Microscopic dynamics and topology of polymer rings immersed in a host matrix of longer linear polymers: Results from a detailed molecular dynamics simulation study and comparison with experimental data

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THE PROBLEM

![Graph showing the problem](image)

METHODOLOGY DETAILS

MODEL SYSTEM: PolyEthylene Oxide

<table>
<thead>
<tr>
<th>Molecules</th>
<th>2k</th>
<th>5k</th>
<th>10k</th>
<th>20k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atoms per chain</td>
<td>123</td>
<td>341</td>
<td>684</td>
<td>1368</td>
</tr>
<tr>
<td>Mw (g/mol)</td>
<td>1806</td>
<td>5022</td>
<td>10044</td>
<td>20088</td>
</tr>
</tbody>
</table>

RESULTS

![Graph showing results](image)

MOLECULAR MODEL VALIDATION

![Graph showing validation](image)

ACKNOWLEDGMENTS

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REFERENCES

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5. G.D. Papadopoulos et al., Polymers 2016, 8, 283.