Lokesh Malik

PERSONAL DETAILS

Birth	July 17, 1990
Location	Shalimar Bagh, New Delhi
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EDUCATION

M.Tech. Thermal Engineering IIT Madras CGPA 9.25

B.Tech. Mechanical Engineering

Kalasalingam University CGPA 8.60

M.TECH. PROJECT

Title Advisor "Characterization of two phase flow in a set of parallel minichannels" Dr. Dhiman Chatterjee

I performed simulations for validation of experimental data for two-phase (air and water) flow through a set of parallel mini-channels (U, Z, I configuration). This project had its application in miniature heat exchangers demanding high heat flux dissipation. Multiphase modelling was done using the VOF (Volume of Fluid) model of ANSYS FLUENT software. I used standard K-epsilon turbulence model and pressure based solver for these computations. Quantities of interest for this problem statement were channel volume flow rate, channel void fraction and channel pressure drop. The results of the numerical simulations of the U channel configuration for slug and slug-annular flow regime were found to have a fair comparison with the experimental data. Further, by calculating the channel friction coefficient for the slug flow regime for U configuration, volume flow rates in other configurations were predicted. After doing the channel mal-distribution study, a resistance model (based on the electrical analogy) was also prepared to validate the relationship of channel pressure drop with the channel volume flow rate, which was found to be consistent.

WORK EXPERIENCE

GATE Faculty

T.I.M.E. Education Pvt. Ltd., New Delhi

Taught Mechanical Engineering subjects like Heat Transfer, Internal Combustion Engines, Strength of Materials, Refrigeration and Air-Conditioning, Production Engineering and Machine Design for preparation of GATE

2016 - present

2013 - 2015

2008 - 2012

SKILLS

Languages	Hindi (Mother Tongue)
	English (Fluent)
Computer Skills	C, C++, Ansys

ACADEMIC ACHIEVEMENTS

GATE 13	Rank 411
GATE 16	Rank 1248