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Aplikasi Teori Teknik Kimia dalam Mencari Model Matematis Pengurangan Berat Tomat Selama Penyimpanan Lie Hwa Fakultas Teknik Jurusan Teknik Kimia Universitas Surabaya liehwa@ubaya.ac.id

Abstract

This article is explained how to make chemical engineering concept more applicable and interesting to students through their experience in research project. The title of their project is "The evaporation rate of stored the water content of fruits and vegetables". This research aimed to study some factors influencing the evaporation rate, to develop mathematical model describing the evaporation process of stored fruits's and vegetables's water content. The experiment was simple and easy. The students kept fruits and vegetables in a storage room and observed the changed in weight of them. Then, they processed data and made mathematical model to explain the behavior of weight loss during storage. During guiding students, faculty concerned with improving the competence of students. Lecturer took students recognize their learning style. By knowing learning style, students would learn more concepts easily. Students learned material through reading journals, textbooks and discussion with lecturer too. The understanding in theory to formulate mathematical model and communication skill could improved through discussion. Students managed to achieve the goal of their research. They could communicate their ideas well and appear confident at the final project seminar.