

Funded Research Projects

- 2010-2013 Large Scale Selective Fermentation of Saudi Dates' Syrups into Fructose and Bioethanol. Sponsored by National Plan of science and technology, KSU, KACST. (with A. E. Abasaheed, S. M. Al-Zahrani, H. K. Atiyeh, M. H. Gaily). 1997000 SR.

Publications

- M. D. Putra, **A. K. Sulieman**, A. E. Abasaheed, M. H. Gaily, S. M. Al-Zahrani, M. A. Zeinelabdeen, H. K. Atiyeh, “A green process for simultaneous production of fructose and ethanol via selective fermentation”, *Journal of Cleaner Production*, (Submitted 2017)
- M. D. Putra, A. E. Abasaheed, H. K. Atiyeh, S. M. Al-Zahrani, M. H. Gaily, **A. K. Sulieman**, and M. A. Zeinelabdeen, “Kinetic Modeling and Enhanced Production of Fructose and Ethanol from Date Fruit Extract”, *J.Chem. Eng. Commun.*, 202(12),1618–1627, (2015).
- M. D. Putra, A. E. Abasaheed, M. A. Zeinelabdeen, M. H. Gaily, and **A. K. Sulieman**, “Selective fermentation of Pitted Dates by *S. cerevisiae* for the Production of Concentrated Fructose Syrups and Ethanol”, *Journal of Physics: Conference Series*, 495, 1-7, (2014).
- M. D. Putra, A. E. Abasaheed, E. M. Ali, **A. K. Sulieman**, M. H. Gaily, and M. A. Zeinelabdeen, “Utilization of Pitted Dates for the Production of Highly Concentrated Fructose Syrups by *S. cerevisiae*”, *Chem. Eng. Trans.*, 38, 397-402, (2014).
- M. D. Putra, A. E. Abasaheed, S. M. Al-Zahrani, M. H. Gaily, **A. K. Sulieman**, M. A. Zeinelabdeen, and H. K. Atiyeh, “Production of Fructose from Highly Concentrated Date Extracts using *Saccharomyces cerevisiae* ”, *Biotechnol. Lett.*, 36(3), 531-536, (2014).
- M. A. Zeinelabdeen, A. E. Abasaheed, M. H. Gaily, **A. K. Sulieman**, and M. D. Putra, “Effect of Temperature on the Production of Fructose and Bioethanol from Date syrup using *Saccharomyces cerevisiae* ATCC 36859”, *8th International Science Conference, Amsterdam, The Netherlands, August 7-8, International Science Index*, 8, 380-384, (2014).
- M. A. Zeinelabdeen, A. E. Abasaheed, M. H. Gaily, **A. K. Sulieman**, and M. D. Putra, “Coproduction of Fructose and Ethanol from Dates by *S. cerevisiae* ATCC 36859”, *World Academy of Science, Engineering and Technology*, 82, 1473-1476, (2013).

- **A. K. Sulieman**, M. H. Gaily, M. A. Zeinelabdeen, M. D. Putra, and A. E. Abasaheed, "Production of Bioethanol Fuel from Low-grade-Date Extract", *International Journal of Chemical Engineering and Applications*, 4, 140-143, (2013).
- M. H. Gaily, **A. K. Sulieman**, and A. E. Abasaheed, "Kinetics of a Three-Step Isomerization of Glucose to Fructose Using Immobilized Enzyme", *International Journal of Chemical Engineering and Applications*, 4(1), 31-34, (2013).
- M. H. Gaily, **A. K. Sulieman**, M. A. Zeinelabdeen, S. M. Al-Zahrani, H. K. Atiyeh, and A. E. Abasaheed, "The Effects of Activation Time on the Production of Fructose and Bioethanol from Date's Extract", *African Journal of Biotechnology*, 11, 8212-8216, (2012).