## Study of physical properties through emulsion structure control

<u>노민주</u><sup>†</sup> 코스맥스 (mj1010@cosmax.com<sup>†</sup>)

A chemical skin enhancer is used to promote skin penetration of the active ingredient. However, alcohol, menthol, urea and the like, which are commonly used chemical skin enhancer, promote skin penetration of the active ingredient through destruction of intercellular lipid components or modification of the lipid structure. It may cause skin barrier damage and various irritation. Therefore, there is a need to develop a cosmetic which can simulate the skin structure without chemical skin enhancer and promote skin penetration of the active ingredient without damaging the skin barrier.

In this study, we developed skin penetration promoting formulation through controlled emulsion structure. We studied the physicochemicals of emulsions which contain ceramides using optical microscope (OM), polarized optical microscope (POM), X-ray scattering (SAXS, WAXS), differential scanning calorimetry (DSC).