

Curriculum KJEM 214, autumn 2014.

BOOK; "An Introduction to INTERFACES & COLLOIDS – The bridge to Nanoscience", John C. Berg, World Scientific Publishing Co. Pte. Ltd.

The curriculum consists of the following parts of the book:

I. INTRODUCTION

II. FLUID INTERFACES AND CAPILLARITY · except C.3, G, H.8-11, I, J.4

III. THERMODYNAMICS OF INTERFACIAL SYSTEMS · except D.4, J, K.5, L.1

IV. SOLID-LIQUID INTERACTIONS

· except B.2-5, C.3, E.2-4, F, G, I, J, K, L, M, O

V. COLLOIDAL SYSTEMS: PHENOMENOLOGY AND CHARACTERIZATION ·

except E.2-4, F.3-4, G.2, H, I

VI. ELECTRICAL PROPERTIES OF INTERFACES · except A.6-7, B.3-5 and 7-8,

C, D.3 and 5-6, E

VII. INTERACTIONS BETWEEN COLLOID PARTICLES · except B.2-4, C.5-7, D,

E.3-8, F, G, H

VIII. RHEOLOGY OF DISPERSIONS · except D.4, E

IX. EMULSIONS AND FOAMS · except D.4, E.5-7

In addition, summaries of the lecture notes will be made available on "Mi Side". The curriculum will to a large extent be limited to this material, together with the exercises that will be done throughout the semester.

Kristine Spildo