High Speed Countercurrent Chromatographic Separation of Ginseng Extract

<u>안은경,</u> 정원일, 송세영, 유일환, 라인영, 박보경, 한원희[†] 동양대학교 (whhan@dyu.ac.kr[†])

HSCCC(high speed countercurrent chromatograph) are used to separate highly valuable components at a commercially viable rate of production using liquid state adsorbent instead of usual solid adsorbents in HPLC, for example. HSCCC uses a novel approach of using continously deformable immiscible fluid adsorbents which are held stationary by centrifugal force by high speed planetary rotation of the tube coils. Using some oil phase (e.g. hexane) and water based phase, we were able to show that ginseng extracts can be seprated into several groups of ginsenosides using the HSCCC. The ELSD(Evaporative Light Scattering Detector) was used with regulated RPM to separate the mixtures. We show the effect of RPM, mobile phase flow rate, and composition of stationary and mobile phase compositions for efficient separation of ginseng extracts.