

## Transesterification of RBD Palm Oil using Supercritical Methanol in a Tubular Type Flow Reactor

최준혁, 이홍식, 임정원, 노승호<sup>1</sup>, 여윤기<sup>1</sup>, 이윤우\*  
서울대학교; <sup>1</sup>LG생활건강  
(ywlee@snu.ac.kr\*)

One of the main purpose of this work is to investigate the transesterification of the RBD palm oil in catalyst-free supercritical methanol. To fine the optimum conditions of this reaction in a tubular type flow reactor, we changed various process parameters such as residence time (12-60min), pressure (50-450bar), temperature (200-400°C), and molar ratio of methanol to RBD palm oil (3-84mole) and evaluated the effects of process parameters on the content of the fatty acid methyl esters (FAMES). The content of fatty acid methyl esters (FAMES) was analyzed using a gas chromatography followed by a British standard method.