

## **BUENOS AIRES 2023**

**JUNE 4 - 8** 

# WCCE11 - 11th WORLD CONGRESS OF CHEMICAL ENGINEERING

IACCHE - XXX INTERAMERICAN CONGRESS OF CHEMICAL ENGINEERING CAIQ2023 - XI ARGENTINIAN CONGRESS OF CHEMICAL ENGINEERING CIBIQ2023 - II IBEROAMERICAN CONGRESS OF CHEMICAL ENGINEERING

Buenos Aires - Argentina - June 4-8, 2023

## "The global chemical engineering working for a better future world"

### **JE-CFD Symposium**

Room 14 Wednesday, June 8, 2023
ORAL PRESENTATION

	ORAL PRESENTATION		Oral session 1
09:00 - 09:30	Keynote lecture	Supersonic Separation of CO2 from Natural Gas	Ricardo de Andrade Medronho
09:30 - 10:30	1446	Numerical Simulation of Emulsions in Microfluidic Flow-focusing Channel Using the Lattice Boltzmann Method	WANG
	2333	Numerical simulations of elongated bubble flowing in viscous fluids in slightly inclined pipes	Karp et al.
	2465	Embedding Periodic Box simulations in Large Eddy simulations to account for small-scale events	Zachariah et al.
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10:30 - 11:00	30		Coffee + Posters
			Oral session 2
11:00 - 11:30	Keynote lecture	DEM and DNS simulations of dispersed two-phase flows	Harry Van den Akker
	2447	New Formulation Process for High-Throughput Materials Development	Brito
	2462	CFD Simulations of Aerated Agitated Bio Reactors with Internals	Jamshidian et al.
	2469	Two-Equation Turbulence Models applied for CFD numerical simulations of a cyclone separator using Fluent and C	Op Simões et al.

12:30 - 14:00	90		Lunch interval
			Oral session 3
14:00 - 14:30	1372	Predictive nucleation and growth of silver nanoparticles in helical flow reactors by the integration of CFD and PBM.	Casado Merino et al.
_	2106	Recent progress in two-phase mixing systems	Kahouadji et al.
14:30 - 15:30	1460	Evaluation of Photochemical Water Disinfection Systems by Integration of Particle Tracking into Kinetic Models for	Casado Merino et al.
_		Microbial Inactivation	
	2551	Numerical Simulation Using Euler Lagrange Approach for SO2 Absorption in NaOH Solution in a Spray Tower	Costa Codolo et al.
	3018	Determination of the global and local volume turnover time for an anaerobic digester by Computational Fluid	Sadino-Riquelme et al.
		Dynamics (CFD) modeling	

#### Poster session

2238	CFD-aided contraction-expansion static mixer design and operation	Balbi et al.
2126	Turbulence chamber design of a pre-orifice nozzle using CFD	Renaudo et al.
2318	Droplet deposition of agrochemical spraying: Comparison of results from a random-walk model and CFD simulation	s Renaudo et al.
2404	Experimental and computational investigation of coaxial contra-rotating impellers design in baffled-free stirred reactor	o de Souza Berestinas
2797	Evaluating the performance of tanks with side entry impellers with the use of Computational Fluid Dynamics	Ribeiro Cruz Santos et al.
1913	A sensitivity analysis of CFD simulations of aerosols produced by metered dose inhalers in valved holding chamber	de Charras et al.
1990	Experimental and CFD study of the deposition of inhalable particles in the induction port of a cascade impactor	de Charras et al.
1225	Mr Fast prediction of transport phenomena in crystal growth using Physics Informed Neural Networks	Takehara et al.
2184	VOF Simulations of Collapsing Cavity near Deformable Oil Droplet	Pandey et al.
2445	Mass Transfer in Stirred Tanks: Dissociating KL and a for model Validation	Le Nepvou De Carfort et al.
2107	Surfactant-induced Marangoni effects in Multiphase flows	Kahouadji et al.
1564	Study of fundamentals of Aeolian dust emission mechanisms using CFD-DEM coupled simulations	Petit et al.
2146	Numerical simulations of pilot and demonstration scale biological methanation bubble column reactor using 1D and	( Ngu et al.
2379	CFD SIMULATION FOR GAS-LIQUID VORTEX REACTOR DESIGN	Chen et al.