Assessment of lattice Boltzmann approach for non-Newtonian fluid flow simulation

A Thesis submitted for the Degree of

Doctor of Philosophy

in School of Engineering

by

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September 2021

Dedicated

to

my family

Declaration by the Research Scholar

I declare that the thesis entitled "**Assessment of lattice Boltzmann approach for non-Newtonian fluid flow simulation**" submitted by me for the degree of Doctor of Philosophy is a bonafide record of research carried out by me under the supervision of Dr. Pradeep Kumar and Dr. Dhiraj V. Patil. The content of this thesis, in full or in parts, have not been submitted to any other Institute or University for the award of any Degree or Diploma.

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September, 2021 — Manju Bisht (D15010)

Declaration by the Research Advisor

This is certify that the thesis entitled "**Assessment of lattice Boltzmann method for non-Newtonian fluid flow simulation**", submitted by Manju Bisht to the Indian Institute of Technology Mandi for the award of the degree of Doctor of Philosophy is a bonafide record of research work carried out by her under our supervision. The content of this thesis, in full or in parts, have not been submitted to any other Institute or University for the award of any Degree or Diploma.

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Dr. Pradeep Kumar
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Dr. Dhiraj V. Patil
September, 2021

Acknowledgements

This thesis would not have been possible without the assistance and support of the many people, all of whom are respectfully acknowledged here. I want to express my gratitude to my thesis advisers Dr. Dhiraj V. Patil and Dr. Pradeep Kumar. They have provided me with thoughtful guidance and professional assistance during my doctoral studies. I could not write this thesis without their guidance and the valuable discussions that we had. I am thankful to them for providing guidance and direction throughout my research work and continuous inspiration and dedication. I want to express my gratitude for their efforts, contributions, valuable time, thoughts, and patience in assisting me during this research. Their insight into and understanding of computational fluid dynamics helped considerably in code development and debugging. Dr. Dhiraj is a kind-hearted person and helped me get started on the HPC cluster and whose original code gave me an excellent starting point to construct the working parallel program. I am grateful to him for vastly boosting my research work presentation and documentation skills. It is hard to put into words how thankful I am for everything you have done for me as a research supervisor and life mentor.

My thanks are extended to each member of my doctoral committee, Dr. Vishal Singh Chauhan (Chair), Dr. P. Anil Kishan, Dr. Rahul Vaish, and Dr. Rajendra Ray for their interest and suggestions during the annual progress meetings of this research. Thank you for your valuable time and wise advice. I am also grateful to the faculty and staff members at the School of Engineering for making my studies and research here worthwhile and enjoyable. I would like to acknowledge Dr. Sina Haeri, from the University of Strathclyde, UK, for providing the data computed using a fictitious domain method and used for comparison with the present lattice Boltzmann results for Newtonian fluid simulation as presented in chapter 2 of this thesis. Further, Ms. N. Kim and Prof. J.N. Reddy, from the Texas A&M University, USA, deserve credit for providing us the data for the Cross model non-Newtonian fluid flow inside a two-dimensional lid-driven cavity for comparison as given in chapter 4.

I want to thank the invaluable support of so many people. My gratitude is also extended to my labmates and friends who have become a part of my life. I appreciate the insightful discus-

sions and enjoyable time spent with lab members: Amit, Sharey, Ruchika, and Chanakya. My experience at IIT Mandi was also made better by the presence of my dear friends: Supriya, Srishti, Vyoma, Ankita, Prabhjot, Mona, Balaji, Ashish, and Bindu. I am grateful for their genuine friendship and support.

I would also want to thank my family for all their support and encouragement. I owe a great debt of gratitude to my mother, brother, and sisters for their unwavering love, support, and encouragement during my long academic and research journey. The long-distance support I have got from you has been vital in allowing me to keep working toward my goal. There are no words to express my thanks and admiration for everything you have done for me. I am also grateful for my husband's parents' support and encouragement.

I want to thank my husband Sunil for his unfailing love, support, and unwavering trust in me. He encouraged me when I was having difficulties in my research or my life. He also helped me to overcome the obstacles. These last few years have been challenging both academically and personally. Even when I was frustrated and upset, I appreciated you being there for me. Without you, this achievement and journey would not have been possible. Thank you from the bottom of my heart and soul.

Above all, I am grateful to the Almighty God for providing good health and blessings to me and my family throughout my doctoral studies.

Contents

Acknowledgements i

Abstract xv

Nomenclature xvii

1 Introduction 1

1.1 Non-Newtonian fluids . . . 1

1.1.1 Time-independent fluid behaviour . . . 2

1.1.2 Time-dependent fluid behaviour . . . 6

1.1.3 Viscoelastic behaviour . . . 7

1.2 Non-Newtonian fluids models . . . 8

1.2.1 Power-law or Ostwald-de Waele model . . . 8

1.2.2 Carreau model and Carreau-Yasuda model . . . 9

1.2.3 Cross model . . . 10

1.3 Generalised Newtonian fluid: Governing equations . . . 10

1.4 Lattice Boltzmann method . . . 13

1.4.1 Chapman-Enskog expansion to recover NS equations . . . 15

1.4.2 Collision step . . . 15

1.4.3 Streaming step . . . 16

1.4.4 Lattice structures . . . 17

1.4.5 Collision models . . . 19

1.5 Lattice Boltzmann for non-Newtonian fluid flows . . . 22

1.6 Research objectives and scope of the present thesis . . . 24

1.7 Thesis outline . . . 25

2 Lattice BGK approach for power-law modeled fluid flow **27**
2.1 Lattice BGK formulation 27
2.1.1 Code validation 29
2.2 Flow inside a wall-driven cavity with undulations 29
2.2.1 Grid-independence study and meshing 31
2.2.2 LBGK code validation 33
2.2.3 Effect of bottom wall-undulations 34
2.3 Power-law fluid flow in wall-driven undulated cavity 42
2.4 Closure 43

3 MRT-LB method for power-law fluids **44**
3.1 MRT-LB formulation 44
3.1.1 Parallelization of LB method with MPI 48
3.1.2 Code validation 54
3.2 Power-law fluid flow in wall-driven undulated cavity 62
3.2.1 Grid-independence test 63
3.2.2 Effect of flow Reynolds number on power-law fluids 64
3.2.3 Effect of wavelength of undulations on the power-law fluids 67
3.2.4 Effect of undulation height on the power-law fluids 68
3.3 Closure 69

4 Assessment of various non-Newtonian fluid models using MRT-LB method **71**
4.1 Non-Newtonian fluid models and MRT-LBM 71
4.2 2D lid-driven cavity 72
4.3 2D lid-driven cavity flow with an embedded cylinder 74
4.4 Flow through 2D straight channel 79
4.5 Flow past a circular cylinder embedded in a 2D channel 81
4.6 Closure 86

5 Non-Newtonian power-law fluid flow over obstacle(s) **88**
5.1 Single circular obstacle in 2D lid-driven cavity 88
5.1.1 Grid-independence test 89
5.1.2 Flow characteristics with varying sizes of obstacle 89
5.1.3 Flow characteristics with varying Reynolds number 91
5.1.4 Flow characteristics with varying power-law index 95

5.1.5 Flow characteristics with varying obstacle shapes 98
5.2 Two square cylinders in 2D lid-driven cavity 98
5.3 Power-law fluid flow over multiple square obstacles 100
5.3.1 Multiple obstacles embedded inside the cavity 102
5.3.2 Multiple obstacles embedded inside the 2D channel 104
5.4 Closure 108

6 Conclusions and future work **109**
6.1 Summary 109
6.2 Conclusions 110
6.3 Suggestions for near future research directions 111

Appendix A Fictitious domain method **113**
A.1 Fictitious domain method 113

Bibliography **114**

List of Publications **131**