



Day 1: November 7th

0	Session	Speaker	Room
8:00	Registration		FEM
8:30	Opening + Safety moment	Beatriz Florence Martelli (UNICAMP) Prof. Marcelo S. de Castro (UNICAMP)	Auditorium
8:40	Welcome	Prof. Denis J. Schiozer (UNICAMP) Andrea Boschetti Achôa (Equinor) Prof. João Marcos T. Romano (UNICAMP)	Auditorium
9:10	Keynote : Investment in research at universities by energy companies: success story of CEPETRO/UNICAMP	Prof. Marcelo S. de Castro (UNICAMP)	Auditorium
9:50	Technical Presentation 1: Electrofacies definition and zonation of the Lower Cretaceous Barra Velha Formation carbonate reservoir in the pre-salt sequence of the Santos Basin, SE Brazil	Marília Molina Camargo (UNICAMP)	Auditorium
10:10	Technical Presentation 2: The influence of faults and fracture corridors on the karst system development in a pre-salt carbonate reservoir, Santos Basin - Brazil	Luiza Mendes (UNICAMP)	Auditorium
10:30	Break + Poster Session A		FEM
11:30	Technical Presentation 3: Closed-loop field development: optimization of field development plan under uncertainty	Abouzar Mirzaei Paiaman (UNICAMP)	Auditorium
11:50	Technical Presentation 4 : Deep learning parameterization by applying cGAN to the UNISIM-II-H benchmark	Paulo Henrique Ranazzi (USP)	Auditorium
12:10	Technical Presentation 5 : The effects of different scenarios of relative permeability hysteresis on oil recovery for different production strategies with WAG-CO ₂ injection	Davi E. S. de Menezes (UNICAMP)	Auditorium
12:30	Lunch		
14:00	Course: Fundamental Controls on Carbonate Rocks and Reservoirs: Part I	Prof. Robert Goldstein (Kansas Univ.)	New York
17:30	Day 1: end of activities		



Conference Venues

Rooms <u>Auditorium</u> and <u>FEM</u> are at:

Faculdade de Engenharia Mecânica (FEM) Rua Mendeleyev, nº 200 – UNICAMP – Campinas, Brazil.

Rooms <u>New York</u>, <u>London</u> and <u>Tokyo</u> are at:

Casa do Professor Visitante (CPV) Av. Érico Veríssimo, nº 1251 – UNICAMP – Campinas, Brazil.









Day 1: Poster Session A

0	Title	Presenter	Room
10:30 – 11:30	Poster A1: Model-based analysis to evaluate the effects of polymer properties and physical phenomena on polymer flooding operations	Bruno Marco O. Silveira (UNICAMP)	
	Poster A2: Comparing WAG-CO ₂ injection with continuous water and gas injection in separate wells for the development and management of a CO ₂ -rich light oil fractured carbonate reservoir subject to full gas recycling	Josias P. de Oliveira Jr. (UNICAMP)	FEM
	Poster A3: Using flexibility in field development planning of Brazilian pre-salt oilfields with high volumes of associated gas: making good decisions as uncertainty unfolds over time	Susana M. G. Santos (UNICAMP)	
	Poster A4: PIV in a centrifugal pump impeller: POD analysis of turbulent flow	William D. P. Fonseca (UNICAMP)	
10:30 - 11:30	Poster A5: Investigation of the HLD parameter on emulsion phase inversion prediction	Tatiana M. Pessanha (UNICAMP)	FEM
10:30 - 11:30	Poster A6: Study of a commercial coating of pipes to improve the flow of emulsions	Rafaela Ferreira (UNICAMP)	FENI
	Poster A7: ESP Performance Analysis Operating with Stable Oil-water Emulsion	Andrey F. Casas Pulido (UNICAMP)	
	Poster A8: Seismic Analysis of downslope deposits and its possible relation with reworked facies of Barra Velha Formation	Juan F. Villacreses (UNICAMP)	
10:30 - 11:30	Poster A9: Digital rock analysis based on X-ray computed tomography of pre-salt lacustrine carbonate reservoir from the Santos Basin, SE Brazil	Gabriela F. Matheus (UNICAMP)	FEM
	Poster A10: Enhancing the Resolution of Micro-CT Images Using Super-Resolution Convolutional Neural Networks (SRCNN)	Ramin Soltanmohammadi (UNICAMP)	







Day 2: November 8th

0	Session	Speaker	Room
3:00	Day 2: Opening		Auditorium
3:05	Keynote: Coalescence in Emulsions	Prof. Dominique Langevin (Paris-Sud Univ.)	Auditorium
8:45	Technical Presentation 6: Particle Image Velocimetry in a centrifugal pump: details of the fluid flow at different operation conditions	Rodolfo M. Perissinotto (UNICAMP)	Auditorium
9:05	Technical Presentation 7: The effect of the demulsifier on the water-oil interfacial properties and emulsion stability	Isabella Genesini Freitas (UNICAMP)	Auditorium
9:25	Technical Presentation 8: Emulsion flow within ESP: From Experimental Approach to Oilfield Application	Natan A. V. Bulgarelli (UNICAMP)	Auditorium
9:45	Break + Poster Session B		FEM
10:45	Keynote: Peregrino Production Challenges	Lucas Silva (Production Engineer, Equinor)	Auditorium
11:25	Technical Presentation 9: Combinatorial production optimization using a decomposition-based evolutionary algorithm	Matheus B. de Moraes (UNICAMP)	Auditorium
11:45	Technical Presentation 10: SPAI preconditioners in OPM Flow	José Eduardo C. Bueno Filho (UNICAMP)	Auditorium
12:05	Technical Presentation 11: An efficient preconditioner for mixed finite element approximations	Sônia M. Gomes (UNICAMP)	Auditorium
12:25	Lunch		
14:00	Course: Practical application of ensemble-based data assimilation and optimization	Prof. Remus Hanea (Lead Advisor on Reservoir Technology, Equinor)	London
14:00	Course: Electric Submersible Pumps (ESPs): Fundamentals, Failure Analysis & Reliability, and Emulsion as a Flow Assurance Issue*	Mark Cowie (Artificial Lift Specialist, Equinor)	Tokyo
	* This course will have an extra session on Nov. 10 th , at	,	
	8:30, room Tokyo		







Day 2: Poster Session B

0	Title	Presenter	Room
9:45 – 10:45	Poster B1: Machine learning and estimation of distribution algorithms for production strategy optimization	Artur F. Brum (UNICAMP)	
	Poster B2: Accurate and Efficient Finite Element Simulations of Porous Media Flow in Fractured Reservoirs	Philippe Devloo (UNICAMP)	FEM
	Poster B3: A posteriori error estimator for a multiscale hybrid mixed method for Darcy's flows	Philippe Devloo (UNICAMP)	
	Poster B4: Visualization approaches as a support for decision-making in petroleum reservoir development and management processes	Samuel Oliveira da Silva (UNICAMP)	
	Poster B5: Fundamental study of droplets coalescence using Lattice-Boltzmann method	Luiz Eduardo Czelusniak (UNICAMP)	
	Poster B6: Modeling and simulation of electrical submersible pump dynamics using transfer functions and bond-graphs	Felipe C. T. Carvalho (UNICAMP)	
9:45 – 10:45	Poster B7: Study of the cause clogging formation in injection lines of a commercial demulsifier in Peregrino field	João Marcos F. O. Souza (UNICAMP)	FEM
	Poster B8: Investigation on the effects of macro/micro paraffin ratio on the thermal and rheological behavior of waxy model oils	Tayanne Ligeiro (UNICAMP)	
	Poster B9: Application of unsupervised learning for rock type prediction and petrophysical characterization using multi-scale data	Shohreh Iraji (UNICAMP)	
9:45 – 10:45	Poster B10: Special Core Analysis - Lab Experiments in a Carbonate Reservoir	Alessandra Winter (UNICAMP)	FEM
	Poster B11: The use of Machine Learning for Image Classification: A Geological Application	Mateus Basso (UNICAMP)	
	Poster B12: A NMR Permeability Map of Barra Velha Formation	Denilson Stefanelli (UNICAMP)	







Day 3: November 9th

0	Session	Speaker	Room
8:00	Day 3: Opening		FEM
8:05	Technical Presentation 12: Dynamic modeling of ESP system using sub-space identification	Felipe de Castro T. Carvalho (UNICAMP)	Auditorium
8:25	Technical Presentation 13: Experimental evaluation of model wax diffusivity by NMR	Ivanei Pinheiro (UNICAMP)	Auditorium
8:45	Technical Presentation 14: High resolution CT image generation using a diffusion-based model	João Paulo P. Souza (UNICAMP)	Auditorium
9:05	Technical Presentation 15: Reworked deposits in pre-salt section: An example of the top of Barra Velha Formation, Santos Basin	Renato Sol Paiva de Medeiros (UNICAMP)	Auditorium
9:25	Keynote: Bacalhau Production Challenges	David Aquino (Prod. Engineer, Equinor)	Auditorium
10:05	Break		FEM
10:35	Keynote: G&G Challenges for the Bacalhau Field	Gabriel Matos (Geologist, Equinor)	Auditorium
		Adriano Motta (Deep Offshore R&D Lead, TotalEnergies)	
11:15		Jorge Luiz Biazussi (Lead Services Specialist, Baker Hughes)	
	Round-table : Challenges to implementation of research results in industry	Marcelo Menezes (Technology Director, Schlumberger)	Auditorium
		Remus Gabriel Hanea (Lead Advisor on Reservoir Tech., Equinor)	
		Moderator : Prof. Denis J. Schiozer (UNICAMP)	
12:45	Conference Closing	Prof. Denis J. Schiozer (UNICAMP) Prof. Antonio Carlos Bannwart (UNICAMP) Prof. Alexandre Campane Vidal (UNICAMP)	Auditorium
13:00	Lunch		
14:00	Course: Practical application of ensemble-based data assimilation and optimization	Prof. Remus Hanea (Lead Advisor on Reservoir Technologies, Equinor)	London
14:00	Course: Electric Submersible Pumps (ESPs): Fundamentals, Failure Analysis & Reliability, and Emulsion as a Flow Assurance Issue*	Francisco Alhanati (Managing Director, C- FER Technologies)	Tokyo
	* This course will have an extra session on Nov. 10 th , at 8:30, room Tokyo		
17:30	Day 3: end of activities		