## **Table of Contents**

| Preface  |     |
|--|-----|
| Thermal Conductivity Impact on Thermal Stability of Reactive Materials R.S. Lebelo   | 1   |
| Performance Analysis of Magnetite Nano-Suspension Based Porous Slider Bearing with Varying Inclination and Slip Parameter P. Ram, A. Kumar, O.D. Makinde, P. Kumar and V.K. Joshi                            | 11  |
| Impact of Chemical Reaction on Marangoni Boundary Layer Flow of a Casson Nano Liquid in the Presence of Uniform Heat Source Sink K.G. Kumar, B.J. Gireesha, B.C.P. Kumara and O.D. Makinde                   | 22  |
| Phenomenon of Radiation and Viscous Dissipation on Casson Nanoliquid Flow Past a Moving Melting Surface  |     |
| K.G. Kumar, B.J. Gireesha, B.C.P. Kumara, G.K. Ramesh and O.D. Makinde   | 33  |
| Radiation Absorption and Viscous-Dissipation on MHD Flow of Casson Fluid over a Vertical Plate Filled with Porous Layers S. Venkateswarlu, S.V.K. Varma, R.V.M.S.S. Kiran Kumar, C.S.K. Raju and P.D. Prasad | 43  |
| Effects of Nonlinear Thermal Radiation and Thermo-Diffusion on MHD Carreau Fluid   |     |
| Flow Past a Stretching Surface with Slip M. Gnaneswara Reddy, M.V.V.N.L. Sudha Rani and O.D. Makinde   | 57  |
| Non-Uniform Heat Source/Sink Effect on Liquid Film Flow of Jeffrey Nanofluid over a Stretching Sheet   |     |
| K. Avinash, N. Sandeep and O.D. Makinde  | 72  |
| Nonlinear Thermal Convection in Jeffrey Liquid Flow with Cross Diffusion Effects Past a<br>Stretched Surface   |     |
| P.B. Sampath Kumar, B.J. Gireesha, B. Mahanthesh and R.S.R. Gorla  | 84  |
| Effects of Oil-Based Nanofluid on a Stretching Surface with Variable Suction and Thermal Conductivity  | 00  |
| C.J. Etwire, İ.Y. Seini and R. Musah  Radiative MHD Stagnation-Point Flow with Heat Transfer Past a Permeable  | 99  |
| Stretching/Shrinking Sheet in a Porous Medium S.R. Sayyed, B.B. Singh and N. Bano  | 110 |
| Analysis of Radiative Magneto-Nanofluid over an Accelerated Plate in a Rotating Medium   |     |
| with Hall Effects R. Sharma, S.M. Hussain, H. Joshi and G.S. Seth  | 129 |
| Unsteady MHD Natural Convective Flow of a Rotating Fluid over an Infinite Vertical Plate due to Oscillatory Movement of the Free-Stream with Hall and Ion-Slip Currents J.K. Singh, G.S. Seth and S.G. Begum | 146 |
| Thermal Radiation, Joule Heating and Hall Effects on Mixed Convective Navier Slip Flow in a Channel with Convective Heating  |     |
| K. Kaladhar and O.D. Makinde  MHD Stagnation Point Flow over Exponentially Stretching Sheet with Exponentially   | 162 |
| MHD Stagnation Point Flow over Exponentially Stretching Sheet with Exponentially Moving Free-Stream, Viscous Dissipation, Thermal Radiation and Non-Uniform Heat Source/Sink                                 |     |
| G.S. Seth, R. Sharma, B. Kumbhakar and R. Tripathi   | 182 |
| An Integral Treatment for Dissipative Boundary Layer Flow along a Radiating Vertical Surface by Natural Convection in a Porous Medium S.R. Sayyed, B.B. Singh and N. Bano                                    | 191 |
|  |     |