

time	Monday	Tuesday	Wednesday	Thursday	Friday
8-9	Most of the mannitol work experiments to be done in Chemistry building pilot hall F308. Works start there at 10:15 unless other is agreed. Both groups can share work, for example so, that at some point everybody is present and then sometimes only half of the group is present. Marked green is suggested to everybody to see/participate.				
9-10					
10-11	Short intro to pilot hall devices. Prepare MRS media and sterilize it with 5 conical flasks, inoculation bottle for 8-L cultivation and inoculation and transfer tubes for Marubishi. Sterilize in an autoclave.	Measure the growth (optical density) in Falcon tubes and choose the the best one to inoculate 5 conical flasks and put the to grow in 30 C.	Feed medium from Diessel to Marubishi	9. sample, start cross-flow filtration, take permeate sample.	Open the crystallizer, start gathering crystals
11-12	Prepare the whole glucose/fructose media (no other components) for 100 L Marubishi cultivation in Diessel tank. Use here about 40 L tap water.	Prepare 15 L reactor: pH probe calibration, NaOH pump calibration, growth media mixture addition, sterilizing	Inoculate Marubishi from Sartorius, take the 1st sample	Start evaporator, continue filtration, take one evaporate sample	Centrifuge crystals 5 times, take sample of crystals and mother liquor, start preparing HPLC samples and standards. Put the dry weight samples into dessicator.
12-13	Start heating Diessel tank with steam from steam generator. Weight into decanters the nutrient salts needed for 15 L and marubishi cultivations	Calibrate Marubishi's Iwaki-pH pump pH probe. Connect the pH probe and add non-sugar media components to Marubishi.	Assemble the cross-flow filter system and measure NWP (normal water permeability)	Evaporation continues, wash Marubishi, circulation wash to cross-flow filtration first with warm water and then 0.1 M NaOH	Continue with HPLC samples. Wash the cross-flow filter and measure NWP. Wash using chlorin if NWP is not as good as in the beginning
13-14	Inoculate each (5) Falcon tubes having 10 mL M.R.S. broth with 0.2 ml of <i>Leuconostoc mesenteroides</i> glycerol liquor and put the tubes to 5 C incubation cabinet. Program the incubation temperature change to 30 C so that 10 hours incubation is held before next incubation.	Sterilize Marubishi	2.sample	Take concentrate sample. Set the crystallizer temperature profile and put the concentrate into crystallizer	Prepare HPLC samples and standards.
14-15	Put 2 ml Eppendorf tubes (about 20) to dry in the oven (80 C) for the following day's cdw assays		3.sample	Stop the circulation wash and leave the cross-flow filter unit with tubes connected into 0.1 NaOH overnight. Prepare Marubishi dry weight samples and put in the oven.	Prepare HPLC samples, leave the samples for the analysis. Measure the dry weight samples.
15-16			4.sample		
16-17			5.sample		
17-18			6.sample		
18-19			7.sample		
19-20		Combine the conical flasks into a sterile inoculation bottle and inoculate 15 L reactor.	8.sample. Let the reactor continue the growth and mannitol production overnight.		