Heteroditopic Rebek’s Imide Directs Reactivity of Homoditopic Olefins within Desolvated Quaternary Assemblies in the Solid State.

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Figure S1. $^1$H NMR spectra of 1·(toluene).

Figure S2. PXRD spectra of 1·(toluene).

Figure S3. FTIR spectra of 1·(toluene).

Figure S4. TGA/DSC thermograms of 1·(toluene).

Figure S5. TGA thermograms of 1·(toluene).
Figure S1. $^1$H NMR spectra of $\text{I} \cdot (\text{toluene})$ (300 MHz, DMSO-d$_6$).

a) before photoreaction (100% toluene)

b) after photoreaction (loss of 15% of toluene guest)

$T = \text{Rebek’s Imide (template)}$
Figure S1. (continued):
c) before photoreaction (no toluene present)
d) after photoreaction (no toluene present)

\[ T = \text{Rebek's Imide (template)} \]
Figure S1. (continued):
e) after photoreaction SCSC (419 nm light) (100% toluene)
f) after photoreaction (419 nm light) (loss of 65% of toluene guest)
Figure S2. PXRD spectra of 1·(toluene).

a) before photoreaction (100% toluene)

b) after photoreaction SCSC (419 nm light) (100% toluene, yield of photoreaction 24%)

![PXRD spectra of 1·(toluene)](image)
**Figure S2.** (continued):

c) after photoreaction (419 nm light) (loss of 65% of toluene guest)
Figure S3. FTIR spectra of 1 (KBr):

a) Rebek’s imide
b) before removal of toluene
c) after removal of toluene
Figure S4. TGA/DSC data of 1·(toluene).

a) before photoreaction (100% toluene)
b) before photoreaction (no toluene present, after removal of toluene)

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<thead>
<tr>
<th>TGA</th>
<th>DSC</th>
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<td><img src="image" alt="TGA Graph" /></td>
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% weight of toluene in 1 calculated = 9.9%
experimental = 10.2%

100% loss of toluene after heating under vacuum a) → b)
Figure S5. TGA data of 1·(toluene).

a) after photoreaction (350 nm light) (loss of 15% toluene)
b) after photoreaction (419 nm light) (loss of 65% toluene)