

COBEM 2025 - Nov. 14						
<b>Area: Aerospace Engineering</b>						
<b>Chair: Hsu Yang Shang</b>						
Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	8:00 - 9:30	245	Neural Networks For Predicting Stress, Strain And Displacement Of A Uav Wing Box	Marcos Rogério Tavares Filho	Adm Nobre	Aerospace Structures
Friday	8:00 - 9:30	1271	Integrated Experimental And Numerical Approach For Evaluating Uav Wing Aeroelastic Deflections Using A Low-Cost Sensor System	Carlos Eduardo da Conceição Cardoso	Adm Nobre	Aerospace Structures
Friday	8:00 - 9:30	1791	Natural Fiber Landing Gear: Design And Analysis For Small-Scale Uav Applications	Luiz Henrique Jorge Machado	Adm Nobre	Aerospace Structures
Friday	8:00 - 9:30	1253	Structural Weight Optimization Of The Nasa Sugar Truss-Based Wing	Maria Rita Barbosa Silveira Silva	Adm Nobre	Aerospace Structures
<b>Chair: Juliana Basilio</b>						
Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	10:40 - 12:00	2675	A Semi-Analytical Model For Buckling Load Prediction In Stiffened Composite Panels Through Vct Analysis	Lucas Giovanetti	Adm Nobre	Aerospace Structures
Friday	10:40 - 12:00	643	Development Of Buckling Charts For Grid-Stiffened Panels Under Shear Loading Using A Parametric Fem Approach	Henrique Fuzaro Gomes	Adm Nobre	Aerospace Structures
Friday	10:40 - 12:00	645	Buckling Analysis Of Integrally Grid-Stiffened Panels Subjected To Shear Loading With A Semi-Analytical Approach	Yago Bueno	Adm Nobre	Aerospace Structures
Friday	10:40 - 12:00	378	Numerical Modelling Of Low-Velocity Impact Damage In Composite Plates Using The Hashin 3D Criterion	Matteo Zanetti	Adm Nobre	Aerospace Structures
Friday	10:40 - 12:00	817	Buckling Prediction Of A Reinforced Composite Panel With Variable Thickness Using The Vibration Correlation Technique	Eduardo Victor Tavares de Melo Andrade	Adm Nobre	Aerospace Structures
<b>Chair: Clecio Fischer</b>						
Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	10:40 - 12:00	38	A review on flight control for multi-tiltrotor aerial vehicles	Marcus Vinicius Rodrigues de Lima	Adm Leo Grossman	Flight Dynamics
Friday	10:40 - 12:00	300	Flight Control Longitudinal Law for a Hypersonic Waverider Vehicle	Ermerson Moura	Adm Leo Grossman	Flight Dynamics
Friday	10:40 - 12:00	332	CubeSats as Support Systems for Lunar South Pole Landings in Artemis Missions	Ximena Celia Mendez Cubillos	Adm Leo Grossman	Flight Dynamics
Friday	10:40 - 12:00	360	Hypersonic waverider vehicle flight control latero-directional law implementation	Ermerson Moura	Adm Leo Grossman	Flight Dynamics
Friday	10:40 - 12:00	765	Longitudinal Dynamic Stability Criteria in Aircraft Design Optimization	Kaique Henrique Mina	Adm Leo Grossman	Flight Dynamics
<b>Chair: Lucas Giovanetti</b>						

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	14:00 - 15:30	621	Interlaminar Fracture Behaviour And Critical Model Energy In Metal Substrate With Castor Oil-Based Adhesive	Rudolf Kniess Ronchi	Adm Nobre	Aerospace Structures
Friday	14:00 - 15:30	358	Crack Propagation In Joint Pins Under Double Shear	Filipe Martins dos	Adm Nobre	Aerospace Structures
Friday	14:00 - 15:30	235	Computational Methodology To Analyse Cohesive Behaviour Coupled With The Xfem For Adhesive And Cohesive Failure On Bonded Joints	Lucas Locatelli Daufenback	Adm Nobre	Aerospace Structures
Friday	14:00 - 15:30	397	Sensitivity Analysis Of Different Piezoelectric Sensor Geometries For Damage Detection In Cfrp Beam Structures	Gustavo Henrique Oestereich	Adm Nobre	Aerospace Structures
<b>Chair: Leonardo Nepomuceno</b>						
Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	14:00 - 15:30	1480	Scramjet Engine Control Law for a Hypersonic Waverider Vehicle	Ermerson Moura	Adm Leo Grossman	Flight Dynamics
Friday	14:00 - 15:30	1499	Total Energy Control System for a Hypersonic Waverider Vehicle	Ermerson Moura	Adm Leo Grossman	Flight Dynamics
Friday	14:00 - 15:30	1507	Hypersonic Waverider Vehicle Flight Control Autopilot System Design and Implementation	Ermerson Moura	Adm Leo Grossman	Flight Dynamics
Friday	14:00 - 15:30	2793	Investigation of Need for Nonlinear Control for a Fighter Jet at Transonic Speeds	Júlia Morone Drummond Alves	Adm Leo Grossman	Flight Dynamics
Friday	14:00 - 15:30	41	System identification of a flexible fixed-wing aircraft using Physics Informed Neural Network	Rodrigo Costa do Nascimento	Adm Leo Grossman	Flight Dynamics
<b>Area: Bioengineering</b>						
<b>COBEM 2025</b>						
<b>Chair: Bruno Agostinho Hernandez</b>						
Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	8:00 - 9:30	1063	Computational Modeling of Breast Compression for Mechanical Characterization of Cancer in Elastography Medical Test	William Peters	PG7	Biomechanics
Friday	8:00 - 9:30	2584	Distal fractures of non-modular femoral stems in primary total hip arthroplasty: the role of patient-related risk factors in mechanical performance	Jorge Antonio Velasco Parra	PG7	Biomechanics
Friday	8:00 - 9:30	391	A Coupled Discrete-Continuous Finite Element Model for Assessing the Suspension Efficiency of a Treadmill	Bruno Agostinho Hernandez	PG7	Biomechanics
Friday	8:00 - 9:30	2736	Modeling, simulation and optimization of an ultrasound therapy to disrupt cancer cells and pathogens	José Viriato Coelho Vargas	PG7	Biomechanics
Friday	8:00 - 9:30	355	Evaluating multi-class classification for gait intent of mimitized post-stroke patients	Felipe Martins	PG7	Biorobotics
Friday	8:00 - 9:30	2316	Estimation of Thermophysical Properties of Filamentous Fungal Colonies	Luiz Fernando Silva Ferreira	PG7	Biofluids and heat

**Chair: Bruno Agostinho Hernandez**

Friday	10:40 - 12:00	2563	Radiofrequency thermal ablation guided by magnetic resonance thermometry	Eber Dantas de Sá Paiva	PG7	Biofluids and heat
Friday	10:40 - 12:00	878	On the rupture of intracranial aneurysms: using CFD to assess whether wall curvature could predict local hemodynamics	Iago Lessa Oliveira	PG7	Biofluids and heat
Friday	10:40 - 12:00	919	On the Effect of High Heart Rates During Exercises on the Hemodynamics of Brain Aneurysms	Henrique Scalon	PG7	Biofluids and heat
Friday	10:40 - 12:00	2710	Reconstructing Temperature Fields and Thermal Dose in RFA Hyperthermia Treatments of Tumors	Isabella Azevedo dos Santos de Oliveira	PG7	Biofluids and heat
Friday	10:40 - 12:00	568	Computational study of the flow inside aneurysms in the abdominal aorta	Lara Andressa Ordonhe Gonçalves	PG7	Biofluids and heat

**COBEM 2025****Chair: Libardo Andrés Gonzales Torres**

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	14:00 - 15:15	975	Development of an Experimental Bench to study Flutter in Prosthetic Heart Valves using High-speed filming	Jorge Felipe Assad Bensoussan	PG7	Biofluids and heat
Friday	14:00 - 15:15	176	Manufacture of Silicone Valves for In Vitro Tests	Nicole Pires	PG7	Biofluids and heat
Friday	14:00 - 15:15	833	Computational Modeling of Glucose and Cellular Marker Distribution in Organ-on-a-Chip Systems: A Finite Element Approach	Libardo Andrés González Torres	PG7	Biofluids and heat
Friday	14:00 - 15:15	1516	On the Origin of the High Oscillatory Shear Index in a Patient-Specific Intracranial Aneurysm	Alisson Baldissera	PG7	Biofluids and heat

**Area: Dynamics, Control, Vibrations and Acoustics****Chair: Geice Paula Villibor**

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	8:00 - 9:30	4	Parameter Estimation Of Suspension Systems For A 6X6 Wheeled Military Vehicle Using PSO	Ricardo Teixeira Da Costa Neto	Adm Leo	Vehicle Dynamics
Friday	8:00 - 9:30	326	Modeling And Numerical Comparison Of Conventional Suspension And Interconnected Hydropneumatic Suspension	Angelo Nuti	Adm Leo	Vehicle Dynamics
Friday	8:00 - 9:30	935	Design and Optimization of a Planetary Transmission for a Formula Student Electric Vehicle	Gabriel Dias	Adm Leo	Vehicle Dynamics
Friday	8:00 - 9:30	1007	Study and Design of a Planetary Transmission for Application in an Electrified Agricultural Machine	Alef de Oliveira Warol	Adm Leo	Vehicle Dynamics
Friday	8:00 - 9:30	1394	Development of an Inertial Dynamometer for Collecting Particulate Matter Emitted by Brake Pads	Vitor Catão	Adm Leo	Vehicle Dynamics
Friday	8:00 - 9:30	2053	A Differential Evolution Approach For Inverting The Pacejka Formula	Guilherme Bernardi	Adm Leo	Vehicle Dynamics

Area: Energy and Thermal Sciences						
Chair: Su Jian						
Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	8:30 - 9:30	2357	Investigating paths for the integration of nuclear power plants and membrane distillation for electricity and potable water cogeneration	Kleber Marques Lisboa	EQ Aud2	Nuclear Energy
Friday	8:30 - 9:30	2387	Prototyping for Numerical and Experimental Verification and Validation of Small Modular Reactor Components	Rebeca Cabral Gonçalves	EQ Aud2	Nuclear Energy
Friday	8:30 - 9:30	2416	Simplified Thermal-Hydraulic Analysis of Pump-Induced Transients in PWR Primary System	Jhulia Ceccon	EQ Aud2	Nuclear Energy
Friday	8:30 - 9:30	2656	A new stabilised finite element formulation with discontinuity capturing: application to axisymmetric incompressible flow and heat transfer	Paulo Augusto Berquó de Sampaio	EQ Aud2	Nuclear Energy
Chair: Diego de Lima Sousa						
Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	8:30 - 9:30	1937	Comparing Magnetization Models in Ferrofluid Thermomagnetic Convection: Linear Approximation and Langevin Function	Luis Castro	EQ Aud1	Numerical Heat
Friday	8:30 - 9:30	1973	A Gpu Implementation Of Gas Tungsten Arc Welding (Gtaw) Model Using Cuda	Ariel Flores Monteiro de Oliveira	EQ Aud1	Numerical Heat
Friday	8:30 - 9:30	1989	1D Radiative Heat Transfer of Nanofluid: Extinction Behavior Comparison	Pedro Henrique de Souza	EQ Aud1	Numerical Heat
Friday	8:30 - 9:30	2283	Numerical Study of a Liquid Cooling System for a Cylindrical Lithium-ion Battery Module	Gabriel Ribeiro Rossger	EQ Aud1	Numerical Heat
Area: Engineering Design						
Chair: Pablo Deivid Valle						
Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	8:30 - 9:30	238	Application Of Industry 4.0 In Waste Reduction: A Study With A Medium-Sized Brewery	Lucas Cilião Guimarães	PG11	Industry 4.0
Friday	8:30 - 9:30	1872	Design of an electric tricycle for outdoor leisure activities focused on PWD as end users.	Daniel Cristiano Almeida Kerber	PG11	Case Studies
Friday	8:30 - 9:30	955	Modelling And Simulation Of Assembly Operations In The Tire Mold Industry	Kaick Santos	PG11	Case Studies
Friday	8:30 - 9:30	1484	Numerical and experimental comparison of insertion force for automotive plastic parts	Lenon Audibert Cisco	PG11	Case Studies
Chair: Marcell Maceno						

Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	10:40 - 12:00	2509	Savonius Turbine Blade Optimization for Low Wind Conditions Using Response Surface Methodology and Genetic Algorithms	Caio Augusto Mascarenhas Dias Filho	PG11	Design for X
Friday	10:40 - 12:00	2045	Evaluation Of Packaging Environmental Performance And Its Role In Reducing Food Waste	Cassiano Lemanski de Paiva	PG11	Design for X
Friday	10:40 - 12:00	2202	Redesign Method Proposal Based on Design for Sustainability and User Assessment	Fernanda Ramos Assolari	PG11	Design for X
Friday	10:40 - 12:00	444	Bioinspired Design of a Low and Medium-Velocity Impact Structure	James Fernando Hernandez Chacua	PG11	Design Creativity
Friday	10:40 - 12:00	243	Analysis of different materials for optimized passive climate control and thermal comfort in energy-efficient buildings	Jayares Michels	PG11	Design Creativity
<b>Chair: Rodrigo Bastos Fernandes</b>						
Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	14:00 - 15:30	1918	An Agile Method and Framework for Model-Based Systems Engineering	Leonardo Souza	PG11	Project management
Friday	14:00 - 15:30	2291	Challenges and Opportunities of Digital Technologies in assessing the social performance of the value chain: A Literature Review	Andréa Ryba Lenzi	PG11	Project management
Friday	14:00 - 15:30	2697	Data-Driven Fault Detection In Bldc Motors Of Electric Bicycles Using Unsupervised Machine Learning	Carmen Elena Patino-Rodriguez	PG11	Reliability
Friday	14:00 - 15:30	2746	Transformation of the After-Sales Service for Heavy Vehicles Applying a Predictive Maintenance Model based on Machine Learning and Telematics	Fernando Jesus Guevara Carazas	PG11	Reliability
Friday	14:00 - 15:30	2242	Development of a Remote Sensing System to Monitor the Usage and Occupancy of Telecommunications Infrastructure	Bruno Ziegler Haselein	PG11	Reliability
<b>Area: Fluid Mechanics</b>						
<b>Chair: Diogo E. V. Andrade</b>						
Day	Hour	Paper ID	Paper Title	Presenter	Room	SubArea
Friday	8:00 - 9:30	139	Gas displacement flows of Herschel-Bulkley materials in axisymmetric capillary tubes	Ivan Siqueira	PG3	Rheology
Friday	8:00 - 9:30	2472	Flow Curve and Oscillatory Shear Rheology of Xanthan Gum/ Glycerol Dispersions	Bianca Sousa	PG3	Rheology
Friday	8:00 - 9:30	1860	Advances and Challenges in the Literature on Friction Factor Estimation for Herschel-Bulkley Non-Newtonian Fluids in Pipelines	Marlon Ribeiro	PG3	Rheology
Friday	8:00 - 9:30	1800	Comparison between two invariant models in the modeling of Poiseuille flow for non-Newtonian fluids using the Power-law model	Luís Eduardo Silva Borges	PG3	Rheology
Friday	8:00 - 9:30	1940	Rheological Characterization of DPPC in an Isotropic Radial Flow	Henrique Uchôa	PG3	Rheology

Friday	8:00 - 9:30	2116	Friction factor assessment on rough surfaces for viscoplastic fluids in laminar regime through numerical simulation	Gustavo Eduardo Oviedo Celis	PG3	Rheology
<b>Chair: Fabio T. Kanizawa</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	8:00 - 9:30	2208	Evaluation Of Hydrate-Like Particle Transportability In Multiphase Flow	Vitor Otávio Ochoski Machado	PG6	Multi-phase
Friday	8:00 - 9:30	316	Two-Phase Flow Dynamics and Transient Modeling for CO <sub>2</sub> Injection in Complex Well Geometries	Bernardo Vieira	PG6	Multi-phase
Friday	8:00 - 9:30	2215	Experimental Evaluation Of Gas-Liquid-Solid Slug Flow With Hydrate-Like Particles	Paúl Delgado	PG6	Multi-phase
Friday	8:00 - 9:30	2147	Simulation of simple ternary fluid flows with the phase field lattice Boltzmann method	Edilson Guimarães de Souza	PG6	Multi-phase
Friday	8:00 - 9:30	835	Unit Cell Modeling of Horizontal Intermittent Gas/Herschel–Bulkley Flows: Parameter Estimation via Physics-Based Equations and Genetic Algorithms	Rafael Cordebela	PG6	Multi-phase
Friday	8:00 - 9:30	1028	Numerical Simulation of a non-Newtonian Fluid-Solid Interaction	Fabio Gaspar Santos Jøenior	PG6	Multi-phase
<b>Chair: Arthur Oliveira</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	10:40 - 12:10	2649	Data Science-Based Methodology to Correlate Operational Data from Multiphase Flow Meters and Separator Vessels Using Separator Data as Reference	Luiz Eduardo Vedoato Almeida Everton	PG6	Multi-phase
Friday	10:40 - 12:10	1042	A Data Science Application for Validating Multiphase Measurement by Separator Data	Gustavo Grecco Lacourt	PG6	Multi-phase
Friday	10:40 - 12:10	595	Modeling transient gas-liquid slug flow evolution in vertical risers with a slug tracking model	Zhongheng Lai	PG6	Multi-phase
Friday	10:40 - 12:10	529	Numerical Simulation of Slug Flow in Pipes with a Pressure Free Model	Zhe Zhang	PG6	Multi-phase
Friday	10:40 - 12:10	2804	2D modelling of gas-liquid slug behaviour in horizontal mini-channel	Rigoberto Morales	PG6	Multi-phase
Friday	10:40 - 12:10	2528	Numerical Simulation of Turbulent Particle-Laden Flow Around a Bluff Body with a Blunt Trailing Edge	Robert Jäckel	PG6	Multi-phase
<b>Chair: Bernardo Ribeiro</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	10:40 - 12:00	1122	Numerical Analysis of the Airflow inside a Solar Dryer	Gabriel Ottoni de Medeiros	PG3	CFD

Friday	10:40 - 12:00	599	Comparison of voting criteria between Brazilian industry practice and ISA-TR84.00.07-2018 guidance	Gustavo Santos de Oliveira Marques	PG3	CFD
Friday	10:40 - 12:00	343	A Computational Platform for Teaching Fluid Mechanics and Heat Transfer	Daniel Elbachá Marnet	PG3	CFD
Friday	10:40 - 12:00	1919	Comparative Analysis of Fluid Flow in Triply Periodic Minimal Surfaces Using OpenFOAM	Rafael Coelho	PG3	CFD
<b>Chair: Kleber Lisboa</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	10:40 - 12:00	1539	Assessment Of Geometric And Flow Parameter Effects On Separation Efficiency In Curved Supersonic Separators	Giovanni Ballario Righini	PG4	CFD
Friday	10:40 - 12:00	978	A Quasi-One-Dimensional Model For A Controllable Inner-Body Supersonic Gas Separator	Enzo Contesini Zugliani	PG4	CFD
Friday	10:40 - 12:00	468	Analysis Of The Efficiency Of Vertical-Axis Wind Turbines With Flow Concentrators To Maximize Available Wind Power	Felipe Brum Rossato	PG4	CFD
Friday	10:40 - 12:00	1198	Numerical Study Of Electrode Size's Influence On The Flow Rate In Mhd Micropumps Using Openfoam	Guilherme Alvarez	PG4	CFD
Friday	10:40 - 12:00	1579	Computational Analysis Of Onshore And Offshore Oscillating Water Column (Owc) Devices Comparison Between Stokes Wave Generation Models And Jonswap Spectrum	Kristian Nascimento Telšken	PG4	CFD
<b>Chair: Joel R. Karp</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	14:00 - 15:30	275	Effect of Aerodynamic Drag on the Stability of a Magnetic Climbing Robot for Flare Inspection	Rodrigo Pellegrini Fodi	PG4	CFD
Friday	14:00 - 15:30	546	Kinetic model for the Boltzmann equation applied to sublimation and deposition of argon in a gas mixture	Denize Kalempa	PG4	CFD
Friday	14:00 - 15:30	244	Numerical simulation of resin infusion and void minimization in vacuum-assisted resin transfer moulding	Karla Beatriz Vivian Silveira	PG4	CFD
Friday	14:00 - 15:30	556	CFD Investigation of Sweep Gas Influence on Zeolite Membrane Performance for CO <sub>2</sub> /CH <sub>4</sub> Separation	Tiago Guena	PG4	CFD
Friday	14:00 - 15:30	2391	A systematic approach based on a Hele-Shaw cell to study the behavior of complex flows in porous media	Matheus Sampaio	PG4	CFD
Friday	14:00 - 15:30	887	Pore-scale two-phase flow prediction using physics informed neural networks	Pedro Calderano	PG4	CFD
<b>Chair: Eduardo Germer</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>

Friday	14:00 - 15:15	422	Parameterization of Horizontal-Axis Wind Turbines Using Computational Fluid Dynamics and Python Programming Language	Cauã Da Silva Ferrari	PG6	Industrial Applications
Friday	14:00 - 15:15				PG6	Industrial Applications
Friday	14:00 - 15:15	2473	Numerical Modeling of Hydrodynamic Journal Bearings Using Finite Difference Method	Gabriel Albino	PG6	Industrial Applications
Friday	14:00 - 15:15	2524	Hydrodynamic and Thermal Analysis of Fluid Flow in Tubes Partially Filled with Porous Material	Eron Aiolfi	PG6	Industrial Applications
<b>Chair: Cezar O. R. Negrão</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	14:10 - 15:30	1493	Modeling And Simulation Of Coupled Column-Annular Cement Displacement Operations Including Bottom Plug	Lucas Constantino	PG 3	Rheology
Friday	14:10 - 15:30	594	Papaya Residue As A Sustainable Additive For Rheology Modification In Synthetic-Based Drilling Fluid	Terhemba Rodney China	PG 3	Rheology
Friday	14:10 - 15:30	520	Rheology Of Dilute Emulsions Of Surfactant-Covered Ferrofluid Droplets	Paulo Henrique Neves Pimenta	PG 3	Rheology
Friday	14:10 - 15:30	2297	Flow Restart Analysis And Property Prediction Using Neural Networks For Viscous Pad On Brine Drilling Fluids In Pump And Dump	Julian Andres Jerez Suarez	PG 3	Rheology
Friday	14:10 - 15:30	2249	Effect Of Hollow Glass Spheres Concentration On The Rheological Behavior Of An Oil-Based Drilling Fluid.	Marcos Vinícius Costa	PG 3	Rheology
<b>Area: Materials and Manufacturing</b>						
<b>Chair: Milton Polli</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	8:00 - 9:30	1657	Analysis of the Performance of Helical Drills with Interchangeable Tips in Drilling ASTM A572 Gr 50 Steel	Salatiel Oliveira Nascimento	PG15	Material removal
Friday	8:00 - 9:30	1953	Dual Modeling and Mean Squared Error Minimization of Surface Roughness Rt in End Milling of Duplex Stainless Steel UNS S32205	Luiz Fernando Braga	PG15	Material removal
Friday	8:00 - 9:30				PG15	Material removal
Friday	8:00 - 9:30	803	Monitoring of Spindle Torque Signal During End Milling of Additively Manufactured Maraging Steel	Amanda Rossi de Oliveira	PG15	Material removal
Friday	8:00 - 9:30	1964	Experimental analysis of temperature in the turning of hardened steel using an infrared camera	Milton Polli	PG15	Material removal
Friday	8:00 - 9:30	763	Use of the Box-Jenkins Method (ARIMA) in Predicting Roughness Ra	Luiz Fernando Braga	PG15	Material removal
<b>Chair: Alisson Rocha</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>

Friday	8:00 - 9:30	2318	Neural Networks for Prediction, Analysis, and Optimization of RSW in AHSS Steels	Rafael Andrade	CT Atos	Union
Friday	8:00 - 9:30	2822	Analysis of Residual Stress and Vibration Stress Relief in Welded Joints of Advanced High-Strength Steels	Paola Rodrigues Pereira	CT Atos	Union
Friday	8:00 - 9:30	2355	Simulation and Evaluation of the Influence of DC and AC Resistance Welding on AHSS	Víctor Augusto Nascimento Magalhães	CT Atos	Union
Friday	8:00 - 9:30	1165	Evaluation of the MIG/MAG Process with Cold Wire Addition for Coating Applications	Carlos Alberto Taveira Cortez Filho	CT Atos	Union
Friday	8:00 - 9:30	420	Development Of Aluminum Diffusion Brazing As A Manufacturing Route For Heat Pipes	Vitor Chiavegato	CT Atos	Union
<b>Chair: Márcio Mafra</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	10:40 - 12:00	2043	Proposal of a Methodology for Preventing Failures in the Mechanical Forming Process in Real Time Based on the Application of Machine Learning	Carlos Vicari	PG15	Metallurgical
Friday	10:40 - 12:00	2149	Thermal Plasma Treatment as an Alternative to Conventional Abrasive Blasting: Effects of Torch Distance on Surface Properties	Julio Luiz Henrique Silva	PG15	Metallurgical
Friday	10:40 - 12:00	388	Non-linear finite element simulation of the coin forging process using ANSYS with experimental validation.	Airton João Gomes Delgado	PG15	Metallurgical
Friday	10:40 - 12:00	1011	Effect of Prealloyed Powder Processing Route on the Properties and Performance of Diamond Composites	Marcello Filgueira	PG15	Metallurgical
Friday	10:40 - 12:00	1155	Influence of Tool Conditions on Burr Formation during Milling of	Roberto Simoni	PG15	Metallurgical
<b>Chair: Leandro Joao da Silva</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	10:40 - 12:00	363	Intermetallic layers influence on the Microhardness of Laser Brazed specimens	Bruno Fuga	CT Atos	Union
Friday	10:40 - 12:00	227	Integration of the CALPHAD Method and Artificial Neural Networks in the Prediction of the Microstructure of the Heat Affected Zone (HAZ) of Welded Joints of ASTM A36 Steel	Luís Eduardo Silva Borges	CT Atos	Union
Friday	10:40 - 12:00	1907	Evaluation of the Effects of Auxiliary Gas Injection on Distortions in TIG Welding of Thin Sheets Through a Trailing Shield	Jorge Luis Junior	CT Atos	Union
Friday	10:40 - 12:00	1270	Effect of Probe Length on Defect Formation and Mechanical Properties of Dissimilar AA2024-T3/AA7050-T76 FSW T-Lap Joint	João Paulo Gabre Ferreira	CT Atos	Union
Friday	10:40 - 12:00	2760	Polarity and depth effects in wet welding performance using a nickel-based tubular wire	Duván Sánchez Quintana	CT Atos	Union

<b>Chair: Americo Scotti</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	14:00 - 15:00	287	Identifying Important Factors for Changes in Manufacturing Management from Industry 3.0 to Industry 4.0	Breno Mendonça	PG15	Management
Friday	14:00 - 15:00	196	Incremental Industry 4.0 Solutions for Brazilian Micro and Small Enterprises	Fábio Muzaranho Jr.	PG15	Management
Friday	14:00 - 15:00	2251	Tests on Low Melting Metallic Filament Extrusion Additive Manufacturing	Téo Maftai Heringer	PG15	Additive
Friday	14:00 - 15:00	2724	Operational Performance Enhancement in Underwater Shielded Metal Arc Welding via Pulsed Current	Orlando Mauricio Castellanos Gonzalez	PG15	Union
<b>Area: Offshore and Petroleum-Engineering</b>						
<b>Chair: Giuliana Venter</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	
Friday	8:00 - 9:30	658	Application of AI in the design of offshore systems for oil production	Johne Trindade	PGMEC1	
Friday	8:00 - 9:30	346	Leveraging Recurrent Neural Networks and Sentiment Analysis for Oil Price Prediction	Eduardo Tulio Santos	PGMEC1	
Friday	8:00 - 9:30	441	Anomaly Detection in Oil-Producing Wells using LSTM Autoencoder	Kevin Schmöckel	PGMEC1	
Friday	8:00 - 9:30	2338	Gas Hydrate Dissociation by Depressurization: Influence of Subcooling, Water Cut, and Hydrate Formation Characteristics	Caio Soares	PGMEC1	
Friday	8:00 - 9:30	2512	Development of an Automated System for Determining Petroleum Acidity	Pedro Manuel Granados Bonilla	PGMEC1	
<b>Chair: Marcio Carvalho &amp; Moyses Marcelino</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	
Friday	10:40 - 12:00	1887	Evaluating Miscible Gas And Water Injection For Enhanced Oil Recovery Under Brazilian Pre-Salt Conditions	Rayana Peres	PGMEC1	
Friday	10:40 - 12:00	646	Multi-Phase Flow In Fractured Carbonates: Effect Of Confining Pressure On Relative Permeability	Wanderson Ferreira Braz	PGMEC1	
Friday	10:40 - 12:00	2289	A Coupled Well-Reservoir Model for Characterizing Stratified Reservoirs: Integrating Temperature and Pressure Data to Estimate Reservoir Properties	José Adriano Cardoso	PGMEC1	
Friday	10:40 - 12:00	2243	Injection Scenario Of CO <sub>2</sub> -Rich Mixtures	Allan de Bastos Falcão	PGMEC1	
Friday	10:40 - 12:00	2108	Comparative Analysis of CO <sub>2</sub> Injection Wellbore Simulators	Marcus Vinícius de Souza Crispim	PGMEC1	
<b>Chair: Marcio Carvalho &amp; Moyses Marcelino</b>						

Friday	14:00 - 15:30	1615	Numerical assessment of a Newtonian quasi-1D mixture model for wax deposition	Samuel Candido	PGMEC1
Friday	14:00 - 15:30	1847	Numerical Evaluation Of The Transport Phenomena That Govern The Process Of Thermal Removal Of Wax Deposits	Ivan Fernney Ibanez Aguilar	PGMEC1
Friday	14:00 - 15:30	2178	Hydrate Management In Multiphase Flow: Morphology Evaluation Upon Shut-In And Restart With CO <sub>2</sub> -Enriched Natural Gas And Different Salt Concentrations	Laércio Malacarne Junior	PGMEC1
Friday	14:00 - 15:30	2049	Modeling the life-cycle thermodynamic performance of multi-stage centrifugal compressors	Paulo Eduardo Batista de Mello	PGMEC1
Friday	14:00 - 15:30	1321	Developing a procedure to estimate SAFT parameters from high-pressure calorimetry data for dense liquids	Eduardo Alves	PGMEC1

<b>Area: Bioengineering</b>						
<b>Chair: Bruno Agostinho Hernandez</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	8:00 - 9:30	1063	Computational Modeling of Breast Compression for Mechanical Characterization of Cancer in Elastography Medical Test	William Peters	PG7	Biomechanics
Friday	8:00 - 9:30	2584	Distal fractures of non-modular femoral stems in primary total hip arthroplasty: the role of patient-related risk factors in mechanical performance	Jorge Antonio Velasco Parra	PG7	Biomechanics
Friday	8:00 - 9:30	391	A Coupled Discrete-Continuous Finite Element Model for Assessing the Suspension Efficiency of a Treadmill	Bruno Agostinho Hernandez	PG7	Biomechanics
Friday	8:00 - 9:30	2736	Modeling, simulation and optimization of an ultrasound therapy to disrupt cancer cells and pathogens	José Viriato Coelho Vargas	PG7	Biomechanics
Friday	8:00 - 9:30	355	Evaluating multi-class classification for gait intent of mimitized post-stroke patients	Felipe Martins	PG7	Biorobotics

Friday	8:00 - 9:30	2316	Estimation of Thermophysical Properties of Filamentous Fungal Colonies	Luiz Fernando Silva Ferreira	PG7	Biofluids and heat
<b>Chair: Bruno Agostinho Hernandez</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	10:40 - 12:00	2563	Radiofrequency thermal ablation guided by magnetic resonance thermometry	Eber Dantas de Sá Paiva	PG7	Biofluids and heat
Friday	10:40 - 12:00	878	On the rupture of intracranial aneurysms: using CFD to assess whether wall curvature could predict local hemodynamics	Iago Lessa Oliveira	PG7	Biofluids and heat
Friday	10:40 - 12:00	919	On the Effect of High Heart Rates During Exercises on the Hemodynamics of Brain Aneurysms	Henrique Scalon	PG7	Biofluids and heat
Friday	10:40 - 12:00	2710	Reconstructing Temperature Fields and Thermal Dose in RFA Hyperthermia Treatments of Tumors	César Pacheco	PG7	Biofluids and heat
Friday	10:40 - 12:00	568	Computational study of the flow inside aneurysms in the abdominal aorta	Lara andressa ordonhe gonçales	PG7	Biofluids and heat
<b>Chair: Libardo Andrés Gonzales Torres</b>						
<b>Day</b>	<b>Hour</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>	<b>Room</b>	<b>SubArea</b>
Friday	14:00 - 15:15	975	Development of an Experimental Bench to study Flutter in Prosthetic Heart Valves using High-speed filming	Lorena Guimarães	PG7	Biofluids and heat
Friday	14:00 - 15:15	176	Manufacture of Silicone Valves for In Vitro Tests	Nicole Pires	PG7	Biofluids and heat
Friday	14:00 - 15:15	833	Computational Modeling of Glucose and Cellular Marker Distribution in Organ-on-a-Chip Systems: A Finite Element Approach	João Guilherme Tomadon Mendes	PG7	Biofluids and heat
Friday	14:00 - 15:15	1516	On the Origin of the High Oscillatory Shear Index in a Patient-Specific Intracranial Aneurysm	Alisson Baldissera	PG7	Biofluids and heat