Polycationic (Mixed) Core-shell Dendrimers for Binding And
Delivery of (In)Organic Substrates

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Table 4: T<sub>1</sub> and T<sub>2</sub> relaxation data for the cationic NMe<sub>2</sub> groups of the dendrimer compounds 5-8 and their corresponding MO-containing derivatives (esd's in parentheses).

<table>
<thead>
<tr>
<th>compound</th>
<th>T&lt;sub&gt;1&lt;/sub&gt; (s)</th>
<th>T&lt;sub&gt;2&lt;/sub&gt; (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>0.139 (0.0017)</td>
<td>0.0413 (0.0016)</td>
</tr>
<tr>
<td>6</td>
<td>0.195 (0.0060)</td>
<td>0.0210 (0.0037)</td>
</tr>
<tr>
<td>7</td>
<td>0.172 (0.0022)</td>
<td>0.0318 (0.015)</td>
</tr>
<tr>
<td>8</td>
<td>0.193 (0.0052)</td>
<td>0.0236 (0.001)</td>
</tr>
<tr>
<td>5.4MO</td>
<td>n.d.</td>
<td>n.d.</td>
</tr>
<tr>
<td>6.4MO</td>
<td>0.831 (0.024)</td>
<td>0.1813 (0.0075)</td>
</tr>
<tr>
<td>7.8MO</td>
<td>0.238 (0.014)</td>
<td>n.d.</td>
</tr>
<tr>
<td>8.8MO</td>
<td>0.206 (0.011)</td>
<td>0.0247 (0.0033)</td>
</tr>
</tbody>
</table>

n.d. = not determined because of too large an overlap of the signals.

Table 5: T<sub>1</sub> and T<sub>2</sub> relaxation data for the Ar-H of the core unit of the dendrimer compounds 5-8 and their corresponding MO-containing derivatives (esd’s in parentheses).

<table>
<thead>
<tr>
<th>compound</th>
<th>T&lt;sub&gt;1&lt;/sub&gt; (s)</th>
<th>T&lt;sub&gt;2&lt;/sub&gt; (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>0.333 (0.0094)</td>
<td>0.0289 (0.0048)</td>
</tr>
<tr>
<td>6</td>
<td>0.843 (0.021)</td>
<td>0.0335 (0.0060)</td>
</tr>
<tr>
<td>7</td>
<td>0.605 (0.021)</td>
<td>0.0256 (0.0062)</td>
</tr>
<tr>
<td>8</td>
<td>0.493 (0.046)</td>
<td>0.0312 (0.013)</td>
</tr>
<tr>
<td>0.493 (0.046)</td>
<td>0.0594 (0.0100)</td>
<td></td>
</tr>
<tr>
<td>0.743 (0.060)</td>
<td>0.0638 (0.016)</td>
<td></td>
</tr>
<tr>
<td>5.4MO</td>
<td>n.d.</td>
<td>n.d.</td>
</tr>
<tr>
<td>6.4MO</td>
<td>n.d.</td>
<td>n.d.</td>
</tr>
<tr>
<td>7.8MO</td>
<td>0.443 (0.105)</td>
<td>#</td>
</tr>
<tr>
<td>8.8MO</td>
<td>0.535 (0.12)</td>
<td>0.0364 (0.010)</td>
</tr>
<tr>
<td>0.426 (0.085)</td>
<td>0.0467 (0.013)</td>
<td></td>
</tr>
</tbody>
</table>

# Very broad signals. n.d. = not determined because Ar-H signals are coincident with other Ar-H.
Figure 6: $^1$H NMR spectra for 7 and 7.8MO, respectively. The asterisks denote solvent impurities.