https://moodle-app1.let.ethz.ch/lms/file.php/82/Chapter_4/4_14.html

Qualitative understanding of partition preferences

Introduction

- Cavity model
- **V** Rules for partitioning ...
- ↓ ...of a given compound
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- The cavity model in quantitative terms
- Selftest
- Problems
- Intermolecular interactions in every day life

🖲 FAQ

Case IIa

Furthermore we can expect that :

Rule 2:

The partitioning of an apolar molecule into various bipolar phases will decrease with the number-density and strength of H-bonds in these phases. This explains what is behind the frequently used term *hydrophobicity*. The examples below show how drastic this effect is.

solvent		K of octan solvent / air	e
n-heptane	$C_7 H_{16}$	8578	
diethyl ether	$H_5C_2 - O - C_2H_5$	8287	Partitioning decreases with increasing cohesive energy in the solvents
1-butanol	C ₄ H ₉ -OH	2264	
1,3-propanediol	C ₃ H ₆ -(OH) ₂	79	
1,2-ethanediol	C_2H_4 -(OH) ₂	13	
water	H-O-H	0.008	

