UNIVERSITY OF COPENHAGEN

Dear Course participant,

It is a pleasure to welcome you to the Master/PhD course "Syntesekemiske metoder" (http://kurser.ku.dk/course/nkek11003u/2014-2015) which will take place from Monday the 10th of August to Friday the 21st of August 2015 from 9.00 to 17.00. Meeting point first day is room B404, situated at fourth floor building B at the H. C. Ørsted institute.

Enclosed you will find the provisional program. The course will be organised in a way such that everyone are in teams of two-three student. When the course starts we will give each team a list of syntheses your team can carry out and recipes for the syntheses. We will also have a list of supplementary problems. You are welcome to add or replace syntheses on your team list with problems from the *supplementary problems* list. The teams will be organised on the first day of the course.

The lectures deal with practical aspects of organic synthesis, such as: important unit operations, handling of butyl lithium and similar sensitive reagents, Schlenck technique, microscale synthesis, microwave synthesis, high-energy chemicals, modern organic chemistry in the industrial setting, choice of bases in organic synthesis, choice of metals in organometallic reactions, flow-chemistry, chromatography, preparative electrochemistry and electrocrystallisation.

Teachers will be Michael Pittelkow (Science), Mikael Begtrup (Farma) and Jørn B. Christensen (Science). In addition, lectures will be presented by invited guests.

Reading the books '*Advanced Practical Organic Chemistry*' by Leonard, Proctor and Lygo and the new book '*Håndbog i synteseteknikker*' by Becker, Begtrup and Nielsen is recommended but not mandatory.

During the course short reports for each completed synthesis must be handed in and at the end of the course a short essay – perhaps together with a short video illustrating key synthetic methodologies used - must be handed in. Evaluation of these written assignments will form the basis of the grade (pass/fail). Each student must hand in an individual report.

Recall bringing favourite spatulas, magic stick, lab coat and protecting glasses.

Best regards

Mikael Begtrup, Jørn B. Christensen and Michael Pittelkow

JULY 29, 2015

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