

THE PHYSIOCHEMICAL CHARACTERISATION OF POSSIBLE ENHANCERS FOR ABSORPTION

The work is deal with studies of lipid and characterisation of the thermotropic behaviour of selected possible enhancers for transdermal absorption.

The thermotropic behaviour was observed by combination DSC and IR spectroscopy of five synthetic compounds with similar structure as skin ceramides. We can deduce that all studied enhancers are highly ordered structures with high number of *trans* conformers and triclinical lipid chain packing. With increased temperatur growth number of *gauche* conformers and increase fluidity of lipid chain. At the same time dissapear hydrogen bounds which form on the polar heads between lipid chains.

Temperature differencies of phase transitions of measuring compounds is considerable. It can be caused insuficient heating of ATR crystal but exists linear dependence of correlation. With increased temperature growth measurement error. This dependence can be used for other measurements.