## Optimization of Supercritical $CO_2$ lipid extraction for biodiesel production from N announce sponse surface methodology



In the present work, extraction of algal lipid from *Nannonchloropsis* sp. was conducted using supercritical CO2 with methanol as a co-solvent. For economical and efficient method of extraction, experimental design was generated based on Box-Behnken, and response surface methodology (RSM) was applied to obtain the optimum extraction condition. The predicted optimum extraction conditions generated by suitable modeling technology was statistically studied as compared to actual experimental results.

This work was supported by the New & Renewable Energy Core Technology Program of the Korea Institute of Energy Technology Evaluation and Planning (KETEP) granted financial resource from the Ministry of Trance, Industry & Energy, Republic of Korea. (No. 20133030090820)