



Application of fluorescence spectroscopy for rapid and noninvasive quality determination of yoghurt ice cream using chemometrics

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Abstract

The aim of this study was to explore the potential of fluorescence spectroscopy to determine the quality of yoghurt ice cream, prepared by adding different concentrations of yoghurt (10, 20, 30, 40, 50%). The addition of 50% of yoghurt showed the lowest pH and meltdown values, whereas the highest acidity and overrun rates were observed at the same concentration. Additionally, fluorescence spectra taken at varied emission and excitation ranges were preprocessed for baseline correction. The partial least square regression analysis on proposed excitation wavelengths (270 nm, 280 nm, 290 nm and 315 nm) showed effective prediction of various quality parameters of yoghurt ice cream.



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Biography:

Niaz Muhammad has completed his Masters at the age of 25 years from University of Agriculture Faisalabad, Pakistan. He is Lecturer in National Agriculture Education College (NAEC). He has published two papers in reputed journals.

Speaker Publications:

1. Masood, Muhammad Abdullah & AMIR, RAI & Ahmad, Asif & Ahmed, Dr Anwaar. (2019). CHIA SEEDS: A PROMISING SUPPLEMENTATION TO CURB MALNUTRITION IN PAKISTAN. 10.21065/AdvFooNutrSci.4.13.
2. Masood, Muhammad Abdullah & AMIR, RAI & Ahmad, Asif. (2019). Role of ICT in disaster risk management A way to forecast policies in achieving food security under current circumstances in Pakistan (Abstract).
3. Masood, Muhammad Abdullah. (2018). Curbing against dietary diseases through healthy eating: Enlightening the future advances in Food Safety and Hygiene practices.