Postdoctoral Research Opportunity in Lattice Boltzmann Modeling of Heat Transfer Phase-Change Processes with Schoolarship from São Paulo State Research Foundation (FAPESP).

The São Carlos School of Engineering of University of São Paulo in collaboration with the Center for Semiconductor Components and Nanotechnologies (CCSNano) from University of Campinas (Unicamp) and the Laboratory of Alternate Energy Systems (SISEA) from University of São Paulo is seeking a qualified individual for a postdoctoral position in Lattice Boltzmann simulation of heat transfer processes with phase change to work in Thematic Project from São Paulo Research Foundation (FAPESP), named: FUNDAMENTALS AND APPLICATIONS OF HIGH PERFORMANCE PROCESSES INVOLVING HEAT TRANSFER WITH PHASE CHANGE. This Thematic Project is coordinated by Professor Gherhardt Ribatski, from São Carlos School of Engineering (EESC) – University of São Paulo (USP) and the selected candidate will be supervised by Prof. Luben Cabezas Gómez from EESC-USP. The registration deadline of applications will end on August 15, 2020. More information about the Thematic Project can be found in (http://www.steer.eesc.usp.br/).

The project mainly consist in the computational implementation and evaluation of numerical simulation techniques with Lattice Boltzmann (LB) method for modeling the hydrodynamic and heat transfer processes that occur in liquid and gas-liquid flows with phase change in microchannels of high performance heat exchangers. The main task is the development of 2D and 3D codes for simulating liquid-gas phase change in microchannels with appropriate Lattice Boltzmann methodologies under study in our research group.

It is expected that the candidate has computational programming skills (C, C++, Fortran, CUDA, Matlab); including experience in development computational tools using shared memory architectures (GPUs). Experience in simulating fluid flow problems and transport

phenomena with Lagrangian methods is desirable. Some knowledge on kinetic theory of gases and statistical methods for fluid modelling is also considered.

Please send a cover letter with justification of interest in the postdoctoral position and research experience in the proposed topic, a copy of CV, and two recommendation letters to Prof. Luben Cabezas Gómez by the e-mail: lubencg@sc.usp.br.

The registration deadline of applications will end on August 15, 2020. The FAPESP scholarship value for PD position is R$ 7.373,10 per month. More information about the scholarship can be found in: **www.fapesp.br/bolsas/pd**.

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