

		<i>Trans</i> -cyclooctene (–) <i>R</i>	
		Yield	e.e.
Pyrolysis of	180 °C-cholesteric A	46%	3.6%
Trimethylcyclooctyl	130 °C-cholesteric B	52%	7.1%
Ammonium	162 °C-isotropic phase C	57%	0%
Enantiomeric	180 °C-cholesteric A	53%	1.9%
Equilibration of	185 °C-cholesteric D	61%	1.4%
Racemic <i>trans</i> -	185 °C-cholesteric E	64%	0%
-Cyclooctene	180 °C-isotropic phase F	62%	0%
		Hexahelicene (+) <i>P</i>	
		Yield	e.e.
Photo-asymmetric	27 °C-cholesteric G	75%	0.66% [5]
Synthesis of	42 °C-compensated nematic H	75%	0.7%
Hexahelicene	57 °C-isotropic phase G	75%	0.2%

A: 3-(*p*-anisyl)3,5-cholestadiene. B: a mixture of 44.5% of A, 40.2% of C and 15.3% of *p*-azoxyanisole. C: 3-phenyl-3,5-cholestadiene. D: 3-(*p*-tolyl)3,5-cholestadiene. E: cholesteryl *p*-nitrobenzoate. F: compound A diluted by decaline. G: mixture of cholesteryl nonanoate and chloride in the ratio 3/2. H: mixture of cholesteryl chloride and myristate in the ratio 1.75/1.

Empirical Models of Hydration of Small Peptides

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In the course of a general study of peptides hydration, different aspects of solute-solvent interactions have been examined for a cyclic dipeptide C-(L-Thr-L-His). This dipeptide belongs to a series of model peptides containing polar side chains which have been investigated elsewhere.

A qualitative study based on the concept of 'static accessibility' to water, allows to analyse the various processes of hydration. The maximum solvation criterium involves large destabilization of the conformations governed by intramolecular interactions. The amphiphilic character of the solute molecule seems to determine conformations which are in better agreement with those found experimentally.

A quantitative study based on energy calculations has been carried out. The stabilities of the hydration sites of the cyclic dipeptide have been evaluated by two empirical potential treatments: the Caillet-Claverie's potential and a simplified method (EMPWI) [1] using a suitable charge distribution. The agreement between the results obtained by the two methods allows to use the simplest model for calculations of more complex molecules.

The conformations of cyclic dipeptides *in vacuo* [2] have been calculated elsewhere and investigated in the solid state by crystallography [3] and in solution by NMR experiments [4]. A general comparison between all these different approaches allows to propose a semi-quantitative picture of the hydration of a small peptide.

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