## Solubility of Succinic Acid Using QCM

<u>김은혜</u>, 강정원<sup>†</sup> 고려대학교 (jwkang@korea.ac.kr<sup>†</sup>)

Succinic acid is used for the application of agriculture, food products, drug, and in other fields. Solubility of succinic acid is required to design crystallization process because it is one of the important properties. In this work, solubility of succinic acid was measured in water by using Quartz Crystal Microbalance (QCM). QCM detects the change of mass per unit area at the QCM electrode surface. Physical effect of aqueous solution of succinic acid affects mass per unit area, and this is converted to signal of the resonance frequency and resistance by intrinsic function in QCM. The profile of the resonance frequency and resistance was observed and analyzed. Phase transition in aqueous solution of succinic acid was presented at the specific temperature as solubility. As a result, solubility data of succinic acid were acquired and compared to existing data.