





| | | Springer Best Paper Award | d | | | | |
|-----------------------|------------------|--|---|--|--|--|--|
| Aerospace Engineering | | | | | | | |
| Poster | COBEM2023 - 2240 | Development Of An Experimental Correction Model For Horizontal Buoyancy In The Testing Section Of The Closed-Circuit Wind Tunnel At Ufmg | Aerodynamics | Marina Fernandes | | | |
| Oral | COBEM2023 - 2271 | Experimental Investigation Of The Boundary Layer Transition Over Surface Irregularities | Aerodynamics | Victor Barcelos Victorino | | | |
| | | Bioengineering | | | | | |
| Poster | COBEM2023 - 0375 | Influence Of Tissue Stiffness On Leaflet Oscillation Dynamics During A Cardiac Cycle. | Biomechanics | Saulo Gonçalves | | | |
| Oral | COBEM2023 - 0131 | Bipedal Human-Exoskeleton Model For Simulations Of Squat-To-Stand Movement | Biomechanics | Denis César Moscon Pereira | | | |
| | | Combustion | | | | | |
| Poster | COBEM2023 - 0890 | Sensitivity Analysis Of A Numerical Model To Predict Polarization Curves Of A Solid Oxide Fuel Cell And Comparison With Experimental Results | Chemical Kinetics and Modeling | Guilherme Pickler | | | |
| Oral | COBEM2023 - 1801 | Wall Temperature Influence On Confined Laminar Equidiffusional Jet Flames | Laminar Flames | Albino Leiroz | | | |
| | | Dynamics, Control, Vibrations, And Acoustics | | | | | |
| Poster | COBEM2023 - 2299 | Convolutional Neural Networks For Pattern-Based Fault Diagnosis In Low-Rotation Equipment | Dynamics of Mechanical Systems | João Lucas Lobato Soares | | | |
| Oral | COBEM2023 - 0626 | Investigation Of An Identical Metastructure For Vibration Attenuation In A Crankshaft With Non-Constant Inertia | Nonlinear dynamics | Nícolas da Silva Dias | | | |
| | | Education | | | | | |
| Poster | COBEM2023 - 0856 | Development Of A Pneumatic Bench For Testing Truss Bridges | Teaching and Learning in Future Engineering Education | Isaac Varela Brito Guimarães de Souza | | | |
| Oral | COBEM2023 - 1694 | Harpias - Stimulating Women To Enter And Stay In Engineering In Brazilian Amazon | Teaching and Learning in Future Engineering Education | Marina Costa | | | |
| | | Energy And Thermal Sciences | | | | | |
| Poster | COBEM2023 - 1099 | Estimation Of The Redistribution Behavior In The Biflux Anomalous Diffusion Problem | Computational Intelligence Applied to Thermal Systems | Douglas Corrêa | | | |
| Oral | COBEM2023 - 0851 | Two-Phase Frictional Pressure Drop At High Saturation Temperatures In A Horizontal Micro-Scale Channel | Heat and Mass Transfer Fundamentals | Daniel Borba Marchetto | | | |



SPRINGER NATURE



| | | Engineering Design | | |
|--------|------------------|---|--|---------------------------------------|
| Poster | COBEM2023 - 0325 | Goal-Oriented Requirements Engineering Applied In The Design Of A Gyrostabilized Turret Of Armored Vehicles | Design Process, Methodology, Methods, and Tools | Murillo Batista dos Santos |
| Oral | COBEM2023 - 2197 | Development Of Hydro Jetting Nozzles For Insulator Washing | Case Studies and Industrial Experiences in Engineering | Lucas Luzzi |
| | | Fluid Mechanics And Rheology | | |
| Poster | COBEM2023 - 2027 | Numerical Study Of Slot Coating Flows With A Viscous Liquid-Gas Interface | Computational Fluid Dynamics | Filipe Oliveira da Silva |
| Oral | COBEM2023 - 1592 | Machine Learning-Based Reduced-Order Models For Burgers And Shallow-Water Equations | Computational Fluid Dynamics | Pedro Roberto Barbosa Rocha |
| | | Fracture, Fatigue, And Structural Integrity | | |
| Poster | COBEM2023 - 1669 | Collapse Of Subsea Pipelines: Numerical Study On The Interaction Of Corrosion Defects With Different Geometric Properties | Pipelines and Pipes | Savanna Cristina Medeiros D'Aguiar |
| Oral | COBEM2023 - 0380 | Application Of Micromechanically-Based Damage Model To Ductile Tearing Behaviour Of Interacting Surface Cracks | Fracture | Gabriel de Castro Coêlho |
| | | Heating, Ventilation, Air-Conditioning, And Refriger | ation | |
| Poster | COBEM2023 - 1234 | Total Equivalent Warming Impact Of Alternative Refrigerants For Replacement Of R-22 | Refrigeration | Willian Moreira Duarte |
| Oral | COBEM2023 - 1460 | Experimental Performance Evaluation Of An Automotive Air Conditioning System | Air-conditioning | Diogo Lôndero Da Silva |
| | | Materials And Manufacturing Engineering | | |
| Poster | COBEM2023 - 2231 | Evaluation Of "Micro-Cladding" Parameters In Face Of Thermal Effects Reduction For Top-Hat Lasers | Materials Characterization and Processing | Joares Reis |
| Oral | COBEM2023 - 1878 | Characterization Of The Aa6082 Matrix Composite With Nbc Obtained Through Friction Stir Processing | Materials Characterization and Processing | Denner Traiano |
| | | Mechatronics And Automation | | |
| Poster | COBEM2023 - 1126 | Modeling And Evaluation Of The Regenerative Potential Of A Quarter-Car With Hydraulic Damper | Fluid Power Systems | João Gabriel Benedito Duarte |
| Oral | COBEM2023 - 0324 | A Review On Gyrostabilized Systems | Control Systems | Murillo Batista dos Santos |
| | | Nano And Microfluidic And Microsystems | | |
| Poster | COBEM2023 - 0730 | Influence Of Working Fluid On Micro-Pin Fin Heat Sinks Under Single-Phase Flow Conditions | Heat and Mass Transfer in Micro and Nano scales | Ariany Moreira |
| | COBEM2023 - 0253 | Evaluation Of Flow Boiling Pressure Drop At High Mass Velocities In Microchannels Using R123 | Heat and Mass Transfer in Micro and Nano scales | Thalles Coimbra Borba Roldão |







| Non-Linear Phenomena | | | | | | | | | |
|--|------------------------------------|---|--|-----------------------------------|--|--|--|--|--|
| Poster | | | | | | | | | |
| Oral | COBEM2023 - 0050 | Nonlinear Dynamics Of A Cantilever Beam Excited By A Limited Power Supply With Magnetic Interaction | Experimental Methods in Nonlinear Phenomena | José Manoel Balthazar | | | | | |
| | Offshore And Petroleum Engineering | | | | | | | | |
| Poster | COBEM2023 - 1062 | Development Of A Inspection Tool For Flexible Pipes Integrity Test: Annular Flooded Detection | Offshore and Petroleum Engineering | Carlos Alberto Nogueira Junior | | | | | |
| Oral | COBEM2023 - 0581 | Experimental Investigation Into The Impact Of Stage Number On The Performance Of ESP Operating With A Gas-Liquid Mixture. | Offshore and Petroleum Engineering | Yan Capellaro | | | | | |
| Smart Materials And Structures | | | | | | | | | |
| Poster | COBEM2023 - 0607 | Experimental Analysis Of A Smart Soft Beam Actuated By SMA Thin Ribbon Actuators | Shape Memory Alloys | Antonio Holanda | | | | | |
| Oral | COBEM2023 - 0415 | Analysis Of Shape Memory Alloys Composites Using Micromechanical Models | Shape Memory Alloys | Alencar Bernardino | | | | | |
| Solid Mechanics | | | | | | | | | |
| Poster | COBEM2023 - 1550 | Analysis Of Aeroelastic Stability Of Viscoelastic Sandwich Panels In Subsonic Regime Using The Nonplanar Doublet-Lattice Method | Structural Statics and Dynamics | Bruno Cunha | | | | | |
| Oral | COBEM2023 - 1793 | A 3D Constitutive Model For Modelling Milling Induced Damage In Composite Laminates | Composite Materials and Structures | Sergio Moni | | | | | |
| Uncertainty Quantification And Stochastic Modeling | | | | | | | | | |
| Poster | | | | | | | | | |
| Oral | COBEM2023 - 1451 | Reliability Estimation Of Crack Propagation In A Rotating Machine Shaft Using Bayesian Deep Learning | Probabilistic Modelling and Analysis, Simulation, and Soft Computing | Helio Fiori de Castro | | | | | |