1. Record Nr. UNINA9911015632603321 Autore Arun K. R Titolo Proceedings of Fluid Mechanics and Fluid Power (FMFP) 2023, Vol. 5: Fluid Mechanics / / edited by K. R. Arun, G. Rajesh, Jaywant H. Arakeri, Hardik Kothadia Singapore:,: Springer Nature Singapore:,: Imprint: Springer., 2025 Pubbl/distr/stampa **ISBN** 981-9777-59-3 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (847 pages) Collana Lecture Notes in Mechanical Engineering, , 2195-4364 Altri autori (Persone) RajeshG ArakeriJaywant H KothadiaHardik Disciplina 620.1064 Soggetti Fluid mechanics Electric power production Mechanics, Applied **Engineering Fluid Dynamics Electrical Power Engineering Engineering Mechanics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Efficient Water Splitting Based Green Hydrogen Synthesis: A Numerical Nota di contenuto Approach -- Performance Assessment of Zeotropic Mixture for Different Organic Rankine Cycle (ORC) Configurations for Medium Source Temperature -- Numerical investigations on noise reduction in heat pump using a muffler with simple expansion chamber, radial baffles and perforated pipe configurations -- Mixed Convection Heat Transfer around a Sphere in a Rotating Fluid -- Performance analysis of Ranque Hilsch vortex tube varying L/D ratio and number of nozzles: -A computational Approach -- Rheotactic motion of a microswimmer near a slippery wall -- Design Evolution Of Coolant Passage For Cooling A Substrate By A Single Stream -- Computational Fluid Dynamics of Digestion inside the Stomach -- Effect of phase difference on the propulsion of a combined heaving and trailing-edge morphing foil --

Gravitational orientation of airways affect particle deposition in lungs.

Sommario/riassunto

This book presents select proceedings of the 10th International and 50th National Conference on Fluid Mechanics and Fluid Power. It covers recent research developments in the area of fluid mechanics. measurement techniques in fluid flows, computational fluid dynamics. The key research topics discussed in this book are fundamental studies in flow instability and transition, fluid-structure interaction, multiphase flows, solidification, melting, cavitation, porous media flows, bubble and droplet dynamics, bio-mems, micro-scale experimental techniques, flow control devices, underwater vehicles, bluff body, biofluid mechanics, aerodynamics, turbomachinery, propulsion and power, heat transfer and thermal engineering, fluids engineering, advances in aerospace and defence technology, micro- and nano-systems engineering, acoustics, structures and fluids, advanced theory and simulations, novel experimental techniques in thermo-fluids engineering, and many more. The book is a valuable reference for researchers and professionals interested in thermo-fluids engineering.