

Bibliography

- [1] A. C. Eringen, "Simple microfluids", *Int. J. Eng. Sci.*, 2 (1964) 205-217.
- [2] A. C. Eringen, "Theory of micropolar fluids", *J. Math. Mech.*, 16 (1966) 1-18.
- [3] A. C. Eringen, "Microcontinuum field theories II -Fluent media", Springer, New York, USA, 2001.
- [4] G. Lukaszewicz, "Micropolar fluids: theory and applications", Birkhauser, Boston, 1999.
- [5] K. Walters, Relation between Coleman-Noll, Rivlin-Ericksen, Green-Rivlin, and Oldroyd fluids, *ZAMP*, 21 (1970) 592 - 600.
- [6] K. R. Rajagopal, On the creeping flow of the second grade fluid, *J. Non-Newtonian Fluid Mech.* 15 (1984) 239–246.
- [7] N. Casson, A flow equation for the pigment oil suspensions of the printing ink type, C.C. Mills (Eds.), *Rheology of Disperse Systems*, Newyork Oxford: Pergamon, (1959) 84-104.
- [8] J. Hartmann, Hg-dynamics I theory of the laminar flow of an electrically conductive liquid in a homogenous magnetic field. *Det Kongelige Danske Videnskabernes Selskab Mathematisk-fysiske Meddeleser*, 15 (1937) 1–27.
- [9] H. Alfven, Existence of electromagnetic -hydrodynamic waves, *Nature*, 150 (1942) 405-406.
- [10] L. Huang, L.C. Lee, Y.C. Whang, Magnetohydrodynamic waves and instabilities in the heat-conducting solar wind plasma, *Planetary and Space Science*, 36 (1988) 775-783.
- [11] L.C. Wang, L.J. Li, Z.W. Ma, X. Zhang, L.C. Lee, Energy of Alfvén waves generated during magnetic reconnection, *Phys. Lett. A* 379 (2015) 2068–2072.
- [12] M. Muskat, *The flow of homogeneous fluids through porous media*, Mc-Graw Hill book company, (1946).
- [13] J. K. Platten, P. Costesque, C. Soret, A short biography, *Eur. Phys. J. E.*, 15 (2004) 235–239.
- [14] E. Hall, "On a New Action of the Magnet on Electric Currents". *American Journal of Mathematics*. 2 (1879) 287–92.
- [15] T. Ariman, M. A. Turk, N. D. Sylvester, Microcontinuum fluid mechanics-a review, *International Journal of Engineering Science*, 11 (1973) 905–930.

- [16] M. El-Hakiem, Effects of a transverse flows with variable viscosity in micro polar fluids, *Heat and Mass Transfer*, 34 (1998) 91-99.
- [17] A. J. Chamkha, T. Grosant, I. Pop, fully developed free convection of a micro polar fluid in a vertical channel, *International communication in heat and mass transfer*, 29 (2002) 1119-1127.
- [18] O. Abdulaziz and I. Hashim, fully developed free convection heat and mass transfer of a micro polar fluid between porous vertical plates, *Numerical Heat Transfer, A*, 55 (2009) 270–288.
- [19] Md. A. Ikbāl, S. Chakravarty, P. K. Mandal, Two-layered micropolar fluid flow through stenosed artery: Effect of peripheral layer thickness. *Computers and Mathematics with Applications*, 58 (2009) 1328–1339
- [20] S. I. Xin-yi, S. I. Xin-hui, L. Zheng, X. Zhang, Homotopy analysis solution for micro polar fluid flow through porous channel with expanding or contracting walls of different permeability, *Applied Mathematics and Mechanics*, 32 (2011) 859–874.
- [21] Z. Alloui, H. Beji, P. Vasseur, Double-diffusive and Soret-induced convection of a micropolar fluid in a vertical channel. *Computers & Mathematics with Applications*, 62 (2011) 725-736.
- [22] A. E. Mohamed, Mixed convection flow of a micropolar fluid from an unsteady stretching surface with viscous dissipation. *Journal of the Egyptian Mathematical Society* 21 (2013) 385–394.
- [23] S. K. Jena, L. K. Malla, S. K. Mahapatra, A. J. Chamkha, Transient buoyancy-opposed double diffusive convection of micropolar fluids in a square enclosure. *International Journal of Heat and Mass Transfer*, 81 (2015) 681-694.
- [24] E. Sudhakara, S. Sreenadh, A. Parandhama, P. Madhu Mohan Reddy, Mathematical theory of steady heat transfers in a thin film flow of a micropolar fluid over an inclined permeable bed. *International Journal of Scientific Research Engineering & Technology (IJSRET)* 2 (2013) 560-567.
- [25] K. Asma, I. Khan, A. Khan, S. Sharidan, Conjugate transfer of heat and mass in unsteady flow of a micropolar fluid with wall couple stress, *AIP Advances*, 5 (2015) 127125, <http://dx.doi.org/10.1063/1.4938551>.

- [26] W. Tan and T. Masuoka, Stokes' first problem for a second grade fluid in a porous half-space with heated boundary, *Int J Non-Linear*, 40 (2005) 515–522.
- [27] M. M. Rashidi, S. A. Majid, A. Mostafa, Application of homotopy analysis method to the unsteady squeezing flow of a second-grade fluid between circular plates, *Math Probl Eng.*, 18 (2010) 706840.
- [28] T. Hayat, M. Qasim, S.A. Shehzad, A. Alsaedi, Unsteady stagnation point flow of second grade fluid with variable free stream, *Alexandria Engineering Journal*, 53 (2014) 455–461.
- [29] M. Hameed, A. Khan, R. Ellahi, M. Raza, Study of magnetic and heat transfer on the peristaltic transport of a fractional second grade fluid in a vertical tube, *Engineering Science and Technology, an International Journal*, 18 (2015) 496-502.
- [30] Samiulhaq, I. Khan, F. Ali, S. Shafie, Exact Solutions for Unsteady Free Convection Flow of a Second Grade Fluid Past a Vertical Flat Plate, *Heat Transfer Research*, 45 (2014) 579-588.
- [31] S. Pramanik, Casson fluid flow and heat transfer past an exponentially porous stretching surface in presence of thermal radiation, *Ain Shams Engineering Journal*, 5 (2014) 205–212.
- [32] G. Mahanta and S. Shaw, 3D Casson fluid flow past a porous linearly stretching sheet with convective boundary condition *Alexandria Engineering Journal*, 54 (2015) 653–659.
- [33] R. Dash, K. Mehta, G. Jayaraman, Casson fluid flow in a pipe filled with a homogeneous porous medium, *Int. J. Eng. Sci.*, 34 (1996) 1145-1156.
- [34] N. Akbar and A. Butt, Physiological Transportation of Casson Fluid in a Plumb Duct, *Communications in Theoretical Physics*, 63 (2015) 347-352.
- [35] K. Bhattacharyya, M.S. Uddin, G.C. Layek, Exact solution for thermal boundary layer in Casson fluid flow over permeable shrinking sheet with variable wall temperature and thermal radiation, *Alexandria Engineering Journal*, 55 (2016) 1703–1712.
- [36] Z. Abbas, M. Sheikh, S. S. Motsa, Numerical solution of binary chemical reaction on stagnation point flow of Casson fluid over a stretching/shrinking sheet with thermal radiation, *Energy*, 95 (2016) 12-20.
- [37] N. Sandeep, O. K. Koriko, I. L. Animasaun, modified kinematic viscosity model for 3D-Casson fluid flow within boundary layer formed on a surface at absolute zero, *Journal of Molecular Liquids*, 221 (2016) 1197–1206.

- [38] C. Sulochana, S. S. Payad, N. Sandeep, Non uniform heat source or sink effect on the flow of 3D Casson fluid in the presence of Soret and thermal radiation, *Int.J.Eng. Resaech in Afrika*, 20 (2016) 112-129.
- [39] L.C. Lee, Time-dependent magnetic reconnection: Two- and three-dimensional MHD simulations, *Computer Physics Communications*, 59 (1990)163-174.
- [40] N. Kumar, P. Kumar, S. Singh, Coronal heating by MHD waves, *Astronomy & Astrophysics* 453 (2006) 1067-1078
- [41] V. V. S. Murty, A. Gupta, N. Mandloi, A. Shukla, Evaluation of thermal performance of heat exchanger unit for parabolic solar cooker for off-place cooking, *Indian J Pure Appl Phys*, 45 (2007) 745–748.
- [42] N. K. Raja, M. S. Khalil, S. A. Masood, M. Shaheen, Design and manufacturing of parabolic trough solar collector system for a developing country Pakistan, *J Am Sci*, 7 (2011) 365–372.
- [43] R. Muthucumaraswamy and E. Geetha, Effects of parabolic motion on an isothermal vertical plate with constant mass flux, *Ain Shams Engineering Journal*, 5 (2014) 1317–1323.
- [44] R. K. Singh and A. K. Singh, MHD Free Convective Flow Past a Semi-infinite Vertical Permeable wall, *Applied Mathematics and Mechanics*, 33 (2012) 1207-1222.
- [45] N. T. M. Eldabe and M. G. E. Salwa, Heat transfer of MHD non – Newtonian Casson fluid flow between two rotating cylinders. *J. Phys. Soc. Japan*, 64 (1995) 41-64.
- [46] S. Nadeem, R. U. Haq, C. Lee, MHD flow of a Casson fluid over an exponentially shrinking sheet, *Scientia Iranica*, B 19 (2012) 1550–1553.
- [47] N. Akbar and Z. Khan, Metachronal beating of cilia under the influence of Casson fluid and magnetic field. *Journal of Magnetism and Magnetic Materials*, 378 (2015) 320-326.
- [48] N. S. Akbar, Influence of magnetic field on peristaltic flow of a Casson fluid in an asymmetric channel: Application in crude oil refinement, *Journal of Magnetism and Magnetic Materials*, 378 (2015) 463–468.
- [49] S. Nadeem, R. Mehmood, N. Akbar, Optimized analytical solution for oblique flow of a Casson-nano fluid with convective boundary conditions, *International Journal of Thermal Sciences*, 78 (2014) 90–100.

- [50] S. Nadeem, R. U. Haq, N. S. Akbar, MHD Three-Dimensional Boundary Layer Flow of Casson Nanofluid Past a Linearly Stretching Sheet with Convective Boundary Condition, *IEEE Transactions on Nanotechnology*, 13 (2014) 109-115.
- [51] N. S. Akbar, S. Nadeem, R. Haq, S. Ye, MHD stagnation point flow of Carreau fluid toward a permeable shrinking sheet: Dual solutions, *Ain Shams Engineering Journal*, 5 (2014) 1233–1239.
- [52] N. Akbar, A. Ebaid, Z. Khan, Numerical analysis of magnetic field effects on Eyring-Powell fluid flow towards a stretching sheet, *Journal of Magnetism and Magnetic Materials*, 382 (2015) 355-358.
- [53] R. K. Singh, A. K. Singh, N. C. Sacheti, P. Chandran, Effect of Induced magnetic field on hydromagnetic free convective flow between vertical walls, *Heat and Mass transfer*, 46 (2010) 523-529.
- [54] R. K. Singh and A. K. Singh, Effect of induced magnetic field on natural convection in vertical concentric annuli, *Acta Mechanica Sinica*, 28 (2012) 315-323.
- [55] R. K. Singh, T. R. Singh, H. R. Kataria, Induced Magnetic Field Effect on Mixed Convection, *IOSR Journal of Mathematics*, 10 (2014) 76-85.
- [56] M. Sheikholeslami, M. Gorji-Bandpy, D. D. Ganji, MHD free convection in an eccentric semi-annulus filled with nanofluid, *Journal of the Taiwan Institute of Chemical Engineers*, 45 (2014) 1204–1216.
- [57] M. Hatami, M. Sheikholeslami, M. Hosseini, D. D. Ganji, Analytical investigation of MHD nanofluid flow in non-parallel walls, *Journal of Molecular Liquids*, 194 (2014) 251–259.
- [58] M. Sheikholeslami and R. Ellahi, Three dimensional mesoscopic simulation of magnetic field effect on natural convection of nanofluid, *International Journal of Heat and Mass Transfer*, 89 (2015) 799-808.
- [59] N. Freidoonimehr, M. M. Rashidi, S. Mahmud, Unsteady MHD free convective flow past a permeable stretching vertical surface in a nano-fluid, *International Journal of Thermal Sciences*, 87 (2015) 136-145.
- [60] S. A. Shehzad, Z. Abdullah, F. M. Abbasi, T. Hayat, A. Alsaedi, Magnetic field effect in three-dimensional flow of an Oldroyd-B nanofluid over a radiative surface, *Journal of Magnetism and Magnetic Materials*, 399 (2016) 97–108.
- [61] F. M. Abbasi, T. Hayat, S. A. Shehzad, F. Alsaadi, N. Altoaibi, Hydromagnetic peristaltic

- transport of copper–water nanofluid with temperature-dependent effective viscosity, *Particuology*, 27 (2016) 133–140.
- [62] T. Hayat, T. Muhammad, S.A. Shehzad, A. Alsaedi, On three-dimensional boundary layer flow of Sisko nanofluid with magnetic field effects, *Advanced Powder Technology* 27 (2016) 504–512.
- [63] U. Khan, N. Ahmed, M. Asadullah, S. T. Mohyud-din, Effects of viscous dissipation and slip velocity on two-dimensional and axisymmetric squeezing flow of Cu-water and Cu-kerosene nanofluids, *Propulsion and Power Research*, 4 (2015) 40–49.
- [64] A. Borrelli, G. Giamtesio, M. C. Patria, Magnetoconvection of a micropolar fluid in a vertical channel. *International Journal of Heat and Mass Transfer*, 80 (2015) 614–625.
- [65] Z. Abbas, T. Javed, M. Sajid, N. Ali, Unsteady MHD flow and heat transfer on a stretching sheet in a rotating fluid, *Journal of the Taiwan Institute of Chemical Engineers*, 41 (2010) 644–650.
- [66] M. A. M. Ahmed, M. E. Mohammed, A. A. Khidir, on linearization method to MHD boundary layer convective heat transfer with low pressure gradient, *Propulsion and Power Research*, 4 (2015) 105–113.
- [67] M. Sheikholeslami, K. Vajravelu, M. M. Rashidi, forced convection heat transfer in a semi annulus under the influence of a variable magnetic field, *International Journal of Heat and Mass Transfer*, 92 (2016) 339–348.
- [68] M. A. A. Mahmoud, S. E. Waheed, MHD flow and heat transfer of a micropolar fluid over a stretching surface with heat generation (absorption) and slip velocity, *Journal of the Egyptian Mathematical Society*, 20 (2012) 20–27.
- [69] H. R. Kataria, H. R. Patel, R. K. Singh, Effect of magnetic field on unsteady natural convective flow of a micropolar fluid between two vertical walls, *Ain Shams Engineering Journal*, 8 (2015) 87–102.
- [70] M. Sheikholeslami, D. D. Ganji, M. Gorji-Bandpy, S. Soleimani, Magnetic field effect on nanofluid flow and heat transfer using KKL model, *Journal of the Taiwan Institute of Chemical Engineers*, 45 (2014) 795–807.
- [71] M. Sheikholeslami, A. J. Chamkha, Electrohydrodynamic free convection heat transfer of a nanofluid in a semi-annulus enclosure with a sinusoidal wall, *Numerical Heat Transfer, Part A*, 69 (2016) 781–793.

- [72] M. Sheikholeslami and M. M. Bhatti, Active method for nanofluid heat transfer enhancement by means of EHD, *International Journal of Heat and Mass Transfer*, 109 (2017) 115–122.
- [73] W. Ibrahim, Nonlinear radiative heat transfers in magnetohydrodynamic (MHD) stagnation point flow of nanofluid past a stretching sheet with convective boundary condition, *Propulsion and Power Research* 4 (2015) 230–239.
- [74] M. Sheikholeslami, D. D. Ganji, M. M. Rashidi, Magnetic field effect on unsteady nanofluid flow and heat transfer using Buongiorno model, *Journal of Magnetism and Magnetic Materials*, 416 (2016) 164-173.
- [75] M. Hatami and H. Safari. "Effect of inside heated cylinder on the natural convection heat transfer of nanofluids in a wavy-wall enclosure." *International Journal of Heat and Mass Transfer*, 103 (2016) 1053-1057.
- [76] M. Hatami, D. Song, D. Jing. "Optimization of a circular-wavy cavity filled by nanofluid under the natural convection heat transfer condition." *International Journal of Heat and Mass Transfer*, 98 (2016) 758-767.
- [77] F. Abbasi, S. Shehzad, Heat transfer analysis for three-dimensional flow of Maxwell fluid with temperature dependent thermal conductivity: Application of Cattaneo-Christov heat flux model, *Journal of Molecular Liquids*, 220 (2016) 848–854.
- [78] R. Muthucumaraswamy, K. E. Sathappan, R. Natarajan, mass transfer effects on exponentially accelerated isothermal vertical plate, *Int. J. of Appl. Math. & Mech*, 4 (2008) 19-25.
- [79] Md. Z. Haque, Md. M. Alam, M. Ferdows, A. Postelnicu, Micropolar fluid behaviors on steady MHD free convection and mass transfer flow with constant heat and mass fluxes, joule heating and viscous dissipation. *Journal of King Saud University – Engineering Sciences*, 24 (2012) 71–84.
- [80] K. Das, R. P. Sharma, A. Sarkar, Heat and mass transfer of a second grade MHD fluid over a convectively heated stretching sheet, *Journal of Computational Design and Engineering*, (2016), <http://dx.doi.org/10.1016/j.jcde.2016.06.001>
- [81] S. Nadeem, N. S. Akbar, Influence of radially varying MHD on the peristaltic flow in an annulus with heat and mass transfer, *Journal of the Taiwan Institute of Chemical Engineers*, 41 (2010) 286–29.

- [82] T. Hayat, N. Ahmed, M. Sajid, S. Asghar, On the MHD flow of a second grade fluid in a porous channel, *Computers & Mathematics with Applications*, 54 (2007) 407–414
- [83] S. M. Rassoulinejad-Mousavi, S. Abbasbandy, "Analysis of Forced Convection in a Circular Tube Filled with a Darcy–Brinkman–Forchheimer Porous Medium Using Spectral Homotopy Analysis Method". *ASME. J. Fluids Eng.*, 133 (2011) 101207.
- [84] S. M. Rassoulinejad-Mousavi, H. R. Seyf, S. Abbasbandy, "Heat transfer through a porous saturated channel with permeable walls using two-equation energy model", *Journal of Porous Media*, 16 (2013) 241-254.
- [85] F. Ali, I. Khan, Samiulhaq, S. Shafie, Conjugate Effects of Heat and Mass Transfer on MHD Free Convection Flow over an Inclined Plate Embedded in a Porous Medium. *PLoS ONE* 8(6): e65223 (2013).
- [86] F. Ali, I. Khan, S. Shafie, N. Musthapa, Heat and Mass Transfer with Free Convection MHD Flow Past a Vertical Plate Embedded in a Porous Medium, (2013), Article ID 346281, <http://dx.doi.org/10.1155/2013/34628>.
- [87] A. Hussnan, Z. Ismail, I. Khan, S. Shafie, unsteady mhd free convection flow in a porous medium with constant mass diffusion and Newtonian heating, *The European Physical Journal - Plus*, (2014) 129: 46. doi:10.1140/epjp/i2014-14046-x
- [88] S. Nadeem, R. U. Haq, N. S. Akbar, Z. H. Khan, MHD three-dimensional Casson fluid flow past a porous linearly stretching sheet, *Alexandria Engineering Journal*, 52 (2013) 577–582.
- [89] A. Khalid, I. Khan, A. Khan, S. Shafie, Unsteady MHD free convection flow of Casson fluid past over an oscillating vertical plate embedded in a porous medium, *Engineering Science and Technology, an International Journal*, 18 (2015) 309-317.
- [90] S. Das, H. K. Mandal, R. N. Jana, O. D. Makinde, Magneto-Nanofluid flow past an impulsively started porous flat plate in a rotating frame, *J Nanofluids*, 4 (2015) 67–75. S.
- [91] Rosseland, *Astrophysik und atom-theoretische Grundlagen*. Berlin: Springer-Verlag; 1931.
- [92] T. Hayat, M. Nawaz, M. Sajid, S. Asghar, The effect of thermal radiation parameter on the flow of a second grade fluid, *Computers and Mathematics with Applications*, 58 (2009) 369-379.
- [93] D. Prakash and M. Muthamilselvan. Effect of radiation on transient MHD flow of micropolar fluid between porous vertical channels with boundary conditions of the third

- kind. *Ain Shams Engineering Journal*, 5 (2014) 1277–1286.
- [94] G. Makanda, S. Shaw, P. Sibanda, Effects of radiation on MHD free convection of a Casson fluid from a horizontal circular cylinder with partial slip in non-Darcy porous medium with viscous dissipation, *Boundary Value Problems*, 1 (2015) 1-14.
- [95] M. M. Rashidi, N. V. Ganesh, A. K. Abdul, B. Ganga, Buoyancy effect on MHD flow of nanofluid over a stretching sheet in the presence of thermal radiation, *J. Mol. Liq.*, 190 (2014) 234–238.
- [96] H. R. Kataria and A. S. Mittal, Mathematical model for velocity and temperature of gravity-driven convective optically thick nanofluid flow past an oscillating vertical plate in presence of magnetic field and radiation, *Journal of the Nigerian Mathematical Society*, 34 (2015) 303–317.
- [97] H. R. Kataria and A. S. Mittal, Velocity, mass and temperature analysis of gravity-driven convection nanofluid flow past an oscillating vertical plate in presence of magnetic field in a porous medium, 5 (2017) 864-874.
- [98] N. S. Akbar, S. Nadeem, R. U. Haq, Z. H. Khan, Radiation effects on MHD stagnation point flow of nano fluid towards a stretching surface with convective boundary condition, *Chinese Journal of Aeronautics*, 26 (2013) 1389–1397.
- [99] M. Sheikholeslami, D. D. Ganji, M. Y. Javed, R. Ellahi, Effect of thermal radiation parameter on magnetohydrodynamics nanofluid flow and heat transfer by means of two phase model, *Journal of Magnetism and Magnetic Materials*, 374 (2015) 36-43.
- [100] M. Sheikholeslami, T. Hayat, A. Alsaedi, MHD free convection of Al_2O_3 –water nanofluid considering thermal radiation parameter: A numerical study, *International Journal of Heat and Mass Transfer*, 96 (2016) 513–524.
- [101] M. M. Rashidi, M. Ali, N. Freidoonimehr, B. Rostami, M. A. Hossain, mixed convective heat transfer for MHD viscoelastic fluid flow over a porous wedge with thermal radiation, *Advances in Mechanical Engineering*, Volume 2014 (2014) Article number 735939, 10 pages <http://dx.doi.org/10.1155/2014/735939>
- [102] P. V. S. Narayana, Effects of variable permeability and radiation absorption on magnetohydrodynamic (MHD) mixed convective flow in a vertical wavy channel with traveling thermal waves, *Propulsion and Power Research*, 4 (2015)150–160.
- [103] M. M. Rashidi, B. Rostami, N. Freidoonimehr, S. Abbasbandy, Free convective heat and

- mass transfer for MHD fluid flow over a permeable vertical stretching sheet in the presence of the radiation and buoyancy effects, *Ain Shams Engineering Journal*, 5 (2014) 901–912.
- [104] S. Ahmed, A. Batin, A. J. Chamkha. Numerical/Laplace transforms analysis for MHD radiating heat/mass transport in a Darcian porous regime bounded by an oscillating vertical surface, *Alexandria Engineering Journal*, 54 (2015) 45–54.
- [105] S. Ahmed, A. Mahdy, Unsteady MHD double diffusive convection in the stagnation region of an impulsively rotating sphere in the presence of thermal radiation effect, *Journal of the Taiwan Institute of Chemical Engineers*, 58 (2016) 173–180.
- [106] M. Sheikholeslami and S.A. Shehzad, Thermal radiation of ferrofluid in existence of Lorentz forces considering variable viscosity, *International Journal of Heat and Mass Transfer*, 109 (2017) 82–92.
- [107] I. Animasaun, Effects of thermophoresis, variable viscosity and thermal conductivity on free convective heat and mass transfer of non-darcian MHD dissipative Casson fluid flow with suction and nth order of chemical reaction, *Journal of the Nigerian Mathematical Society*, 34 (2015) 11–31.
- [108] G. Makanda, S. Shaw, P. Sibanda, Diffusion of Chemically Reactive Species in Casson Fluid Flow over an Unsteady Stretching Surface in Porous Medium in the Presence of a Magnetic Field, *Mathematical Problems in Engineering*, (2015), 724596, <http://dx.doi.org/10.1155/2015/724596>.
- [109] G. S. Seth, B. Kumbhakar, S. Sarkar, Unsteady Hydromagnetic Natural Convection Flow with Heat and Mass Transfer of a Thermally Radiating and Chemically Reactive Fluid Past a Vertical Plate with Newtonian Heating and Time Dependent Free-Stream, *Int. J. Heat Tech*, 32 (2014) 87-94.
- [110] H. R. Kataria and H. R. Patel, Radiation and chemical reaction effects on MHD Casson fluid flow past an oscillating vertical plate embedded in porous medium, *Alexandria Engineering Journal* 55 (2016) 583-595.
- [111] P. B. A. Reddy, Magnetohydrodynamic flow of a Casson fluid over an exponentially inclined permeable stretching surface with thermal radiation and chemical reaction, *Ain Shams Engineering Journal*, 7 (2016) 593–602.
- [112] M. K. Nayak, G. C. Dash, L. P. Singh, Heat and mass transfer effects on MHD viscoelastic fluid over a stretching sheet through porous medium in presence of chemical reaction,

Propulsion and Power Research, 5 (2016) 70–80.

- [113] P. Narayana and D. Babu, Numerical study of MHD heat and mass transfer of a Jeffrey fluid over a stretching sheet with chemical reaction and thermal radiation, *Journal of the Taiwan Institute of Chemical Engineers*, 59 (2016) 18–25.
- [114] T. Hayat, S. A. Shehzad, A. Alsaedi, MHD three-dimensional flow of Maxwell fluid with variable thermal conductivity and heat source/sink, *Int. J. Numer. Methods Heat Fluid Flow*, 24 (2014) 1073–1085.
- [115] S. A. Shehzad, T. Hayat, A. Alsaedi, Three-Dimensional MHD Flow of Casson Fluid in Porous Medium with Heat Generation, *Journal of Applied Fluid Mechanics*, 9 (2016) 215–223.
- [116] S. A. Shehzad, Z. Abdullah, A. Alsaedi, F. M. Abbasi, T. Hayat, Thermally radiative three-dimensional flow of Jeffrey nanofluid with internal heat generation and magnetic field, *Journal of Magnetism and Magnetic Materials*, 397 (2016) 108–114.
- [117] C. Fetecau, D. Vieru, C. Fetecau, I. Pop, Slip effects on the unsteady radiative MHD free convection flow over a moving plate with mass diffusion and heat source, *Eur. Phys. J. Plus*, (2015) 130: 6
- [118] F. Abbasi, S. Shehzad, T. Hayat, B. Ahmad, Doubly stratified mixed convection flow of Maxwell nanofluid with heat generation/absorption, *Journal of Magnetism and Magnetic Materials*, 404 (2016) 159–165.
- [119] R. S. Raju, G. J. Reddy, J. A. Rao, M.M. Rashidi, R. S. R. Gorla, Analytical and Numerical study of unsteady MHD free convection flow over an exponentially moving vertical plate with Heat Absorption, *International Journal of Thermal Sciences*, 107 (2016) 303–315.
- [120] S. Nadeem, R. Mehmood, N. S. Akbar, Thermo-diffusion effects on MHD oblique stagnation-point flow of a viscoelastic fluid over a convective surface, *Eur Phys J Plus*, 129 (2014)1–18.
- [121] S. Sengupta and N. Ahmed, Chemical reaction interaction on unsteady MHD free convective radiative flow past an oscillating plate embedded in porous media with thermal diffusion, *Advances in Applied Science Research*, 6 (2015) 87–104.
- [122] U. Khan, N. Ahmed, S. I. Khan, S. T. Mohyud-din, Thermo-diffusion effects on MHD stagnation point flow towards a stretching sheet in a nanofluid, *Propulsion and Power Research*, 3 (2014) 151–158.

- [123] T. Hayat, S. Shehzad, A. Alsaedi, Soret and Dufour effects on magnetohydrodynamic (MHD) flow of Casson fluid, *Applied Mathematics and Mechanics*, 33 (2012) 1301-1312.
- [124] T. Hayat, H. Yasmin, M. Al-Yami, Soret and Dufour effects in peristaltic transport of physiological fluids with chemical reaction: A mathematical analysis, *Computers & Fluids*, 89 (2014) 242–253.
- [125] T. Hayat, Q. M. Rafiq, F. Alsaadi, M. Ayub, Soret and Dufour effects on peristaltic transport in curved channel with radial magnetic field and convective conditions, *Journal of Magnetism and Magnetic Materials*, 405 (2016) 358–369.
- [126] K. K. Anantha, R. J. V. Ramana, N. Sandeep, V. Sugunamma, Dual Solutions for Thermo Diffusion and Diffusion Thermo Effects on 3D MHD Casson Fluid Flow over a Stretching Surface, *R. J. Pharmacy and tech*, 9 (2016) 1187-1194.
- [127] H. R. Kataria and H. R. Patel, soret and heat generation effects on MHD Casson fluid flow past an oscillating vertical plate embedded through porous medium, *Alexandria Engineering Journal*, 55 (2016) 2125-2137.
- [128] P. O. Olanrewaju and Z. Abbas, Corrigendum to “Convection heat and mass transfer in a hydromagnetic flow of a second grade fluid in the presence of thermal radiation and thermal diffusion, *International Communications in Heat and Mass Transfer*, 51 (2014) 59–60.
- [129] G. Kumaran and N. Sandeep, Thermophoresis and Brownian moment effects on parabolic flow of MHD Casson and Williamson fluids with cross diffusion, *Journal of Molecular Liquids*, 233 (2017) 262–269.
- [130] P. V. S. Narayana, B. Venkateswarlu, S. Venkataramana, Effects of Hall current and radiation absorption on MHD micropolar fluid in a rotating system, *Ain Shams Engineering Journal*, 4 (2013) 843–854.
- [131] J. I. Oahimire and B. I. Olajuwon, Effect of Hall current and thermal radiation on heat and mass transfer of a chemically reacting MHD flow of a micropolar fluid through a porous medium, *Journal of King Saud University – Engineering Sciences*, 26 (2014) 112–121.
- [132] B. I. Olajuwon, J. I. Oahimire, M. Ferdow, Effect of thermal radiation and Hall current on heat and mass transfer of unsteady MHD flow of a viscoelastic micropolar fluid through a porous medium, *Engineering Science and Technology, an International Journal*, 17 (2014) 185-193.

- [133] G. S. Seth, S. Sarkar, S. M. Hussain, Effects of Hall current Radiation and Rotation on Natural Convection Heat and Mass Transfer Flow Past a Moving Vertical Plate, *Ain Shams Engineering Journal* 5 (2014) 489-503.
- [134] G. S. Seth, S. M. Hussain, S. Sarkar, Effects of Hall current and Rotation on Unsteady MHD Natural Convection Flow with Heat and Mass Transfer Past an Impulsively Moving Vertical Plate in the Presence of Radiation and Chemical Reaction, *Bulg. Chem. Comm.*, 46 (2014) 704- 718.
- [135] S. M. Hussain, J. Jain, G.S. Seth, M.M. Rashidi, Free convective heat transfers with hall effects, heat absorption and chemical reaction over an accelerated moving plate in a rotating system, *Journal of Magnetism and Magnetic Materials*, 422 (2017) 112–123.
- [136] A. Raptis, A. K. Singh, Rotation effects on MHD free-convection flow past an accelerated vertical plate, *Mech Res Commun*, 12 (1985) 31–40.
- [137] M. M. Rashidi, N. Kavyani, S. Abelman, Investigation of entropy generation in MHD and slip flow over a rotating porous disk with variable properties, *Int. J. Heat Mass Transf.*, 70 (2014) 892–917.
- [138] M. M. Rashidi and E. Erfani, Analytical Method for Solving Steady MHD Convective and Slip Flow due to a Rotating Disk with Viscous Dissipation and Ohmic Heating, *Engineering Computations* 29 (2012) 562–579.
- [139] S. Nadeem and S. Saleem, Analytical treatment of unsteady mixed convection MHD flow on a rotating cone in a rotating frame, *Journal of the Taiwan Institute of Chemical Engineers*, 44 (2013) 596–604.
- [140] S. Lee and M. M. Yovanovich, Laminar natural convection from a vertical plate with a step change in wall temperature, *J. Heat Transf.*, 113 (1991) 501-504.
- [141] G. S. Seth, Md. S. Ansari, R. Nandkeolyar, MHD natural convection flow with radiative heat transfer past an impulsively moving plate with ramped wall temperature, *Heat Mass Transfer*, 47 (2011) 551–561.
- [142] G. S. Seth, R. Nandkeolyar, Md. S. Ansari, Effects of Thermal Radiation and Rotation on Unsteady Hydromagnetic Free Convection Flow Past an Impulsively Moving Vertical Plate with Ramped Temperature in a Porous Medium, *J. Appl. Fluid Mech*, 6 (2013) 27-38.
- [143] G. S. Seth, G. K. Mahato, S. Sarkar, Effects of Hall Current and Rotation on MHD Natural

- Convection Flow Past an Impulsively Moving Vertical Plate with Ramped Temperature in the Presence of Thermal Diffusion with Heat Absorption, *Int. J. Energy & Tech*, 5 (2013) 1- 12.
- [144] G. S. Seth, S. Sarkar, G. K. Mahato, Effects of Hall Current on Hydromagnetic Free Convection Flow with Heat and Mass Transfer of a Heat Absorbing Fluid Past an Impulsively Moving Vertical Plate with Ramped Temperature, *Int. J. Heat Tech*, 31 (2013) 85-96.
- [145] G. S. Seth, S. Sarkar, S. M. Hussain, G. K. Mahato, Effects of Hall Current and Rotation on Hydromagnetic Natural Convection Flow with Heat and Mass Transfer of a Heat Absorbing Fluid Past an Impulsively Moving Vertical Plate with Ramped Temperature, *J. Appl. Fluid Mech*, 8 (2015) 159- 171.
- [146] G. S. Seth, S. Sarkar, MHD Natural Convection Heat and Mass Transfer Flow Past a Time Dependent Moving Vertical Plate with Ramped Temperature in a Rotating Medium with Hall Effects, Radiation and Chemical Reaction, *J. Mech*, 31 (2015) 91 – 104.
- [147] G. S. Seth, R. Sharma, S. Sarkar, Hydromagnetic Natural Convection Heat and Mass Transfer Flow with Hall Current of a Heat Absorbing and Radiating Fluid Past an Accelerated Moving Vertical Plate with Ramped Temperature in a Rotating Medium, *J. Appl. Fluid Mech*, 8 (2015) 7-20.
- [148] G. S. Seth, A K. Singha, R Sharma, MHD natural convection flow with hall effects, radiation and Heat absorption over an exponentially accelerated vertical Plate with ramped temperature, *Ind. J. Sci. Res. and Tech*, 5 (2015) 10-22.
- [149] G. S. Seth, S. M. Hussain, S. Sarkar, Hydromagnetic natural convection flow with heat and mass transfer of a chemically reacting and heat Absorbing fluid past an accelerated moving vertical plate with ramped temperature and ramped surface Concentration through a porous medium, *Journal of the Egyptian Mathematical Society*, 23 (2015) 197–207.
- [150] G. S. Seth, B. Kumbhakar, R. Sharma, Unsteady MHD free convection flow with Hall effect of a radiating and heat absorbing fluid past a moving vertical plate with variable ramped temperature, *Journal of the Egyptian Mathematical Society*, 24 (2016) 471–478.
- [151] R. Nandkeolyar, M. Das, P. Sibanda, Exact solutions of unsteady MHD free convection in a heat absorbing fluid flow past a flat plate with ramped wall temperature, *Boundary Value Problems*, (2013) 2013:247.

- [152] R. Nandkeolyar, G. S. Seth, O. D. Makinde, P. Sibanda, Md. S. Ansari, Unsteady Hydromagnetic Natural Convection Flow of a Dusty Fluid Past an Impulsively Moving Vertical Plate with Ramped Temperature in the Presence of Thermal Radiation, *ASME J. Appl. Mech* 80 (2013) p. 061003-(1-9), DOI: 10.1115/1.4023959.
- [153] A. Khan, I. Khan, F. Ali, S. Shafie, Effects of wall shear stress MHD conjugate flow over an inclined plate in a porous medium with ramped wall temperature, *Mathematical Problems in Engineering*, (2014), [dx.doi.org/10.1155/2014/861708](https://doi.org/10.1155/2014/861708).
- [154] A. Khalid, I. Khan, S. Shafie, Exact solutions for free convection flow of Nano fluids with ramped wall temperature, *The European Physical Journal Plus*, (2015) 130:57.
- [155] Samiulhaq, S. Ahmad, D. Vieru, I. Khan, S. Shafie, Unsteady Magnetohydrodynamic Free Convection Flow of a Second Grade Fluid in a Porous Medium with Ramped Wall Temperature *PLOS ONE* 9(5) (2015): e88766. doi: 10.1371/journal.pone.0088766
- [156] H. R. Kataria and H. R. Patel, Heat and Mass Transfer in MHD Second Grade Fluid Flow with Ramped Wall Temperature through Porous Medium, *Mathematics Today*, 32 (2016) 67-83.
- [157] H. R. Kataria and H. R. Patel, (2016): Effect of thermo-diffusion and parabolic motion on MHD Second grade fluid flow with ramped wall temperature and ramped surface concentration, *Alexandria Engineering Journal*, doi: 10.1016/j.aej.2016.1
- [158] G. K. Batchelor, *An Introduction to Fluid Dynamics*. London: Cambridge University Press; 1987.
- [159] V. M. Soundalgekar, Free convection effects on the Flow Past a Vertical Oscillating Plate, *Astrophysics Space Science*, 66(1979), 165-172.
- [160] V. M. Soundalgekar and S. P. Akolkar, Effects of free convection and mass transfer on flow past a vertical oscillating plate, *Astrophysics and Space Science*, 89(1983), 241-254
- [161] A. K. Singh and N. Kumar, Free convection flow past an exponentially accelerated vertical plate. – *Astrophysics and Space Science*, 98 (1984) 245-258.
- [162] E. M. Sparrow and R. D. Cess, Temperature-dependent Heat Sources or Sinks in a Stagnation Point Flow, *Appl. Sci. Res.*, 10 (1961) 185-197.
- [163] M. H. Kamel, Unsteady MHD Convection through Porous Medium with Combined Heat and Mass Transfer with Heat Source/Sink, *Energ. Convers. Manage.*, 42 (2001) 393-405.
- [164] A. J. Chamkha, Unsteady MHD Convective Heat and Mass Transfer Past a Semi-Infinite

Vertical Permeable Moving Plate with Heat Absorption, Int. J. Eng. Sci., 42 (2004) 217-230.

- [165] A. Rapits, Mass transfer and free convection through a porous medium by the presence of a rotating fluid, Int. Comm. Heat and Mass transfer, 10 (1983), 141.
- [166] G. W. Sutton and A. Sherman, Engineering Magnetohydrodynamics, McGraw-Hill, New York, 1965.
- [167] R. B. Hetnarski, on inverting the Laplace transforms connected with the error function, "Zastowania Matematyki", (1964) 399-405.
- [168] P. Puri, P. K. Kythe, Some inverse Laplace transforms of exponential form, "Journal of Applied Mathematics and Physics (ZAMP)" 39, (1988) 149- 156.