



Minutes from two NORA Technical Committee meetings, September 2014

- the Marie Skłodowska-Curie ITN NORA

12 September 2014, Ghent and a Skype meeting on the 19th September 2014:

Present at both meetings: Rob van Spanning, Lars Bakken, Andy Gates, Åsa Frostegård

Agenda: Planning of NORA Summer School 2 (Biochemistry, kinetics, energetics, systems biology, wastewater technology) and NORA Summer School 3.

After some discussion, the schedule below was suggested. It is emphasized that the course called *NORA Summer School 2* should be 3 credits (ECTS), meaning that the students must get some preparatory task (reading) and a written assignment to work on afterwards. The rule of thumb is that 30 work hours correspond to 1 credit (ECTS). Course literature will be uploaded consecutively on the NORA intranet. All literature will be available for the NORA fellows from October 24, 2014.

NORA Summer School 3 (entrepreneurship) will soon be presented in more detail; Mark van Loosdrecht is presently working on that.

Schedule NORA Summer School 2

Saturday 15th November:

Biochemistry of denitrification (2h; Andy Gates, UEA)

Exercises in groups: Michaelis Menten kinetics of denitrification enzymes (Andy Gates, UEA)

Bioenergetics of denitrification (2h; Rob van Spanning, VUA)

Exercises in groups; the task will be to figure out denitrification schemes of selected organisms based on blasting and to predict the bioenergetics (Rob van Spanning, VUA)

Sunday 16th November:

Kinetics of denitrification (2h; Lars Bakken, NMBU)

Exercises (kinetics) individually and then in plenum (Lars Bakken, NMBU)

Monday 17th November:

Lectures and assignment on systems bioinformatics of metabolic networks (Wilfred Röling, VUA)

Tuesday 18th November:

Theory wastewater treatment (TUD)

Systems biology of wastewater treatment plants (TUD)

Visit to wastewater treatment plants (this is a *common activity* for Summer Schools 2 and 3)

Schedule NORA Summer School 3 (preliminary)

Wednesday 19th and Thursday 20th November:

Summer school 3: Entrepreneurial skills