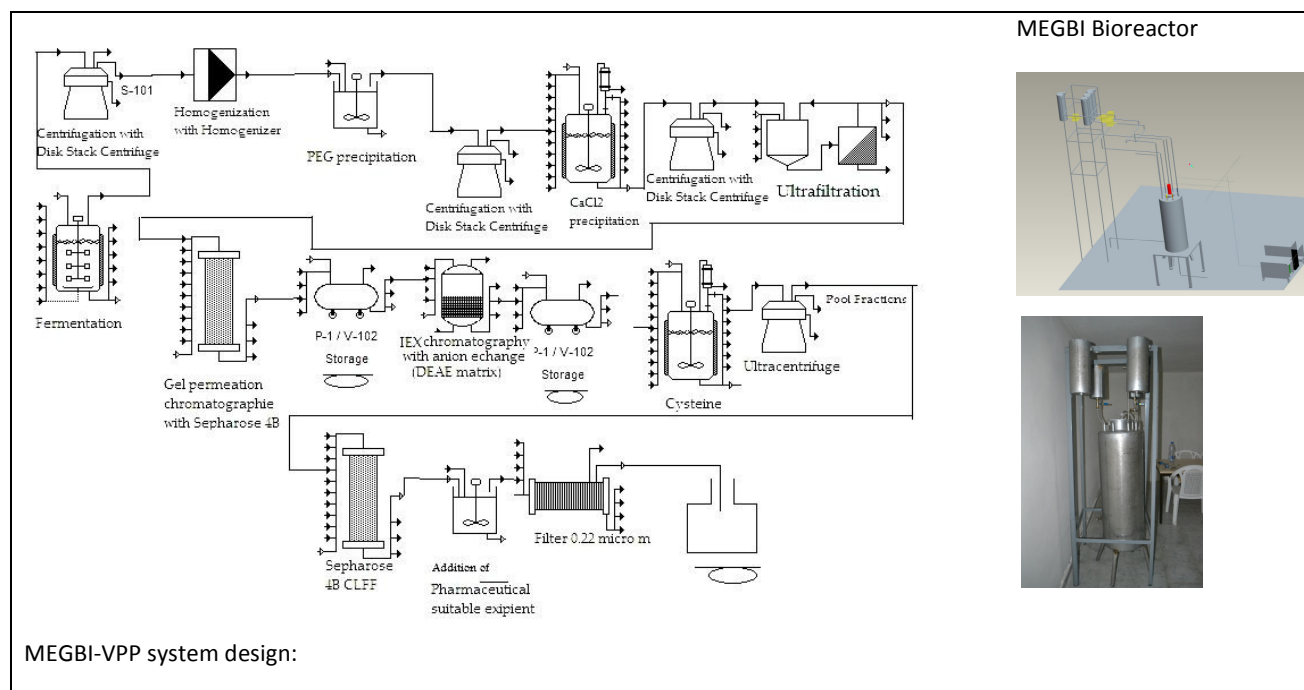
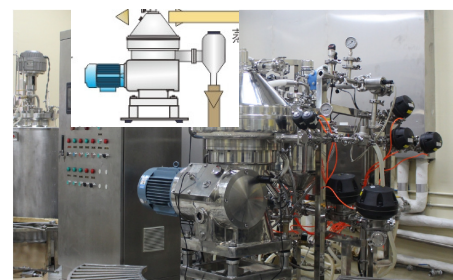


Ras Nhache/Batroun - Tripoli, 12th Jan 2015



Downstream System (Purification) from Solaris Group (in this way MEGBI-VPP downstream processing shall be developed)



Disc stack centrifuge from Huading/China

Master Thesis

Modeling and Integration of devices for the vaccine production plant MEGBI-VPP

- Modeling of Homogenizer (3 weeks)
- Modeling of Disc Stack Centrifuge in including CIP/SIP functional elements (mechanics) (3 weeks)
- Modeling Process Scale Gel Permeation and ion exchange chromatographic devices (3 weeks)
- Modeling of Process Scale Ultrafiltration Device (3 weeks)
- Integration of Devices to MEGBI-VPP downstream processing (DSP) unit (2 weeks)
- Documentation (3 weeks)

Keywords: CAD, Tool ProEngineer, Process Scale Homogenizer, Process Scale Centrifugation, Process Scale Protein Chromatography, Biotechnology