

1. Record Nr.	UNINA9910800119503321
Autore	Singh Krishna Mohan
Titolo	Fluid Mechanics and Fluid Power, Volume 3 [[electronic resource]] : Select Proceedings of FMFP 2022 / / edited by Krishna Mohan Singh, Sushanta Dutta, Sudhakar Subudhi, Nikhil Kumar Singh
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	981-9963-43-5
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (726 pages)
Collana	Lecture Notes in Mechanical Engineering, , 2195-4364
Altri autori (Persone)	DuttaSushanta SubudhiSudhakar SinghNikhil Kumar
Disciplina	620.1064
Soggetti	Fluid mechanics Electric power production Mechanics, Applied Engineering Fluid Dynamics Mechanical Power Engineering Engineering Mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. CFD Analysis for the study of Automotive Underhood Aerodynamics and Thermal Management -- Chapter 2. Numerical Study of Nozzle Exhaust Plume Impingement on Flat Plate under Low Pressure Environment -- Chapter 3. Effect of Confinement in Coaxial Swirling Jets: Numerical study -- Chapter 4. Influence of Cryogenic Temperature on degradation of step graded scaffold: A CFD Study -- Chapter 5. Improved MLPG Method for Potential Flow Problem -- Chapter 6. Conjugate Heat Transfer Simulations Using Characteristic-based Off-Lattice Boltzmann Method -- Chapter 7. Sensitivity mapping of TBL wall-pressure spectra with CFD turbulence models for wind tunnel test result prediction.-Chapter 8. Numerical Predictions of Two-Phase Natural Circulation Loop Transients using DFM and HEM based Models -- Chapter 9. Implementation of the Accurate Conservative Phase Field Method for two-phase incompressible flows in a finite volume framework -- Chapter 10. Numerical Investigation of Inertance type

Pulse Tube Cryocooler for Space Applications -- Chapter 11. CFD Modelling of High Pressure Subcooled Flow Boiling in Vertical Pipes -- Chapter 12. Potential flow around square cylinder with rounded corners -- Chapter 13. Numerical Simulation and Validation of NACA0012 Airfoil to Predict its Performance during the Stalling Condition -- Chapter 14. Effect of Vent Position on Temperature Inhomogeneity inside Apple Storage Package: A Numerical Study -- Chapter 15. RANS simulations of ground effects on flow past airfoils with increasing camber. etc.

Sommario/riassunto

This book comprises select peer-reviewed proceedings of the 9th International and 49th National Conference on Fluid Mechanics and Fluid Power (FMFP 2022). This book brings together scientific ideas and engineering solutions put forth by researchers and practitioners from academia and industry in the important and ubiquitous field of fluid mechanics. The contents of this book focus on fundamental issues and perspective in fluid mechanics, measurement techniques in fluid mechanics, computational fluid and gas dynamics, instability, transition and turbulence, fluid-structure interaction, multiphase flows, microfluidics, bio-inspired fluid mechanics, aerodynamics, turbomachinery, propulsion and power and other miscellaneous topics in the broad domain of fluid mechanics. This book is a useful reference to researchers and professionals working in the broad field of mechanics.
