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Association behavior of biosurfactant in glyceride and plam oil system / Ang Yock Lin.

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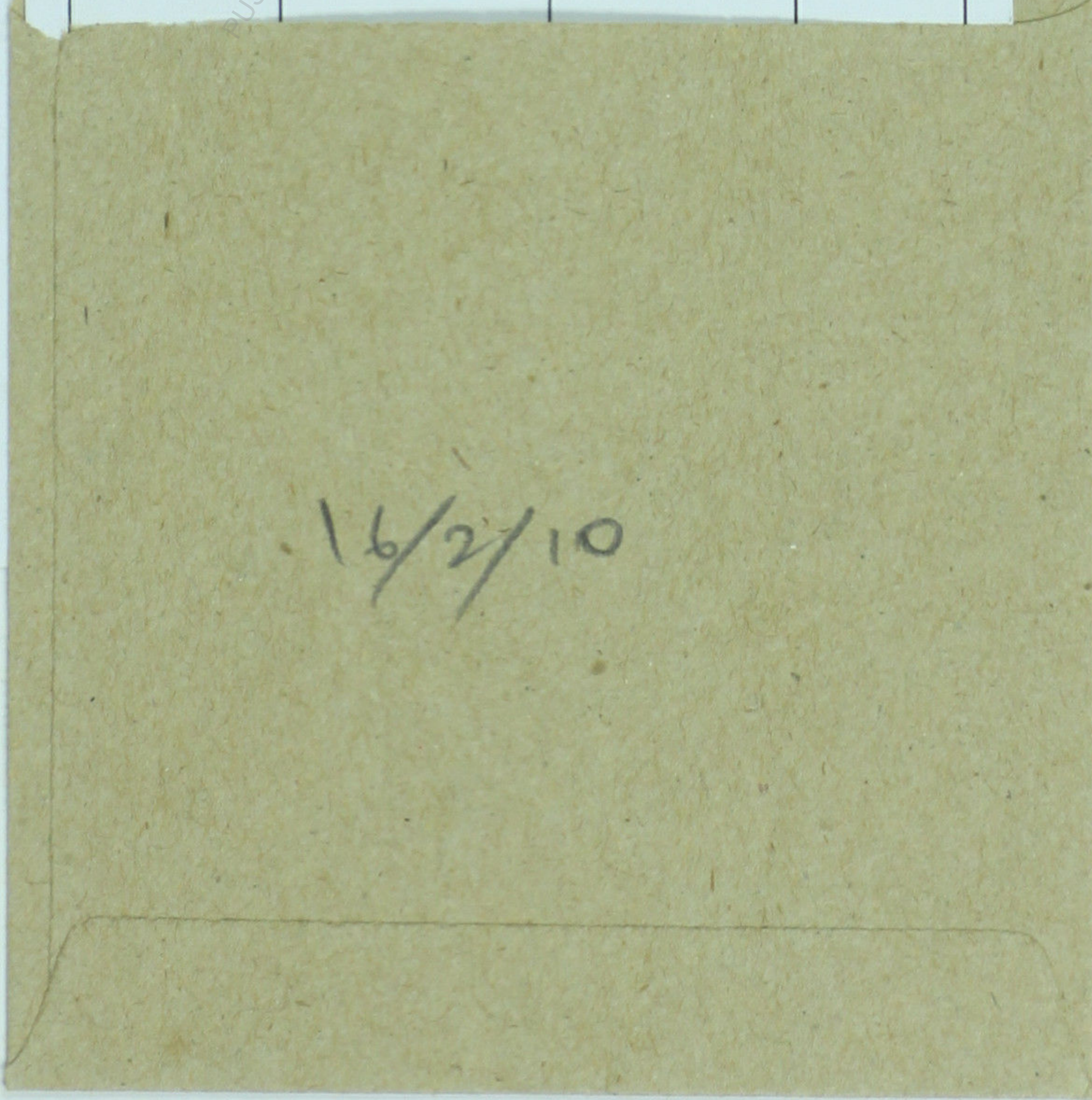
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**ASSOCIATION BEHAVIOR
OF
BIOSURFACTANT IN GLYCERIDE AND PALM OIL
SYSTEM**

By

ANG YOCK LIN

PUSAT PEMBELAJARAN DIGITAL SULTANAH NUZUHIRAH

**FACULTY OF SCIENCE AND TECHNOLOGY
KOLEJ UNIVERSITI TERENGGANU
UNIVERSITI PUTRA MALAYSIA**

2001

**ASSOCIATION BEHAVIOR
OF
BIOSURFACTANT IN GLYCERIDE AND PALM OIL
SYSTEM**

By

ANG YOCK LIN

**Thesis submitted in partial fulfillment of the
requirement for the Degree of Science (Hons.)**

**Faculty of Science and Technology
KOLEJ UNIVERSITI TERENGGANU
UNIVERSITI PUTRA MALAYSIA**

2001

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TITLE:

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PUSAT PEMBELAJARAN DIGITAL SAMPANAH NUNUK HIRAH

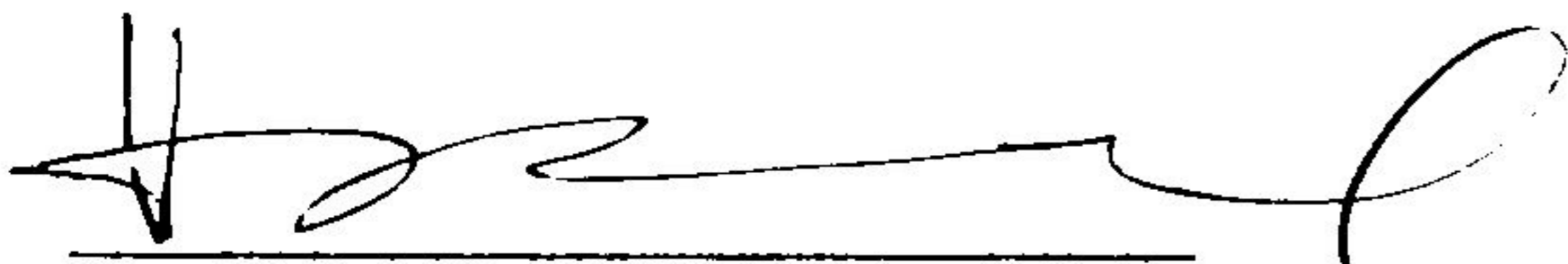
**ASSOCIATION BEHAVIOUR
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By:

ANG YOCK LIN


Approved By:

Supervisor,


(Prof. Dr. Hamdan Suhaimi)

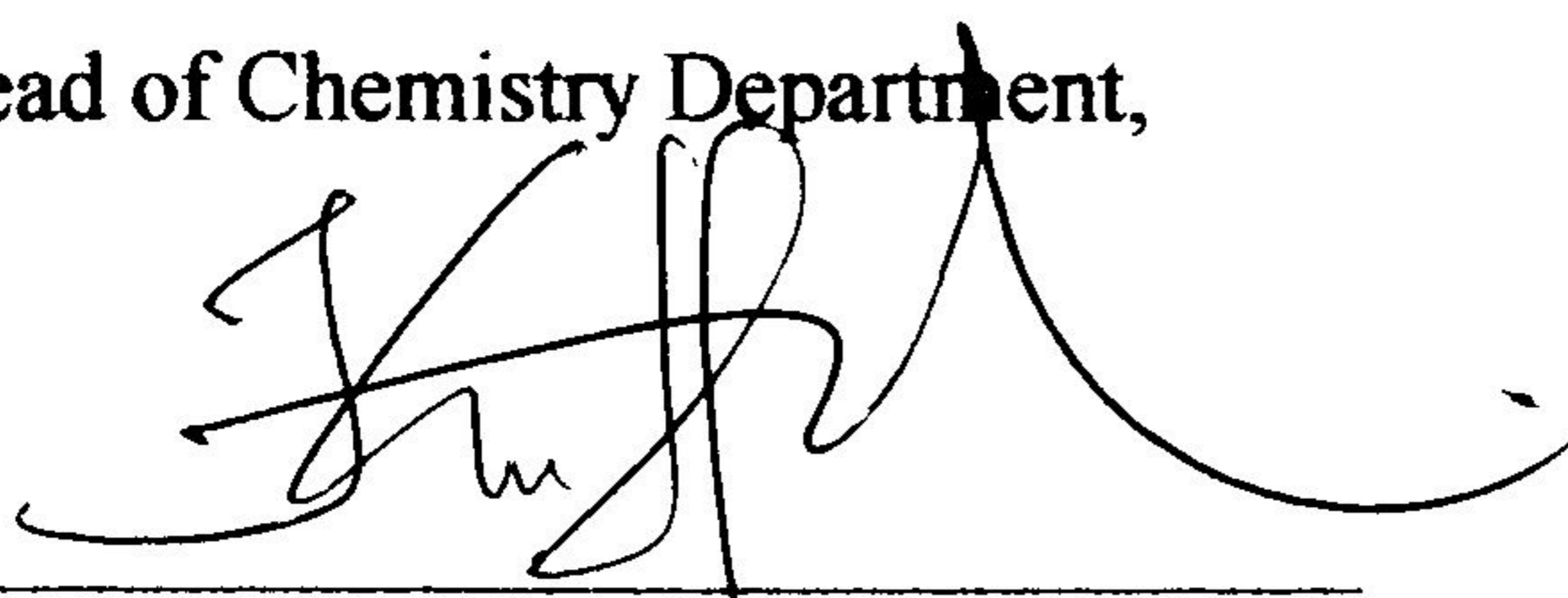
Date : 24/03/01

Project Coordinator,


(Puan Marinah Mohd Ariffin)

Date : 24/03/01

Head of Chemistry Department,


(Assoc. Prof. Dr. Ku Halim Ku Bulat)

Date : 14/04/01

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ABSTRAK

Kajian terhadap sistem alkohol dengan surfaktan garam hempedu dan air telah dilakukan pada suhu $27 \pm 1^\circ\text{C}$. Keputusan menunjukkan butanol adalah stabil dan mempunyai kawasan misel yang paling luas. Ini juga disokong dengan keputusan yang menunjukkan bahawa butanol memberikan ketegangan permukaan yang terendah dengan nilai CMC iaitu $2.81 * 10^{-3} \text{ mol/l}$. Walau bagaimanapun, butanol bertindak kurang stabil apabila minyak gliserida ditambah. Kajian terhadap sistem surfaktan garam hempedu/alkohol (9/1) dengan minyak gliserida dan air menunjukkan pentanol adalah paling stabil dan mempunyai kawasan misel yang paling luas.

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ABSTRACT

Studies on alcohol system with bile salt and water were carried out at $27 \pm 1^\circ\text{C}$. The results indicates that butanol exhibited a large and stable micellar region. Besides that, the results also shows that butanol has the lowest in surface tension with CMC value 2.81×10^{-3} mol/l. However, butanol appeared to be unstable when glyceride oil was added. Studies on bile salt/alcohol (9/1) system with glyceride oil and water indicated that pentanol was the most stable and gave the largest micellar region.

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