20 mol\%)} & \\
&\text{Et$_2$Zn (3 equiv), [Ti(O-i-Pr)$_4$] (2 equiv)} \\
&\text{PhMe, –30 °C, 48 h}
\end{align*}
\]