

Grant Agreement No.: 604656

Project acronym: NanoSim

Project title: A Multiscale Simulation-Based Design Platform for Cost-Effective CO₂ Capture Processes using Nano-Structured Materials (NanoSim)

Funding scheme: Collaborative Project

Thematic Priority: NMP

THEME: [NMP.2013.1.4-1] Development of an integrated multi-scale modelling environment for nanomaterials and systems by design

Starting date of project: 1st of January , 2014

Duration: 48 months

WP N°	Del. N°	Title	Version	Lead beneficiary	Nature	Dissemin. level	Delivery date from Annex I	Actual delivery date dd/mm/yyyy
9	6	Description of the project within the NanoSim web-portal and user forum for support (36)	0	DCS	R	PU	31/12/2016	29/12/2016

One of the main objectives of the dissemination WP9 is to bring NanoSim as close as possible to a wide audience of stakeholders, both from the general public as well as specialists. Fig. 1 shows a snapshot of the user forum for the COSI components CFDEM®coupling, LIGGGHTS® and ParScale – created administered by DCS. Fig 2. shows a snapshot of the NanoSim web portal, created and maintained by SINTEF (recently updated by publications and events).











Forum	Topics	Posts	Last post
 New category: Contributed simulations, cases, scripts, tutorials Whenever you make something work which you think could be useful for others as well, please put it here!	7	17	By jpolá 5 months 4 days ago
 ParScale - User and Developer Forum Discussions about the ParScale simulation engine go here!	18	45	By Madadi 1 month 2 days ago
 CFDEM®coupling - User Forum This is a forum dedicated to CFDEM®coupling using the LIGGGHTS® DEM code and OpenSource CFD.	629 9 new	2604	By NTT1508 2 hours 58 min ago
 CFDEM®coupling- Developer Forum Topics related to developing with CFDEM®coupling can be discussed here: discussion about implementation details, C++, MPI and debugging tools	34	93	By ckloss 1 month 1 week ago
 LIGGGHTS® - User Forum LIGGGHTS® related topics can be discussed here: discussion about models, installation, feature requests and general discussion	1458 9 new	6226	By j-kerbl 6 hours 22 min ago
 LIGGGHTS® - Developer Forum Topics related to developing with LIGGGHTS® can be discussed here: discussion about implementation details, C++, MPI and debugging tools	113 3 new	453	By MiRa 1 week 1 hour ago
 Bug Reports for CFDEM®coupling, LIGGGHTS®, and ParScale (Possible) bugs / suspicious behavior should be reported as a new thread here, not in the user forum. This should give both you and the developers a clear idea about the status of your bug report (submitted/assigned/fixe)	98 2 new	399	By ckloss 22 hours 48 min ago
 Post Processing Post processing of LIGGGHTS®/CFDEM®coupling/ParScale based simulations is discussed here	123	554	By rubikon2045 3 months 3 weeks ago
 CFDEM®coupling, LIGGGHTS® and ParScale - Announcements from the developers Announcements from the developers go here	141	171	By ckloss 1 week 2 days ago
 CFD and DEM - General Discussion Anything that is related CFD and DEM modelling can be discussed here	41	111	By chanchalx 3 months 3 weeks ago

Figure 1: User forums (Screenshot as of 29/12/2016), available at <http://www.cfdem.com/forum>



NanoSim

NanoSim - A Multi-scale Simulation-Based Design Platform for Cost-Effective CO₂ Capture Processes using Nano-Structured Materials



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NanoSim

Objectives

Summary

Consortium

Publications

News and Events

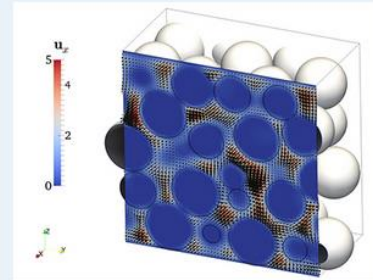
User forum

A Multi-scale Simulation-Based Design Platform for Cost-Effective CO₂ Capture Processes using Nano-Structured Materials (NanoSim)

The main objectives of the project are to:

1. Develop an open-source computational platform that will allow the rational design of the second generation of gas-particle CO₂ capture technologies based on nano-structured materials
2. Design and manufacture nano-structured material and shorten the development process of nano-enabled products based on the multi-scale modelling
3. Design and demonstrate an energy conversion reactor with CO₂ capture based on the superior performance of nano-structured materials

The figure shows a result for DNS of the flow through a particle bed



Project information

Duration: 01.01 2014 - 31.12 2017

Work programme: FP7 – NMP.2013

Total budget: 5.200 K€

Internal pages

These pages are for partners only and requires username and password.

Link to [NanoSim eroom](#)

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Figure 2: Description of the NanoSim project at the NanoSim website, available at

<http://www.sintef.no/projectweb/nanosim/>