

STUDIES ON THE TECHNIQUES, KINETICS AND THERMODYNAMICS OF CORN OIL EXTRACTION: MINI REVIEW

Matthew Nkoom¹, Rejoice Agyeiwaa Arthur^{2,4}, Alexander Baffour Akoto³, Bismark Odum³, Joseph Ltalangon Lesukat¹, and Williams Kweku Darkwah^{1,4*}

¹ Key Laboratory of Integrated Regulation and Resource Development on Shallow Lakes, Ministry of Education, Environmental Engineering Department, College of Environment, Hohai University, Nanjing, China.

²Kumasi Centre for collaborative Research in Tropical Medicine, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

³College of Harbor, Coastal and Offshore Engineering, Hohai University, Nanjing, China

⁴Biochemistry Department, School of Biological Sciences, University of Cape Coast, Cape Coast, Ghana.

*Corresponding Author

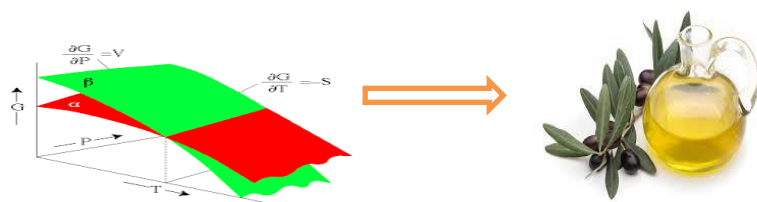
Williams Kweku Darkwah *

Key Laboratory of Integrated Regulation and Resource Development on Shallow Lakes, Ministry of Education, Environmental Engineering Department, College of Environment, Hohai University, Nanjing, China

Email: williams.darkwah@stu.ucc.edu.gh; williamsdarkwakwaku@yahoo.com

Phone: +8615295782807

ABSTRACT



Corn oil contains about 58g of polyunsaturated fatty acids per 100g of oil and these polyunsaturated fatty acids which are essential to the human body helps maintain healthy blood vessels, nerves and tissues. Oil extraction from corn has traditionally been carried out on the whole grain using such methods as solvent extraction, mechanical pressing and recently supercritical CO₂ extraction. In this mini review, this potential reveals the techniques, kinetics and thermodynamics of corn oil extraction. Here, authors review contemporary advancement in the health importance of corn oil, different techniques of corn oil extractions and the kinetics and thermodynamics of corn oil extraction. The present study gives an account of full knowledge of the use of the outstanding kinetics and thermodynamics of corn oil extraction.

Keywords: Kinetics and thermodynamics, Corn Oil Extraction, Zea maize, Pharmacological Values.