Official Schedule - PetroPhase 2022

Sunday June 12th	Monday June 13th	Tuesday June 14th	Wednesday June 15th	Thursday 16th	Friday June 17th
	8:00 - 8:30 **Open Lecture** **Pablo Barcena (Corporate Strategy Manager) Ecopetrol S.A.**	**8:00 - 8:40** **Keynote Emulsions & Interfacial Phenomena (EIP)** **Priyanka Juyal (ChampionX)**	**8:00 - 8:40** **Keynote Conventional & Unconventional resources (C&UC)** **Yucel Akkutlu (Texas A&M Univ.)**	**8:00 - 8:40** **Keynote Petroleum Chemistry (PC)** **Murray Gray (Univ. Of Alberta)**	Optional Excursions
	8:30 - 8:46 **CT&F Ecopetrol S.A. - Journal presentation (Luis J. Hoyos)** **E&F ACS - Special edition (J. Sebastian Ramírez)**	8:40 - 9:02 EIP 2 - Camila Santander	8:40 - 9:02 C&UC - 1 Fernando Rojas	8:40 - 9:02 PC - 2 Jorge Orrego	Day Long Flow Assurance Course Sponsored by ENNOVA LLC Instructors: Abul Jamaluddin (Stratum Reservoir) & Francisco "Paco" Vargas (ENNOVA) (Optional – Limited Reservations)
	8:46 - 9:26 **Keynote Petroleum Properties (PP)** **Harvey Yarranton (Univ. Of Calgary)**	9:02 - 9:24 EIP 3 - Simon Andersen	9:02 - 9:24 C&UC 2 - Pinaki Ghosh	9:02 - 9:24 PC - 3 Silvia Vesga	
	9:26 - 9:48 PP1 - Michael Hoepfner	9:24 - 9:46 EIP 4 - Martina Piccioli	9:24 - 9:46 C&UC 3 - Amir Mahmoudkhani	9:24 - 9:46 PC - 4 - Hugh Jones	
	9:48- 10:12 Coffe Break - Networking	9:46 - 10:08 EIP 5 - Isabelle Viegas	9:46 - 10:08 C&UC 4 - Oscar Medina Erazo	9:46 - 10:08 PC - 5 Andrew Yen	
	10:12 - 10:34 PP2 - Iván D Moncayo	10:08- 10:30 Coffe Break - Networking	10:08- 10:30 Coffe Break - Networking	10:08- 10:30 Coffe Break - Networking	
	10:34 - 10:56 PP3 - Andrés Piña	10:30 - 10:52 EIP 6 - Henderson Quintero	**10:30 - 10:52** **C&UC E - Eduardo Manrique (Ecopetrol S.A.)**	10:30 - 10:52 PC - 6 Matthias Witt	
	10:56 – 11:18 PP 4 - Jean Nöel Jaubert	**10:52- 11:32** **Keynote Upgrading & Fouling (UPF)** **Pedro Pereira Almao (Univ. Of Calgary)**	**10:52- 11:32** **Keynote Flow Asssurance (FA)** **Francisco "Paco" Vargas (Ennova)**	14:46 - 15:08 PC - 7 Khoa Huynh	
	11:18 - 11:58 **Keynote Petroleum & Transition Energy (PTE)** **Jeramie J Adams (WRI)**	11:32 – 11:54 UPF 2 - Juan David Guzmán	11:32 - 11:54 FA - 3 Cristiam Cundar	11:16 - 11:38 PC - 8 Igor E. Lins	
	11:58 – 12:20 **PTE E - Edgar Castillo (Ecopetrol S.A.)**	11:54 – 12:16 UPF 3 - David de Jesús Perez	11:54 – 12:16 FA - 4 Carlos Lira-Galeana	11:38 – 12:00 PC - 9 Quan Shi	
	12:20 - 13:40 **Lunch & networking**	**12:16 - 13:40** **Lunch & networking**	**12:16 - 13:40 pm** **Lunch & networking**	12:00 – 12:22 PC - 10 Linzhou Zhang	
	13:40 – 14:02 PTE 1 - D.C. Palacio	13:40 - 14:02 EIP 7 - Miguel Rondón	13:40 – 14:02 FA - 5 George Savulescu	Optional Excursions	Day Long Flow Assurance Course Sponsored by ENNOVA LLC Instructors: Abul Jamaluddin (Stratum Reservoir) & Francisco "Paco" Vargas (ENNOVA) (Optional – Limited Reservations)
	14:02 - 14:24 PTE 2 - Lady Giraldo	14:02 - 14:24 EIP 8 - Nicolás Cardenas	14:02 - 14:24 FA - 6 Jens Pffeifer		
15:00 - 18:00 **Register & Networking**	14:24 - 14:46 PTE 3 - Eddie Sierra	14:24 - 14:46 PTE 4 - Zhen Hou	14:24 - 14:46 C&UC - 5 Karen Feilberg		
	14:46 - 15:26 **Scott Fogler Honor Keynote** **Ryan Hartman (NYU)**	14:46 - 15:08 PTE 5 - Doris Gonzalez	14:46 - 15:08 PC - 1 Nathaniel T. T. Souza		
	15:26 - 15:48 PP 5 - Julia Troncoso	15:08 - 15:30 PTE 6 - Mikhail Varfolomeev	15:10 - 16:00 Travel to Gala Dinner		
	15:48 - 16:10 Coffe Break - Networking	15:30 - 15:52 Coffee Break - Networking	Gala Dinner 16:30 - 22:00		
	16:10 - 16:32 PP 6 - Asok Tharanivasan	**15:52 - 16:32** **Jefferson Creek Honor Keynote** **Doris Gonzalez (Inmenso) & Jianxin Wang (Chevron)**			
18:00 - 18:20 **Welcome speech** **Lina Navarro, Chair of PetroPhase 2022** **J. Sebastian Ramírez, Chair of the technical committee**	16:32 - 16:54 PP 7 - Martín Cismondi	16:32 - 16:54 FA 1 - JD Aristizabal			
	16:54 - 17:16 EIP 1 - Evgeniya Hristrova	16:54 - 17:16 FA 2 - Plinio Silva			
18:20 - 20:00 **Opening Gala & Welcome Talk** **Ernesto Gutierrez, Ecopetrol S.A.** **Chief Technology and Innovation Officer**	**17:20 - 19:20** **Poster session I (Odd)**	**17:20 - 19:20** **Poster Session (Even)**			

Petroleum Chemistry Session				
Schedule Code	**Speaker**	**Country**	**Affiliation**	**Title**
PC-K	*Murray R Gray*	Canada	University of Alberta	**Thermal Processing Affects Asphaltene Properties Central for Carbon Fiber Production**
PC-1	*Nathaniel T. T. Souza*	France	UPPA/Total Energies	**Comparison of direct and indirect analysis of crude oil molecules adsorbed onto carbonate rock surface**
PC-2	*Jorge A. Orrego*	Colombia	Ecopetrol S.A.	**Characterization of Acidic Species in Asphaltenic Fractions by FT-ICR-MS and infrared spectroscopy**
PC-3	*Silvia J. Vesga*	Germany	Univeristy of Rostock	**Thermo-optical carbon analyzer coupled to high-resolution mass spectrometry – A novel analytical approach addressing coking behavior and molecular moieties of Asphaltenes**
PC-4	*Hugh Jones*	United Kingdom	University of Warwick	**Two-Dimensional Mass Spectrometry for the Analysis of Complex Mixtures**
PC-5	*Andrew Yen*	USA	Baker Hughes	**Analysis of Asphaltene Field Deposits from Offshore Assets**
PC-6	*Matthias Witt*	Germany	Chevron - Bruker Daltoniks	**Effect of precipitation time on deposit characteristics on crude oil blending**
PC-7	*Khoa Huynh*	Denmark	Technical University of Denmark	**Profiling of carboxylic acids in North Sea crude oils by halogenated secondary amine labeling and LC-HRMS**
PC-8	*Igor Emanuel Lins*	Brasil	Universidade Federal da Bahia	**A comprehensive study of physicochemical and geochemical effects on CO2LSWAG injection in carbonates using numerical simulation with SO42- and Mg2+ as interpolants of relative permeability curves**
PC-9	*Quan Shi*	China	China University of Petroleum	**Molecular Characterization of Hydrocarbons in Heavy Petroleum Fractions by Chemical Derivatization Followed by Electrospray Ionization High-resolution Mass Spectrometry**
PC-10	*Linzhou Zhang*	China	China University of Petroleum	**Gasoline molecular-level blending model**

Session Chairs: J. Sebastian Ramírez & Jorge Orrego Ruiz

Petroleum Properties Session				
Schedule Code	**Speaker**	**Country**	**Affiliation**	**Title**
PP-K	*Harvey Yarranton*	Canada	University of Calgary	**Simple Methods for Heavy Oil Properties**
PP-1	*Michael Hoepfner*	USA	University of Utah	**Probing Asphaltene Phase Transitions with Ultra-Small-Angle Scattering: Mechanistic and Inhibition Investigations**
PP-2	*Iván Moncayo*	Colombia	Meridian Consulting - Ecopetrol S.A.	**Predictive Cubic-Plus-Association (CPA) Equation of State (EoS) from Petroleomics Characterization and Molecular Dynamics Simulations: A Case of Study of Organics Precipitation in a Live Crude Oil**
PP-3	*Andrés Piña*	France	Université de Lorraine	**Towards a highly accurate cubic equation of state: the translated-consistent Peng-Robinson (tc-PR) EoS and its extension to mixtures**
PP-4	*Jean Nöel Jaubert*	France	Université de Lorraine	**Evaluating the performance of well-established cubic and SAFT-type equations of state over thousands of experimental data points**
PP-5	*Julia Trancoso*	Denmark	Technical University of Denmark	**Vapor-Liquid Equilibrium Measurements and Cubic Plus Association (CPA) Modeling of Triethylene Glycol (1) + Methane/ Ethane (2) + Water (3) Systems**
PP-6	*Asok Tharanivasan*	Canada	KBC Advanced Technologies (A Yokogawa Company)	**Asphaltene Stability Modeling and Prediction in Crude Oil Blends**
PP-7	*Martin Cismondi*	Argentina	Universidad Nacional de Córdoba	**Phase Envelopes for reservoir fluids with Asphaltene onset lines: Exploring topology transitions based on compositional changes**
SF-K	*Ryan L Hartman*	USA	New York University	**Scott Fogler honor lecture**

Session Chairs: Ryan Hartman & Michael Hoepfner

Emulsions & Interfacial Phenomena Session				
Schedule Code	**Speaker**	**Country**	**Afiliación**	**Title**
EIP-K	*Priyanka Juyal*	USA	ChampionX	**Separations Management in the Changing Face of the Industry**
EIP-1	*Evgeniya Hristrova*	Canada	Natural Resources Canada	**Coalescence Inhibition and Agglomeration Initiation in the Paraffinic-Naphthenic Froth Treatment Transition Region**
EIP-2	*Camila Santander*	Canada	University of Alberta	**Understand the effects of tuning water chemistry (temperature, pH, and salinity) in water assisted settling of fine solids**
EIP-3	*Simon I. Andersen*	Denmark	DTU Offshore	**Synergistic Effects of Oil Field Chemicals in Produced Water Treatment**
EIP-4	*Martina Piccioli*	Norway	Norwegian University of Science and Technology	**Gas flotation for subsea produced water treatment: combining macro- and micro-scale experiments**
EIP-5	*Isabelle Viegas*	Denmark	Technical Univeristy of Denmark	**Investigation on oil-in-water/isopropanol emulsions using fluorescence spectroscopy and screening analysis**
EIP-6	*Henderson Quintero*	Colombia	Ecopetrol S.A.	**Effect of Residual Polymeric Additives on the Rheological and Colloidal Properties of Water-in-Oil Emulsions**
EIP-7	*Miguel Rondón*	Venezuela	Universidad de los Andes Mérida	**Asphaltenes aggregation influence on the optimum formulation to break water-in-crude oil emulsions: Experimental evidence from a Quartz Crystal Resonator sensor and an Oscillating Spinning Drop Interfacial Rheometer**
EIP-8	*Nicolás Cardenas*	Colombia	Universidad Industrial de Santander	**Evaluation of graphene oxide–metal oxide nanocomposites as additives in a drill-in fluid**

Session Chairs: Fernando Rojas & Simon Andersen

Conventional & Unconventional Resources Session				
Schedule Code	**Speaker**	**Country**	**Affiliation**	**Title**
C&UC-K	*Ibrahim Yucel Akkutlu*	USA	Texas A&M University	**Carbon Sequestration and EOR in Organic-rich Source Rocks**
C&UC-E	*Eduardo Manrique*	Colombia	Ecopetrol S.A.	**Evaluation of CO2 EOR and Storage Opportunities from Industrial Sources and Thermal EOR Projects**
C&UC-1	*Fernando A. Rojas*	Colombia	Ecopetrol S.A.	**Dissolved Organic Matter (DOM) as Natural Tracer on Preformed Foams Steam Injection Processes in a Mature Heavy Oil Field: Electrospray Ionization--Tandem Mass Spectrometry Approach**
C&UC-2	*Pinaki Gosh*	USA	SNF Holding Company	**Re-injection Of Produced Polymer in EOR Projects To Improve Economics**
C&UC-3	*Amir Mahmoudkhani*	USA	Locus Fermentation Solutions	**Cyclic vs Normal Paraffin Wax Retention on Formation Rocks and a Method for Damage Remediation Using Biosurfactants**
C&UC-4	*Oscar Medina Erazo*	Colombia	Universidad Nacional de Colombia	**Kinetic Oxidation Insights of Heavy Crude Oil at High-Pressure High-Temperature Conditions to Enhance the Efficiency of In-Situ Combustion Processes**
C&UC-5	*Karen Feilberg*	Denmark	Technical University of Denmark	**Changes in surface chemistry and wetting state during aging and flooding of carbonate rock studied by SEM-EDS and AFM-IR**

Session Chairs: Raul Osorio & Eduardo Manrique

Upgrading & Fouling Session				
Schedule Code	**Speaker**	**Country**	**Affiliation**	**Title**
UPF-K	*Pedro Pereira Almao*	Canada	University of Calgary	**Sustainable and Versatile Upgrading of Heavy Oils from Any Origin**
UPF-1	*Juan David Guzmán*	Colombia	Universidad Nacional de Colombia	**Nanoparticles enhanced solvent deasphalting (e-SDA) and catalytic cracking oxidation of pitch**
UPF-2	*David de Jesús Perez*	Colombia	Ecopetrol S.A.	**Sustainable and Versatile Upgrading of Heavy Oils from Any Origin**

Session Chairs: Lina Navarro

Petroleum & Energy TransitionSession				
Schedule Code	**Speaker**	**Country**	**Affiliation**	**Title**
PTE-K	*Jeramie J. Adams*	USA	Western Research Institute	**Transitions in Energy Keynote: From Fuels to Materials, New Role for Asphaltenes?**
PTE-E	*Edgar Castillo*	Colombia	Ecopetrol S.A.	**Hydrogen as energy vector in the Oil&Gas industry**
PTE-1	*Diana Catalina Palacio*	UK	University of Warwick	**Unlocking the potential of biofuels via reaction pathways in van Krevelen diagrams**
PTE-2	*Lady Giraldo*	Colombia	Universidad Nacional de Colombia	**Development of Silica Nanoparticles Biomass-Derived for Enhanced Carbon Capture and Storage Process (e-CCS) for Flue Gas Streams in Shallow Reservoirs**
PTE-3	*Eddie Sierra*	Colombia	AVEVA	**Shaping the Future with Sustainable Process Design and Operation**
PTE-5	*Zhen Hou*	USA	Aspen Technology Inc	**Modeling Petroleum and Bio-feedstock Conversions for Sustainable Refinery via Aspen HYSYS Molecule-Based Petroleum Refining**
PTE-6	*Mikhail Varfolomeev*	Russia	Kazan Federal University	**Synthesis and Study of Promising Hydrate Formation Promoters Based on Fatty Alcohol Sulphosuccinates for Gas Storage and Transportation Technologies**

Session Chairs: J. Sebastian Ramírez & Rodrigo Torres

Flow Assurance Session				
Schedule Code	**Speaker**	**Country**	**Affiliation**	**Title**
FA-K	*Francisco "Paco" Vargas*	USA	ENNOVA	**Fifteen Years Into the Quest of Successfully Managing Asphaltene Deposition Problems**
FA-1	*Juan David Aristizabal*	Colombia	Ecopetrol S.A.	**Viscosity prediction of Extra Heavy and Heavy Live Oils: A comparative study of three compositional models**
FA-2	*Plinio Silva*	Brasil	Petrobras	**Rheological mapping of emulsion properties using Machine Learning Tools**
FA-3	*Cristiam Cundar*	Colombia	Ecopetrol S.A.	**A Machine Learning Model for Predicting Asphaltene Damage Risk from ASCI and Live Crude Oil Densities at Reservoir Conditions**
FA-4	*Carlos Lira*	Mexico	Instituto Mexicano del Petróleo	**Compositional Grading with Equations of State. Plus fraction segregation and tar-mat formation in hydrocarbon reservoirs**
FA-5	*George Savulescu*	Norway	Norwegian University of Sciences and Technology	**Novel NMR techniques to assess the wax precipitation evolution in crude oil systems**
FA-6	*Jens Pfeiffer*	Germany	PSL Systemtechnik GmbH	**Design implementation and optimization of paraffin mitigation strategies- the importance of understanding the limitations of physical property and compositional data: wax deposition in the presence of inhibitors and pour point depressants**
JC-K	*Doris Gonzalez & Jianxin Wang*	USA	INMENSO & Chevron	**Jefferson Creek honor lecture**

Session Chairs: Carlos Lira-Galeana & Francisco “Paco” Vargas