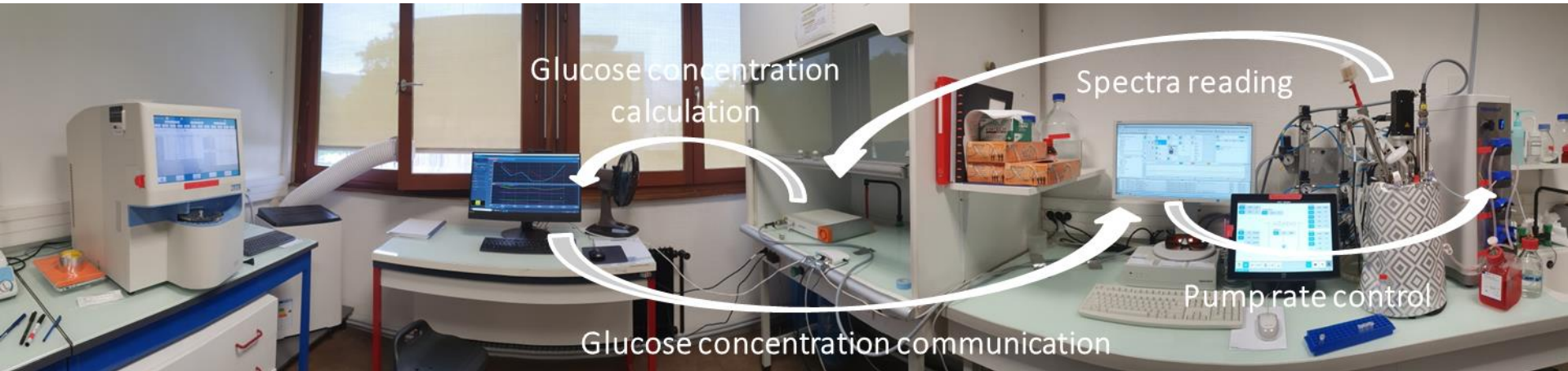


Glucose closed-loop control in a cell culture

Example of a CHO cell culture (up to 12 Mcells/mL)



RESOLUTION Spectra Systems' Application Lab

Experimental parameters

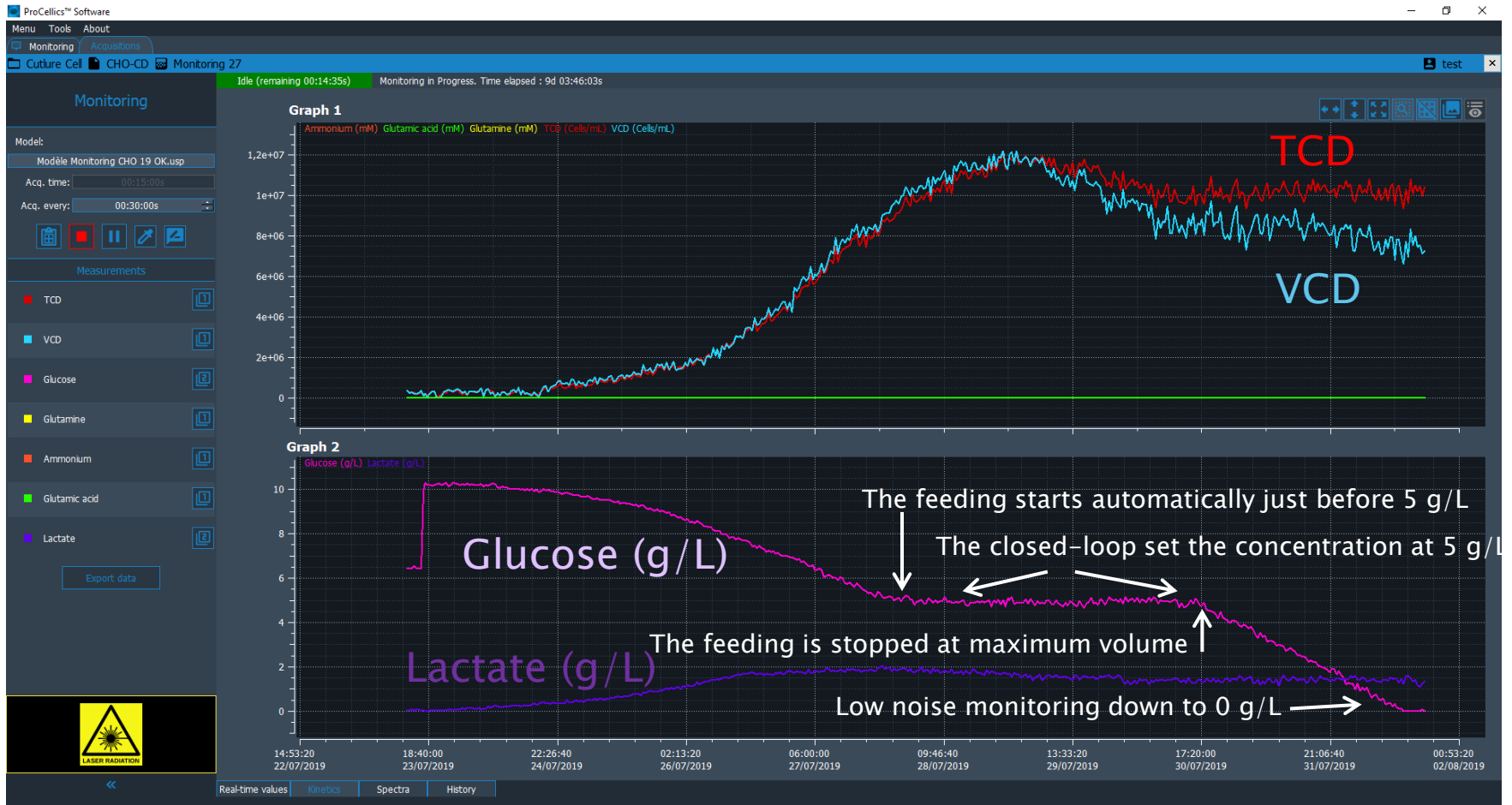
- CHO-S
- CD-CHO medium
- Fed-batch
- 5L bioreactor Bioflo® 320 (Eppendorf)
- Model trained on 4 batches
- Ref. FLEX2 (Nova Biomedical)

Closed-loop control setup

- Real-time monitoring: ProCellics™ Raman analyzer
- OPC UA communication between ProCellics™ and the bio-controller software
- Feeding rate calculated according to an exponential law

Glucose closed-loop control in a cell culture

Example of a CHO cell culture (up to 12 Mcells/mL)



Glucose closed-loop control in a cell culture

Example of a CHO cell culture (up to 12 Mcells/mL)

