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Pharmaceutical
Multiphase Reactors
CHE.782

Design of Multiphase
Flow Processes
669.266

An Introduction to the Filtering Toolbox „CPPPO“

A - Content of the CPPPO Package
B - Installation

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A part of this teaching material has been prepared for NanoSim (http://sintef.no/NanoSim/

Outline

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Session A - What is part of CPPPO?

- Overview of the CPPPO package
- Implementation strategy

Session B - Installation of CPPPO

- Before you start
- A Walk through of the installation process

A - CPPPO Source Package

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1 - CPPPO is a part of the CFDEMcoupling package
https://github.com/CFDEMproject/CFDEMcoupling-PUBLIC2NanoSim/tree/master/src/c3po

2 – Implementation is based on (i) a core, (ii) interface libraries, and (iii) sample applications how to use CPPPO

B - Before you start

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…be sure your linux computer is set up, and you have all tools in place to access linux computers from Windows (on Windows, install Xming, putty & filezilla).

Linux resources:
-gedit
-git
-openmpi, (inkl. -devel)
-paraview (you can use the older OpenFOAM version, or the newest one provided by your distro or via http://www.paraview.org/)
-Matlab, octave, gnuplot

Windows resources (for accessing Linux machines and editing files):
http://sourceforge.net/projects/xming/
http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html
http://filezilla-project.org/
http://notepad-plus-plus.org/

…be sure OpenFOAM is installed

…be sure Qt 5.x and HDF5 (optional) is installed

B - Installation

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…is similar to any other CFDEM package

…be sure Qt 5.x and HDF5 (optional) is installed

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