

Detailed Agenda OpenGeoSys Community Meeting (OGS CM 2023)  
05-06.12.2023, UFZ Leipzig, VISLAB (Building 7.2)

CET	OpenGeoSys Community Meeting 2023		
05.12.2023	<i>Tuesday</i>		
09:00	Technical meetings (individual)		
11:45	<i>Welcome lunch</i>		
	<b>OGS overview</b>		
12:30 – 13:00	OpenGeoSys 6.5: An overview of new feature and outlook to 2024	Lars Bilke, Dima Naumov	
13:00 – 13:30	OGSTools: Tools and Workflows (see also Python sessions on 06.12.2023)	Florian Zill, Tobias Meisel, Jörg Buchwald, Christoph Lehmann, Julian Heinze (FEFLOW converter) ...	
	<b>User and devs reports</b>		
13:30 – 14:30	TUBAF session: Thomas Nagel <ul style="list-style-type: none"> <li>– Thomas: Overview of TUBAF activities</li> <li>– Chaofan: Geothermal and fractured systems</li> <li>– Mehran: Material modeling with MFront</li> </ul>		
14:30 – 15:30	BGR session: Hua Shao, Jan Thiedau <ul style="list-style-type: none"> <li>– Jan/Carlos: THM and transport modelling in fractured crystalline rock</li> <li>– Max: OGSUQ.jl: An uncertainty quantification toolbox for OpenGeoSys 6 in the julia language</li> <li>– Eike: A bimodal pore-model for strain-dependent water retention behavior of bentonite</li> <li>– Shuang/Vinay: Numerical investigations into gas transport and gas-induced processes in Opalinus Clay</li> </ul>		
15:30 – 15:45	<i>Coffee / tea break</i>		
15:45 – 16:15	<b>VIS session:</b> Karsten Rink, Nico Graebbling, Ozan Sen, Susann Goldstein		
16:15 – 17:15	CAU session: Sebastian Bauer et al. <ul style="list-style-type: none"> <li>– Johannes Nordbeck: Numerical simulation of a High-Temperature-ATES field test: quantification of induced convection, cycle efficiency and thermal impacts</li> <li>– Jens Olaf Delfs: Numerical simulation of geothermal wells: New model developments and their applications.</li> <li>– Stefan Heldt: Uncertainty assessment of High-Temperature Aquifer Thermal Energy Storage (HT-ATES) thermal impacts and efficiency</li> </ul>		
17:15 – 18:45	UFZ / MUL session: <ul style="list-style-type: none"> <li>– Thomas Kalbacher, Tom Fischer, Afid Nur Kholis: Groundwater modeling</li> <li>– Haibing Shao, Maximilian Dörnbrack, Chaofan Chen et al.: Geothermal energy systems</li> <li>– Tymofiy Gerasimov (UFZ/BGE-TEC): THM analysis of saturated porous medium with phase-change (soil freezing around BHEs and the induced deformation)</li> <li>– Olaf Kolditz, Jörg Buchwald, Christoph Lehmann, Norbert Grunwald, Feliks Kizskurno, Philipp Selzer, Haibing Shao, Falko Vehling, Wenqing Wang, Florian Zill + OGS Core Team: Deep geological repositories</li> <li>– Keita Yoshioka, Mostafa Mollaali, Tao You et al.: Phase-field session</li> </ul>		
19:30 –	<i>Pizza party</i>		

06.12.2023	Wednesday		
09:00 – 11:00	<ul style="list-style-type: none"> <li>– Lingxiang Wang (Tongji University): A Darcy-scale numerical model for microbially induced calcite precipitation modeling in heterogeneous porous media</li> <li>– Pavan Kumar Bhukya (IIT Madras): Coupled bio-chemo-hydro-mechanical modeling studies on the MICP treatment for large-scale application in soils</li> <li>– Pouria Behnoudfat, Uli Kelka (CSIRO/BGE): A variationally adaptive-stabilized conforming finite element framework for time-dependent problems</li> <li>– Xuerui Wang (GRS): Numerical Simulation of Radionuclide Migration in fractured Rock”</li> <li>– Tymofiy Gerasimov (BGE-TEC): HM modeling of bentonite (water transport and swelling of bentonite column)</li> <li>– ...</li> </ul>		
11:00 – 11:15	Coffee / tea break		
11:15 – 12:00	<p><b>Focus theme: OGS large applications</b></p> <p>e.g.:</p> <ul style="list-style-type: none"> <li>– Donau groundwater model (H)</li> <li>– FE experiment in DECOVALEX (TRM)</li> <li>– Repository model in EURAD (TH2)</li> <li>– Far-field (clay/salt) in AREHS (THM)</li> <li>– VPF in CD-A (RM)</li> <li>– ...</li> </ul>	We invite OGS users to provide reports about their significant OGS applications, such as EURAD-GAS, DECOVALEX, and FE-Task. They can share their experiences and suggest improvements.	
12:00 – 13:00	<p><b>Focus theme: OGS Python session</b></p> <ul style="list-style-type: none"> <li>– Current status of OGSTools (see talk on 05.12.)</li> <li>– How to use OGSTools?</li> <li>– How to contribute to OGSTools?</li> </ul>	Here, we request that OGS users reporting on their Python tools, impart their insight on employing Python within the OGS framework, and suggest possible inclusions in OGSTools.	
13:00 – 13:30	Discussion on future OGS features and demands		
13:30	Light lunch and farewell		
14:00 –	Technical meetings (individual)	Here you may meet for selected topics with the OGS core team you are interested in	

Videoconferencing:

OGS CM 2023 Day 1 (05.12.2023)

<https://ufz-de.zoom-x.de/j/3378459256?pwd=UktaTlo1MG1NV2lVYzNLblFjd2h4QT09>

OGS CM 2023 Day 2 (06.12.2023)

<https://ufz-de.zoom-x.de/j/3378459256?pwd=UktaTlo1MG1NV2lVYzNLblFjd2h4QT09>

Kenncode: 603564