



MBR-TRAIN Summer School Programm

	Tuesday, 15 July 2008	Wednesday, 16 July 2008	Thursday, 17 July 2008
08.45 - 09.00	Welcome/practical details	Welcome/practical details	Welcome/practical details
09.00 - 10.30	Introduction Why modelling? Process modelling Methodologies Biological Process modelling (part 1) Mass balances Biological processes P.A. Vanrolleghem (ULaval, Can)	General introduction to CFD Navier-Stokes equations turbulence modelling 1 phase vs multiphase J. Ducoste (NC State, USA)	Hands-on exercise in WEST Implement BSMBR Y. Amerlinck (MOSTforWATER, BE)
10.30 - 10.45	Coffee break	Coffee break	Coffee break
10.45 - 12.15	Biological Process modelling (part 2) Gujer matrix SMP model Filtration modelling I. Nopens (UGent, BE)	Application of CFD in WWT MBR Process units M. Hunze (FlowConcept, DE)	Hands-on exercise in WEST Implement BSMBR Y. Amerlinck (MOSTforWATER, BE)
12.15 - 13.30	Lunch break	Lunch break	Lunch break
13.30 - 15.30	Introduction to control theory P.A. Vanrolleghem (ULaval, Can)	Introduction to Population Balances General equation Link with CFD J. Ducoste (NC State, USA)	Technical visit to MBR Schilde - operated by Aquafin
15.30 - 15.45	Coffee break	Coffee break	
15.45 - 17.15	Introduction to data acquisition and control I. Nopens (UGent, BE)	Hands-on exercise in WEST General introduction" Y. Amerlinck (MOSTforWATER, BE)	W. De Wilde (Aquafin NV, BE)
20.00	Social event - Boat trip	Social event - Visit to brewery	