Taguette highlights: Move a Step 3

he CFD results were compared with DNS and experimental data in the literature. The roughness-resolving approach was used for all models to resolve the realistic geometry of irregular roughness in channel flows. The smooth-channel flow study was conducted at Re τ = 500, 1000, 2000, and 5000 and Pr = 0.71.

Document: Thermofluid_Paper1 **Tags:** Move a Step 3

This is because the device is supplied with air by Accepted 10 March 2021

a turbocharger mounted at the front of the vehicle which sucks this air and delivers it to the vortex tube, Available online 17 March 2021

which in turn produces hot air and gas at each of its ends cold air.

Document: Thermofluid_Paper2 **Tags:** Move a Step 3

The ionic liquids in the form of 1-butyl-4-methyl-Ionic liquids

pyradinium iodide (IL-I) and 1-ethylimidazolium chloride (IL-Cl) are mixed individually with a precursor of Time-resolved photoluminescence

Cesium Formamidinium Lead Triiodide and Methylammonium Chloride (CsFAPbI3− MACl). The decay of charge carriers within the perovskite film before and after passivation with ILs was measured by Time Resolved Photoluminescence Spectroscopy (TRPL). The effect of added ILs on the recombination rate of the photocarriers was investigated by analyzing the decay of the TRPL signal in all samples

Document: Thermofluid_Paper3 **Tags:** Move a Step 3

Several design modifications have been applied to PTCs in terms of reflector, receiver, and tracking system while different arrangements of thermal energy storage (TES) systems are being integrated to ensure maximum performance, and modifying TES geometry by inserting fins can enhance the discharge efficiency up to 24%. Primary reflector and receiver are the two most important components of LFRs and modifications techniques including them are showing significant prospects regarding their application on a commercial scale

Document: Thermofluid_Paper4 **Tags:** Move a Step 3

Four Zeotropic mixture

different thermodynamic models were used; they differed by the definition of maximal (T

Critical temperature

Eva) and minimal

(T

Working fluids categories

Cond) temperatures. Three different scenarios were investigated in all models by picking components from Organic rankine cycle

different working fluid classes to prepare zeotropic mixtures.

Document: Thermofluid_Paper5 **Tags:** Move a Step 3

Subsequently, computational fluid dynamics (CFD) simulations were employed to optimize the boundary conditions and geometrical parameters.

Experimental investigations were conducted to validate the design and evaluate the ejector’s performance.

Document: Thermofluid_Paper6 **Tags:** Move a Step 3

The governing equations are changed into ordinary differential equations with the appropriate similarity Heat generation

transformations. Then these equations are answered using the shooting technique and the Runge-Kutta 4th-order Thermal radiation

Suction/injection

method. The impact of Deborah number (De), suction/ injection (fw), thermal radiation (Rd), viscous dissipation Momentum slip condition

(Ec), velocity slip parameter (λ) and heat generation (Q) are displayed through graphs and tables. The main target of this investigation is to discuss the impact of the Nusselt number profile for the suction parameter (fw) against momentum slip (λ), thermal slip conditions (β) and radiation parameter. Skin friction profile for suction parameter also discussed against Maxwell fluid parameter (De).

Document: Thermofluid_Paper7 **Tags:** Move a Step 3

In the Joule heating

Entropy generation

heat equation, the Joule heating and Cattaneo-Christov heat flux model are contemplated. Through using proper Bejan number

similarity transformations, equations involving momentum and heat transfer are simplified into ordinary differential equations. The Homotopy analysis approach is used to solve these equations using the computer soft-ware MATHEMATICA. By resolving the flow limitations on temperature and velocity, the entropy production is computed. Using graphical demonstration, the impact of various parameters such as suction/injection parameter, Brinkman number, magnetic parameter, stretching/shrinking

parameter, temperature ratio parameter on flow, thermal relaxation parameter, temperature exponent parameter, Hall effect parameter, on velocity, temperature, entropy production, and Bejan number has been thoroughly discussed. The local Nusselt number and skin friction can also be identified for practical reasons for various approximations of physical parameters.

Document: Thermofluid_Paper8 **Tags:** Move a Step 3

Using annual time series data from 1971 to 2019, the Financial development

study used NonLinear autoregressive distributive lag (NARDL) to examine the relationship.

Document: Thermofluid_Paper9 **Tags:** Move a Step 3

Due to the limited availability of experimental and predictive data on heat transport phenomena across the interstices of low-porosity microcellular structures - numerically simulated data of effective thermal conductivity for conduction heat transfer in metal foam-fluid systems have been compared for structures typified by near-circular pore walls and openings, i.e. “bottleneck-type” structures and foam porosity ranging between 0.65 and 0.78. A three-dimensional high-resolution image inversion and computational fluid dynamics modelling and simulation of conductive heat transfer for both the fluid and solid domains at pore level is used to estimate effective thermal conductivity for these structures.

Document: Thermofluid_Paper10 **Tags:** Move a Step 3