

# Bibliography

- [1] J. Larmor, How could a rotating body such as the Sun become a magnet?, Report of the British Association for the Advancement of Science, **87 Meeting**(1919), pp.159-160.
- [2] A. Kolin, An electromagnetic flowmeter: Principle of method and its application to blood flow acceleration, *Experimental Biology and Medicine*, **35**(1936), pp.53-56.
- [3] J. Hartmann, Theory of laminar flow of an electrically conducting liquid in a homogeneous magnetic field, *Hg-Dynamics I*, Kongelige Danske Videnskabernes Selskab, *Mathematisk-fysiske Meddelelse*, **15(6)**(1937), pp.1-28.
- [4] H. Alfven, Existence of electromagnetic hydrodynamic waves, *Nature*, **150**(1942), pp.405-406.
- [5] E.C. Bullard, *Mon. Nat. Roy. Astro. Soc., Geophys. Suppl.*, **5**(1948), pp.245.
- [6] G.H. Cole, Some aspects of Magnetohydrodynamics, *Advances in phys.*, **5**(1956), pp.452.
- [7] T.G. Cowling, *Magnetohydrodynamics*, Interscience Publishers, Inc., New York, (1957).
- [8] R.C. Meyer, On reducing Aerodynamics heat transfer rates by Magnetohydrodynamic techniques, *J. Aerospace Sci.*, **25**(1958), pp.561-566.
- [9] L.P. Harris, *Hydromagnetic channel flow*, Mass. Inst. Tech. press and Wiley, New York, (1960).
- [10] V.C.A. Ferraro and C. Plumpton, *An introduction to Magneto-fluid Mechanics*, Oxford University press, UK, (1961).

- 
- [11] J.A. Shercliff, A text book of Magnetohydrodynamics, Pergamon Press, UK, (1965).
- [12] K.R. Cramer and S.I. Pai, Magneto-fluid dynamics for engineers and applied physicists, McGraw-Hill, New York, (1973).
- [13] P.A. Davidson, An introduction to Magnetohydrodynamics, Cambridge University Press, (2001).
- [14] H. Darcy, Les Fontaines Publiques de la ville de Dijon, New York, (1856).
- [15] M. Muskat, The flow of homogeneous fluids through porous media, McGraw-Hill, New York, (1937).
- [16] S. Chandrasekhar, Radiative transfer, Dover Publications, New York, (1960).
- [17] V. Kourganoff, Basic methods in transfer problems, Oxford University Press, New York, (1952).
- [18] V.V. Sobolev, A treatise on radiative transfer, Von Nostrand, (1963).
- [19] H.P. Greenspan, The theory of rotating fluids, Cambridge University Press, (1990).
- [20] R.N. Jana and N. Datta, Couette flow and heat transfer in a rotating system, *Acta Mech.*, **26**(1977), pp.301-306.
- [21] R.N. Jana, N. Datta and B.S. Majumdar, Magnetohydrodynamic Couette flow and heat transfer in a rotating system, *J. Phys. Soc. Japan*, **42**(1977), pp.1034-1039.
- [22] G.S. Seth and M.K. Maiti, MHD Couette flow and heat transfer in a rotating system, *Ind. J. Pure Appl. Maths*, **13**(1982), pp.931-945.
- [23] B.S. Mazumder, An exact solution of oscillatory Couette flow in a rotating system, *Trans. ASME J. Appl. Mech.*, **58**(1991), pp.1104-1107.
- [24] R. Ganapathy, A note on oscillatory Couette flow in a rotating system, *ASME J. Appl. Mech.*, **61**(1994), pp.208-209.
- [25] G.S. Seth and N. Mahto, Generalised oscillatory MHD Couette flow in a rotating system, *Proc. Math. Soc. BHU*, **2**(1986), pp.23-40.

- 
- [26] G.S. Seth, R. Singh and N. Mahto, Oscillatory hydromagnetic Couette flow in a rotating system, *Ind. J. Tech.*, **26**(1988), pp.329-333.
- [27] G. Mondal and K.K. Mandal, Effect of Hall current on MHD Couette flow between thick arbitrarily conducting plate in a rotating system, *J. Phys. Soc. Japan*, **52**(2)(1983), pp.470-477.
- [28] A.K. Singh, N.C. Sachiti and P. Chandran, Transient effects on magnetohydrodynamic Couette flow with rotation: Accelerated motion, *Int. J. Eng. Sci.*, **32**(1994), pp.133-139.
- [29] R.N. Jana and G. Dogra, Hydromagnetics Couette flow in a rotating system in the presence of an inclined magnetic field, *Mathematical Forum*, **11**(1997), pp.26-34.
- [30] G.S. Seth, N. Mahto and S.K. Singh, Heat transfer characteristics of MHD Couette flow in a rotating system in the presence of inclined magnetic field, *Proc. Math. Soc. BHU*, **18**(2002), pp.85-92.
- [31] K.D. Singh, An oscillatory hydromagnetic Couette flow in a rotating system, *ZAMM*, **80**(6)(2000), pp.429-432.
- [32] S.K. Ghosh and I. Pop, Hall effects on MHD plasma Couette flow in a rotating environment, *Int. J. Appl. Mech. Eng.*, **9**(2)(2004), pp.293-305.
- [33] H.A. Attia, Unsteady Couette flow with heat transfer considering ion-slip, *Turk J. Phys.*, **29**(2005), pp.379-388.
- [34] G.S. Seth, R.N. Jana and M.K. Maiti, Unsteady hydromagnetic Couette flow in a rotating system, *Int. J. Engng. Sci.*, **20**(5)(1982), pp.989-999.
- [35] S.K. Ghosh and I. Pop, An analytical approach to MHD plasma behaviour of a rotating environment in the presence of an inclined magnetic field as compared to excitation frequency, *Int. J. Appl. Mech. Eng.*, **11**(4)(2006), pp.845-856.
- [36] A. Kumar, G.S. Seth and A. Talib, Hydromagnetic Couette flow in a rotating system with Hall effects, *Acta Ciencia Indica*, **33M**(2007), pp.937-945.
- [37] B.K. Das, M. Guria and R.N. Jana, Unsteady Couette flow in a rotating system, *Meccanica*, **43**(2008), pp.517-521.
- [38] S. Das, S.L. Maji, M. Guria and R.N. Jana, Unsteady MHD Couette flow in a rotating system, *Math. Comp. Modelling*, **50**(2009), pp.1211-1217.

- 
- [39] M. Guria, S. Das, R.N. Jana and S.K. Ghosh, Oscillatory Couette flow in the presence of an inclined magnetic field, *Meccanica*, **44**(2009), pp.555-564.
- [40] G.S. Seth, R. Nandkeolyar, N. Mahato and S.K. Sing, MHD Couette flow in a rotating system in the presence of an inclined magnetic field, *Appl. Math. Sci.*, **3**(2009), pp.2919-2932.
- [41] G.S. Seth and J.K. Singh, Steady hydromagnetic Couette flow in a rotating system with non-conducting walls, *Int. J. Eng. Sci. and Tech.*, **3**(2)(2011), pp.146-156.
- [42] O.A. Bég, S.K. Ghosh and M. Narahari, Mathematical modelling of oscillatory MHD Couette flow in a rotating highly permeable medium permeated by an oblique magnetic field, *Chem. Eng. Comm.*, **198**(2)(2011), pp.235-254.
- [43] N. Ghara, S.L. Maji, S. Das, R.N. Jana and S.K. Ghosh, Effects of Hall current and ion-slip on unsteady MHD Couette flow, *Open J. Fluid Dynamics*, **2**(2012), pp.1-13.
- [44] B.C. Sarkar, S. Das and R.N. Jana, Effects of radiation on transient MHD free convective Couette flow in a rotating system, *Adv. in Appl. Sci. Research*, **3**(5)(2012), pp.3291-3310.
- [45] S.L. Maji, S. Das and R.N. Jana, Hall effects on unsteady Couette flow in a rotating system, *Journal of Mechanics*, **29**(03)(2013), pp.443-452.
- [46] S. Das, R.N. Jana and A.J. Chamkha, Entropy generation in a rotating Couette flow with suction/injection, *Commun. Num. Analy.*, **2015**(1)(2015), pp.62-81.
- [47] A.O. Ali, O.D. Makinde and Y.N. Gyekye, Numerical study of unsteady MHD Couette flow and heat transfer in a rotating frame of reference, *Int. J. Math. Heat Fluid Flow*, **26**(5)(2016), pp.1567-1579.
- [48] S. Das, R.N. Jana and O.D. Makinde, Transient hydromagnetic reactive Couette flow and heat transfer in a rotating frame of reference, *Alexandria Engineering Journal*, **55**(2016), pp.635-664.
- [49] S. Das, A. Ali, S.K. Guchhait and R.N. Jana, Hall effects on rotating MHD Couette flow when magnetic field being fixed to either fluid or to moving plate, *International Journal of Science and Culture*, **01**(01)(2016), pp.29-47.

- 
- [50] S. Das, R.N. Jana and A.J. Chamka, Entropy generation due to unsteady hydromagnetic Couette flow and heat transfer with asymmetric convective cooling in a rotating system, *Journal of Mathematical Modelling*, **3(2)**(2016), pp.111-128.
- [51] K. Rajesh, A. Govindarajan, M. Vidhya and E.P. Siva, An analysis of oscillatory hydromagnetic Couette flow through a porous medium in a rotating system, *Journal of Physics: Conference series*, **1000(012145)**(2018), pp.1-7.
- [52] H. Sato, The Hall effects in the viscous flow of ionized gas between parallel plates under transverse magnetic field, *J. Phys. Soc. Japan*, **16**(1961), pp.1427-1433.
- [53] T. Yamanishi, Effects of Hall current on the steady hydromagnetic flow between two parallel plates, *Annual Meeting Phys. Soc., Japan*, **5**(1962), pp.29.
- [54] V.M. Soundalgekar, Hall effects on heat transfer in MHD channel flow under crossed fields, *Proc. Nat. Inst. Sci.*, **A,35(4)**(1969), pp.492-501.
- [55] A.H. Eraslan, Temperature distribution in MHD channel with Hall effect, *AIAAJ.*, **7**(1969), pp.186-188.
- [56] I. Pop, The effects of Hall currents on hydromagnetic flow near an accelerated plate, *J. Math. Phys. Sci.*, **5**(1971), pp.375-385.
- [57] A.S. Gupta, Hydromagnetic flow past a porous flat plate with Hall effects, *Acta Mechanica*, **22(3-4)**(1975), pp.281-287.
- [58] C.V.V. Bhadram, Hall effects on the hydromagnetic flow due to an oscillating plane with or without rotation, *Acta Mechanica*, **24**(1976), pp.319-326.
- [59] B.S. Mazumder, A.S. Gupta and N. Datta, Flow and heat transfer in the hydromagnetic Ekman layer on a porous plate with Hall effects, *Int. J. Heat mass Transfer*, **19**(1976), pp.523-527.
- [60] R.N. Jana and N. Datta, Hall effects on hydromagnetic flow over an impulsively started porous plate, *Acta Mechanica*, **28**(1977), pp.211-218.
- [61] R.N. Jana, A.S. Gupta and N. Datta, Hall effects on the hydromagnetic flow past an infinite porous flat plate, *J. Phys. Soc. Japan.*, **43**(1977), pp.1767-1772.
- [62] N. Datta and R.N. Jana, Hall effects on hydromagnetic flow and heat transfer in a rotating channel, *J. Inst. Math. and its Appl.*, **19**(1977), pp.217-229.

- 
- [63] R.N. Jana and N. Datta, Hall effects on unsteady Couette flow, *Int. J. Engg. Sci.*, **15**(1977), pp.35-43.
- [64] R. Sivaprasad, D.R.V. Prasad Rao and D.V. Krishna, Hall effects on unsteady MHD free and forced convection flow in a porous rotating channel, *Ind. J. Pure Appl. Math.*, **19**(7)(1988), pp.688-696.
- [65] A.K. Kanch, G. Dogra and R.N. Jana, Hall effects on hydromagnetic flow in a horizontal channel in the presence of inclined magnetic field, *J. Phys. Sci.*, **3**(1997), pp.9-13.
- [66] S.K. Ghosh, Hall effects on hydromagnetic convective flow in a rotating channel, *Ind. J. Pure Appl. Math.*, **25**(9)(1994), pp.991-1000.
- [67] S.K. Ghosh, Hall effect on unsteady hydromagnetic flow in a rotating channel permeated by an inclined magnetic field in the presence of an oscillator, *Czech. J. Physics*, **49**(1999), pp.465-472.
- [68] M. Guria and R.N. Jana, Hall effects on the hydromagnetic convective flow through a rotating channel under general wall conditions, *Magnetohydrodynamics*, **43**(3)(2007), pp.287-300.
- [69] G.S. Seth and Md.S. Ansari, Magnetohydrodynamic convective flow in a rotating channel with Hall effects, *Int. J. Theory and Appl. Mechanism*, **4**(2009), pp.205-222.
- [70] G.S. Seth, R. Nadkeolyar and Md.S. Ansari, Hall effects on oscillatory hydromagnetic Couette flow in a rotating system, *Int. J. Acad. Res.*, **1**(2009), pp.6-17.
- [71] D. Singh Chauhan and R. Agrawal, Effects of Hall current on MHD Couette flow in a channel partially filled with a porous medium in a rotating system, *Meccanica*, **47**(2)(2012), pp.405-421.
- [72] B.K. Jha and C.A. Apere, Time-dependent MHD Couette flow of rotating fluid with Hall and ion-slip currents, *Appl. Math. Mech. Eng. Ed.*, **33**(4)(2012), pp.399-410.
- [73] K.D. Singh and R. Pathak, Effect of rotation and Hall current on mixed convection MHD flow through a porous medium filled in a vertical channel in presence of thermal radiation, *Indian J. Pure and Appl. Phys.*, **50**(2012), pp.77-85.

- [74] S.K. Guchhait, S. Das and R.N. Jana, Combined effect of Hall current and rotation on MHD mixed convection oscillatory flow in a rotating vertical channel, *Int. J. Com. Appl.*, **49(13)**(2012), pp.1-11.
- [75] B.C. Sarkar, S. Das and R.N. Jana, Effects of Hall currents and radiation on MHD free convective flow past an oscillating vertical plate with oscillatory plate temperature in a porous medium, *Bull. Soc. Math. Services and Standards*, **1(3)**(2012), pp.6-32.
- [76] B.C. Sarkar, S. Das and R.N. Jana, Combined effects of Hall currents and radiation on MHD free convective Couette flow in a rotating system, *Adv. in Appl. Sci. Research*, **3(6)**(2012), pp.3766-3787.
- [77] B.C. Sarkar, S. Das and R.N. Jana, Combined effects of Hall currents and rotation on steady hydromagnetic Couette flow, *Research J. Appl. Sci., Engg. and Tech.*, **5(6)**(2013), pp.1864-1875.
- [78] B.C. Sarkar, S. Das and R.N. Jana, Hall effects on unsteady MHD free convective flow past an accelerated moving vertical plate with viscous and Joule dissipations, *Int. J. Comp. Applications*, **70(24)**(2013), pp.19-28.
- [79] G.S. Seth, G.K. Mahato and 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 and heat absorption, *Int. J. Energy Tech.*, **5**(2013), pp.1-12.
- [80] S. Das, B.C. Sarkar and R. N. Jana, Hall effects on MHD free convection boundary layer flow past a vertical flat plate, *Meccanica*, **48(6)**(2013), pp.1387-1398.
- [81] S. Das, S.K. Guchhait and R.N. Jana, Effects of Hall currents and radiation on unsteady MHD flow past a heated moving vertical plate, *Journal of Applied Fluid Mechanics*, **7(4)**(2014), pp.683-692.
- [82] S. Das, S.L. Maji and R.N. Jana, Combined effects of Hall current and wall conductance on MHD fully developed flow with asymmetric heating of walls, *Journal of Natural Science and Sustainable Technology*, **8(1)**(2014), pp.1-26.
- [83] S. Das and R.N. Jana, Effects of Hall currents on MHD flow past a porous flat plate slip condition embedded in a porous medium in a rotating system, *Journal of Natural Science and Sustainable Technology*, **8(1)**(2014), pp.27-50.

- 
- [84] S.K. Guchhait, R.N. Jana and S. Das, Hall effects on hydromagnetic free convection in a heated vertical channel in presence of inclined magnetic field and thermal radiation, *Turkish Journal of Engineering and Environmental Sciences*, **38**(2014), pp.434-454.
- [85] G.S. Seth, R. Tripathi and R. Sharma, Natural convection flow past an exponentially accelerated vertical ramped temperature plate with Hall effects and heat absorption, *Int. J. Heat Tech.*, **33**(3)(2015)), pp.139-144.
- [86] S. Das, S.K. Guchhait and R.N. Jana, Hall effects on unsteady hydromagnetic flow past an accelerated porous flat plate in a rotating system, *Journal of Applied Fluid Mechanics(Poland)*, **8**(3)(2015), pp.409-417.
- [87] S. Das, S.K. Guchhait, R.N. Jana and O.D. Makinde, Hall effects on an unsteady magnetoconvection and radiative heat transfer past a porous plate, *Alexandria Engineering Journal*, **55**(2016), pp.1321-1331.
- [88] S. Das, B. Tarafdar O.D. Makinde and R.N. Jana, Rotating slip flow in a shrinking permeable channel considering Hall current effects, *Defect and Diffusion Forum*, **387**(2018), pp.534-549.
- [89] G. Padma and S.V. Suneetha, Hall effects on MHD flow through porous medium in a rotating parallel plate channel, *International Journal of Applied Engineering Research*, **13**(11)(2018), pp.9772-9789.
- [90] B.Prabhakar Reddy, Hall effect on MHD transient flow past an impulsively started infinite horizontal porous plate in a rotating system, *International Journal of Applied Mechanics and Engineering*, **23**(2)(2018), pp.471-483.
- [91] S. Das, B. Tarafdar, B.C. Sarkar and R.N. Jana, Rotational magneto-hydrodynamic Couette flow of nano-fluids with Hall effects, *Journal of Nanofluids*, **8**(3)(2019), pp.604-619.
- [92] R.A. Regirer, On convective motion of a conducting fluid between parallel vertical plates in a magnetic field, *Soviet Phys. JETP*, **37**(1960), pp.149.
- [93] Y. Mori, On combined free and force convective laminar magnetohydrodynamic flow and heat transfer in channels with transverse magnetic field, *Int. Dev. Heat Trans.*, **Part 5**(1961), pp.1031.



- 
- [94] C.P. Yu, Combined forced and free convection channel flows in magnetohydrodynamics, *AIAA JI*, **3**(1965), pp.1184.
- [95] G. Poots, Laminar natural convection flow in magneto-hydrodynamic, *Int. J. Heat Mass Trans.*, **3**(1961), pp.1-25.
- [96] P.S. Gupta and A.S. Gupta, Radiation effect on hydromagnetic convection in a vertical channel, *Int. J. Heat Mass Trans.*, **17**(1974), pp.1437-1442.
- [97] N. Datta and R.N. Jana, Effect of wall conductances on hydromagnetic convection of a radiating gas in a vertical channel, *Int. J. Heat Mass Trans.*, **19**(1976), pp.1015-1019.
- [98] N. Datta and R.N. Jana, Hall effects on hydromagnetic convective flow through a channel with conducting walls, *Int. J. Engg. Sci.*, **15**(1977), pp.561-567.
- [99] S.K. Ghosh and D.K. Nandi, Magnetohydrodynamic fully developed combined convection flow between vertical plates heated asymmetrically, *J. Technical Physics*, **41(2)**(2000), pp.173-185.
- [100] S.K. Ghosh, I. Pop and D.K. Nandi, MHD fully developed mixed convection flow with asymmetric heating of the wall, *Int. J. Appl. Mech. and Engg.*, **7(4)**(2002), pp.1211-1228.
- [101] J.C. Umavathi and M.S. Malashetty, MHD mixed convection in a vertical channel, *Int. J. Non-linear Mech.*, **40**(2005), pp.91-101.
- [102] S. Das, N. Ghara and R.N. Jana, MHD free convection between vertical walls, *Int. J. Math. Archive*, **2(11)**(2011), pp.2429-2439.
- [103] C. Mandal, S. Das and R.N. Jana, Effect of radiation on transient natural convection flow between two vertical walls, *Int. J. Appl. Infor. Sys.*, **2(2)**(2012), pp.49-56.
- [104] B.C. Sarkar, S. das and R.N. Jana, Transient MHD natural convection between two vertical walls heated/cooled asymmetrically, *Int. J. Computer Application*, **52(3)**(2012), pp.27-34.
- [105] K.D. Singh, Exact solution of MHD mixed convection periodic flow in a rotating vertical channel with heat radiation, *Int. J. Appl. Mech. Engg.*, **18(3)**(2013), pp.853-869.

- [106] K.D. Singh and R. Pathak, Effects of slip conditions and Hall current on an oscillatory convective flow in a rotating vertical porous channel with thermal radiation, *Int. J. Appl. Math. and Mech.*, **9**(2013), pp.60-77.
- [107] S. Das and R.N. Jana, Hall effects on unsteady free convection in a heated vertical channel in presence of heat generation, *Appl. Math. and Phy.*, **1(3)**(2013), pp.45-59.
- [108] S.O. Adesanya, E.O. Oluwadare, J.A. Falade and O.D. Makinde, Hydromagnetic natural convection flow between vertical parallel plates with time-periodic boundary conditions, *J. Magnetism and Magnetic Materials*, **396**(2015), pp.295-303.
- [109] B.K. Jha, B. Aina and A.T. Ajiya, MHD natural convection in a vertical parallel plate microchannel, *J. Ain Shams Eng.*, **6**(2015), pp.289-295.
- [110] B.K. Jha, B. Aina and A.T. Ajiya, Role of suction/injection on MHD natural convection flow in a vertical micro channel, *Int. J. Energy Technology*, **7**(2015), pp.30-39.
- [111] S. Das, R.N. Jana and O.D. Makinde, Mixed convective magnetohydrodynamic flow in a vertical channel filled with nanofluids, *Engineering Science and Technology, an Int. Journal*, **18(2)**(2015), pp.244-255.
- [112] S. Das, R.N. Jana and O.D. Makinde, Transient natural convection in a vertical channel filled with nanofluids in the presence of thermal radiation, *Alexandria Engineering Journal*, **55(1)**(2016), pp.253-262.
- [113] K. Dwivedi, R.K. Khare and A. Paul, MHD flow through vertical channel with porous medium, *Int. Journal of Applied Engineering Research*, **13(15)**(2018), pp.11923-11926.
- [114] B.K. Jha, P.B. Malgwi and B. Aina, Hall effects on MHD natural convection flow in a vertical microchannel, *Alexandria Engineering Journal*, **57(2)**(2018), pp.983-993.
- [115] M. Goswami, K.G. Singha, A. Goswami and P.N. Deka, A study of unsteady MHD vertical flow of an incompressible viscous, electrically conducting fluid bounded by two non-conducting plates in presence of a uniform inclined magnetic field, *Proceeding of the World Congress on Engineering 2018, Vol I WCE 2018*(2018), London, U.K., pp.1-6.

- [116] H.S. Takhar, R.S.R. Gorla and V.M. Soundalgekar, Radiation effects on MHD free convection flow of a radiating gas past a semi-infinite vertical plate, *Int. J. Num. Methods Heat flu. flow*, **6(2)**(1996), pp.77-83.
- [117] M.E.M. Quaf, Exact solution of thermal radiation on MHD flow over a stretching porous sheet, *App. Math. and Comp.*, **170(2)**(2005), pp.1117-1125.
- [118] A. Raptis, C. Perdikis and H.S. Takhar, Effect of thermal radiation on MHD flow, *Appl. Math. and Comp.*, **153(3)**(2004), pp.645-649.
- [119] J.A. Gbadeyan, S. Daniel and E.G. Kefas, The radiation effect on electro-hydromagnetic froth flow in vertical channel, *J. Math. Asso. Nigeria*, **32(2B)**(2005), pp.388-396.
- [120] H.M. Duwairi and R.M. Duwairi, Thermal radiation effect on MHD Rayleigh flow with constant surface heat flux, *Heat and Mass Trans.*, **41(1)**(2005), pp.51-57.
- [121] C. Perdikis and E. Raptis, Unsteady MHD flow in the presence of radiation, *Int. J. Appl. Mech. Eng.*, **11(2)**(2006), pp.383-390.
- [122] P. Mebine, Radiation effects on MHD Couette flow with heat transfer between two parallel plates, *Global J. Pure and Appl. Math.*, **3(2)**(2007), pp.1-12.
- [123] J. Zueco, Network simulation method applied to radiation and viscous dissipation effects on MHD unsteady free convection over a vertical porous plate, *Appl. Math. Modelling*, **31(9)**(2007), pp.2019-2033.
- [124] B.K. Jha and A.O. Ajibade, Free convective flow of heat generating/absorbing fluid between vertical porous plates with periodic heat input, *Int. Comm. Heat and Mass Trans.*, **36**(2009), pp.624-631.
- [125] M. Guria, N. Ghara and R.N. Jana, Radiation effect on three dimensional vertical channel flow, *Int. J. Appl. Mech. Eng.*, **15(4)**(2010), pp.1065-1081.
- [126] B.K. Jha and A.O. Ajibade, Unsteady free convective Couette flow of heat generating/absorbing fluid, *Int. J. Energy and Tech.*, **2(12)**(2010), pp.1-9.
- [127] S.K. Ghosh, S. Rawat, O.A. Bég and T.A. Bég, Thermal radiation effects on unsteady hydromagnetic gas flow along an inclined plane with indirect natural convection, *Int. J. Appl. Math. and Mech.*, **6(13)**(2010), pp.41-57.

- [128] A.G.V. Kumar and S.V.K. Varma, Radiation effects on MHD flow past an impulsively started exponentially accelerated vertical plate with variable temperature in the presence of heat generation, *Int. J. Eng. Sci. Tech.*, **3(4)**(2011), pp.2897-2909.
- [129] U.S. Rajput and S. Kumar, Rotation and radiation effects on MHD flow past an impulsively started vertical plate with variable temperature, *Int. J. Mathematical Analysis*, **5(24)**(2011), pp.1155-1163.
- [130] M. Jana, S. Das and R.N. Jana, Radiation effect on unsteady MHD free convective flow past an exponentially accelerated vertical plate with viscous and Joule dissipations, *Int. J. Eng. Res. and Appl.*, **2(5)**(2012), pp.270-278.
- [131] M. Jana, S. Das and R.N. Jana, Effects of radiation on MHD natural convection near a vertical plate with oscillatory ramped plate temperature, *Int. J. Eng. Innovation and Res.*, **1(4)**(2012), pp.366-375.
- [132] S. Das, S.K. Guchhait and R.N. Jana, Effects of radiation on free convection MHD Couette flow with variable wall temperature in presence of heat generation, *Adv. in Theo. and Appl. Math.*, **7(2)**(2012), pp.171-190.
- [133] S. Das, S.K. Guchhait and R.N. Jana, Radiation effects on unsteady MHD free convective Couette flow of heat generation/absorption fluid, *Int. J. Comp. Appl.*, **39(3)**(2012), pp.42-51.
- [134] S.K. Guchhait, S. Das and R.N. Jana, Combined effects of Hall current and radiation on MHD free convective flow in a vertical channel with an oscillatory wall temperature, *Open Journal of Fluid Dynamics*, **3(1)**(2013), pp.9-22.
- [135] S. Das, S.K. Guchhait and R.N. Jana, Radiation effects on MHD free convection flow past an oscillating vertical porous plate with periodic heat flux, *International Journal of Computer Applications (USA)*, **65(3)**(2013), pp.36-41.
- [136] A. Ogulu and O.D. Makinde, Unsteady hydromagnetic free convection flow of a dissipative and radiating fluid past a vertical plate with constant heat flux, *Chem. Eng. Commun.*, **196**(2009), pp.454-462.
- [137] T.G. Motsumi and O.D. Makinde, Effects of thermal radiation and viscous dissipation on boundary layer flow of nanofluids over a permeable moving flat plate, *Physica Scripta*, **86**(2012), pp.045003(1-8).

- [138] O.D. Makinde and M.S. Tshehla, Unsteady hydromagnetic flow of radiating fluid past a convectively heated vertical plate with the Navier slip, *Adv. Math. Phys.*, **2014**, **Article ID 973593**(2014), pp.1-10.
- [139] S. Das, R.N. Jana and O.D. Makinde, An oscillatory MHD convective flow in a vertical channel filled with porous medium with Hall and thermal radiation effects, *Special Topics and Reviews in Porous (Begell House)*, **5(1)**(2014), pp.63-82.
- [140] S. Das and R.N. Jana, Natural convective magnetonano fluid flow and radiative heat transfer past a moving vertical plate, *Alexandria Eng. J.*, **54(1)**(2015), pp.55-64.
- [141] R. Nandkeolyar and M. Das, MHD free convective radiative flow past a flat plate with ramped temperature in the presence of inclined magnetic field, *Computational and Applied Mathematics*, **34(1)**(2015), pp.109-123.
- [142] B.C. Sarkar, S. Das and R.N. Jana, Diffusion-thermo and thermal radiation of an optically thick gray gas in presence of magnetic field and porous medium, *Journal of Applied Fluid Mechanics (Poland)*, **9(4)**(2016), pp.2037-2051.
- [143] S.K. Ghosh, S. Das, R.N. Jana and A. Ghosh, Thermal radiation on transient laminar gray gas flow past an oscillating vertical plate with variable temperature, *International Journal of Advanced Thermofluid Research*, **1(2)**(2016), pp.1-21.
- [144] S. Das, R.N. Jana and O.D. Makinde, Transient natural convection in a vertical channel filled with nanofluids in presence of thermal radiation, *Alexandria Engineering Journal (Elsevier)*, **55**(2016), pp.253-262.
- [145] S. Das, A. Sensharma, R.N. Jana and R.P. Sharma, Stability of nanofluid flow through a vertical channel with wall thermal conductance and radiation, *Journal of Nanofluids, American Scientific Publishers*, **6(4)**(2017), pp.680-691.
- [146] S. Das, A. Sensharma, R.N. Jana and R.P. Sharma, Slip flow of nanofluid past a vertical plate with ramped wall temperature considering thermal radiation, *Journal of Nanofluids, American Scientific Publishers*, **6(6)**(2017), pp.1054-1064.
- [147] S. Das, B. Tarafdar, R.N. Jana and O.D. Makinde, Influence of rotational buoyancy on magneto-radiation-convection near a rotating vertical plate, *European Journal of Mechanics-B/Fluids*, **75**( 2019), pp.209-218.

- 
- [148] L.J. Crane, Flow past a stretching plate, *Z. Angew. Math. Phys.*, **21(4)**(1970), pp.645-647.
- [149] P. Carragher, L.J. Crane, Heat transfer on a continuous stretching sheet, *Z. Angew. Math. Mech.*, **62**(1982), pp.564-565.
- [150] C.Y. Wang, Liquid film on an unsteady stretching sheet, *Q. Appl. Math.*, **48**(1990), pp.601-610.
- [151] N. Afzal, Heat transfer from a stretching surface, *Int. J. Heat Mass Transf.*, **36(4)**(1993), pp.1128-1131.
- [152] K. Vajravelu and A. Hadjinicolaou, Heat transfer in a viscous fluid over a stretching sheet with viscous dissipation and internal heat generation, *Int. Commun. Heat Mass Transf.*, **20(3)**(1993), pp.417-430.
- [153] T.C. Chiam, Stagnation point flow towards a stretching plate, *J. Phys. Soc. Jpn.*, **63**(1994), pp.2443-2444
- [154] V. Kumaran and G. Ramanaiah, A note on the flow over a stretching sheet, *Acta Mech.*, **116(1-4)**(1996), pp.229-233.
- [155] E.M.A. Elbashbeshy, Heat transfer over an exponentially stretching continuous surface with suction, *Arch. Mech.*, **53(6)**(2001), pp.643-651.
- [156] P.Donald Ariel, Axisymmetric flow due to a stretching sheet with partial slip, *Comput. Math. Appl.*, **54**(2007), pp.1169-1183.
- [157] C.Y. Wang, Flow due to a stretching boundary with partial slip-an exact solution of the Navier-Stokes equations, *Chem. Eng. Sci.*, **57(17)**(2002), pp.3745-3747.
- [158] H.I. Andersson, Slip flow past a stretching surface, *Acta Mech.*, **158(1)**(2002), pp.121-125.
- [159] E.M.A. Elbashbeshy and M.A.A. Bazid, Heat transfer over an unsteady stretching surface with internal heat generation, *Appl. Math. Comput.*, **138(2-3)**(2003), pp.239-245.
- [160] C.Y. Wang, Natural convection on a vertical radially stretching sheet, *Math. Anal. App.*, **332**(2007), pp.877-883.

- 
- [161] M. Sajid, I. Ahmad, T. Hayat and M. Ayub, Series solution for unsteady axisymmetric flow and heat transfer over a radially stretching sheet, *Commun. Nonlinear Sci. Numer. Simul.*, **13(10)**(2008), pp.2193-2202.
- [162] A. Ishak, R. Nazar and I. Pop, Hydromagnetic flow and heat transfer adjacent to a stretching vertical sheet, *Heat Mass Transf.*, **44(8)**(2008), pp.921-927.
- [163] T. Fang, J. Zhang and S. Yao, Slip MHD viscous flow over a stretching sheet-An exact solution, *Commun. Nonlinear Sci. Numer. Simul.*, **14**(2009), pp.3731-3737.
- [164] V. Kumaran, A.K. Banerjee, A.V. Kumar and K. Vajravelu, MHD flow past a stretching permeable sheet, *Appl. Math. Comput.*, **210(1)**(2009), pp.26-32.
- [165] V. Kumaran, A.V. Kumar and I. Pop, Transition of MHD boundary layer flow past a stretching sheet, *Commun. Nonlinear Sci. Numer. Simul.*, **15**(2010), pp.300-311.
- [166] O.D. Makinde and A. Aziz, Flow and heat transfer of nanofluids over stretching sheet taking into account partial slip and thermal convective boundary conditions, *Int. J. Therm. Sci.*, **49(9)**(2013), pp.1357-1366.
- [167] O.D. Makinde, Computational modelling of nanofluids flow over a convectively heated unsteady stretching sheet, *Current Nanoscience*, **9**(2013), pp.673-678.
- [168] O.D. Makinde and A. Aziz, Boundary layer flow of a nanofluid past a stretching sheet with convective boundary condition, *Int. J. Thermal Sciences*, **50**(2011), pp.1326-1332.
- [169] S. Das, R.N. Jana and O.D. Makinde, MHD boundary layer slip flow and heat transfer of nanofluid past a vertical stretching sheet with non-uniform heat generation/absorption, *Int. J. Nanoscience*, **13(3)**(2014), pp.1450019(1-12).
- [170] K. Das, P.R. Duari and P.K. Kundu, Nanofluid flow over an unsteady stretching surface in presence of thermal radiation, *Alexandria Eng. J.*, **53(3)**(2014), pp.737-745.
- [171] S. Das, R.N. Jana and O.D. Makinde, MHD boundary layer slip flow and heat transfer of nanofluid past a vertical stretching sheet with non-uniform heat generation/absorption, *International Journal of Nanoscience*, **13(3)**(2014), pp.1-12.

- [172] S. Das, S. Chakraborty, R.N. Jana and O.D. Makinde, Entropy analysis of an unsteady magneto-nanofluid flow past an accelerating stretching sheet with convective boundary condition, *Applied Mathematics and Mechanics (English Edition)*, Springer, **36(12)**(2015), pp.1593-1610.
- [173] S. Das, S. Chakraborty, R.N. Jana and O.D. Makinde, Entropy generation in hydromagnetic and thermal boundary layer flow due to radially stretching sheet with Newtonian heating, *Journal of Heat and Mass Transfer Research*, **2**(2015), pp.51-61.
- [174] B.J. Gireesha, B. Mahanthesh, R.S.R. Gorla and P.T. Manjunatha, Thermal radiation and Hall effects on boundary layer flow past a non-isothermal stretching surface embedded in porous medium with non-uniform heat source/sink and fluid-particle suspension, *Heat Mass Transfer*, **52(4)**(2016), pp.897-911.
- [175] M. Sheikholeslami, M.T. Mustafa and D.D. Ganji, Effect of Lorentz forces on forced-convection nanofluid flow over a stretched surface, *Particuology*, **26**(2016), pp.108-113.
- [176] Z. Abbas, M. Naveed and M. Sajid, Hydromagnetic slip flow of nanofluid over a curved stretching surface with heat generation and thermal radiation, *J. Mol. Liq.*, **215**(2016), pp.756-762.
- [177] N.S. Akbar, D. Tripathi, Z.H. Khan and O.A. Bég, A numerical study of magnetohydrodynamic transport of nanofluids over a vertical stretching sheet with exponential temperature-dependent viscosity and buoyancy effects, *Chem. Phys. Lett.*, **661**(2016), pp.20-30.
- [178] W. Ibrahim, Magnetohydrodynamic(MHD) boundary layer stagnation point flow and heat transfer of a nanofluid past a stretching sheet with melting, *Propulsion and Power Research*, **6(3)**(2017), pp.214-222.
- [179] S. Das, S. Chakraborty, R.N. Jana and O.D. Makinde, Entropy analysis of MHD variable thermal conductivity fluid flow past a convectively heated stretching cylinder, *Defect and Diffusion Forum*, **387**(2018), pp.244-259.
- [180] I. M. Alarifi, A.G. Abokhalil, M. Osman, L. Ali Lund, M. Ben Ayed, H. Belmabrouk and I. Tlili, MHD flow and heat transfer over vertical stretching sheet with heat sink or source effect, *Symmetry*, **11,297**(2019), pp.1-14.



- 
- [181] M.N. Ozisik, Interaction of radiation with convection, In: Handbook of Single-Phase Convection Heat Transfer (Kakac, S., Shah, R.K. and Aung W., eds.), Wiley, New York, (1987).
- [182] M.F. Modest, Radiative Heat Transfer(2nd edition), Academic Press, New York, (2003).
- [183] E.M. Sparrow and R.D. Cess, Radiation Heat Transfer, Brooks/Cole, Belmont, California, (1970).
- [184] M.N. Ozisik, Radiative Transfer and Interactions with Conduction and Convection, Wiley, New York, (1973).
- [185] R. Siegel and J.R. Howell, Thermal Radiation Heat Transfer(3rd edition), Hemisphere, New York, (1992).
- [186] W. Aung, Fully developed laminar free convection between vertical plates heated asymmetrically, *Int. J. Heat Mass Transfer*, **15**(1972), pp.1577-1580.
- [187] W. Aung, L.S. Fletcher and V. Sernas, Developing laminar free convection between vertical flat plates asymmetric heating, *Int. J. Heat Mass Transfer*, **15**(1972), pp.2293-2308.
- [188] W. Aung and G. Worku, Developing flow and flow reversal in a vertical channel with asymmetric wall temperature, *J. Heat Transfer*, **108**(1986), pp.299-304.
- [189] W. Aung and G. Worku, Theory of fully developed, combined convection including flow reversal, *J. Heat Transfer*, **108**(1986), pp.485-488.
- [190] A. Barletta, Fully developed mixed convection and flow reversal in a vertical rectangular duct with uniform wall heat flux, *Int. J. Heat Mass Transfer*, **45**(2002), pp.641-654.
- [191] K. Boulama and N. Galanis, Analytical solution for fully developed mixed convection between parallel vertical plates with heat and mass transfer, *J. Heat Transfer*, **126**(2004), pp.381-388.
- [192] A.C. Cogley, W.C. Vincenti and S.E. Gilles, Differential approximation for radiative transfer in a non-grey gas near equilibrium, *American Institute of Aeronautics and Astronautics*, **6**(3)(1968), pp.551-553.

- [193] R. Greif, I.S. Habib and J.C. Lin, Laminar convection of a radiating gas in a vertical channel, *J. Fluid Mech.*, **46(3)**(1971), pp.513-520.
- [194] N. Datta and R.N. Jana, Effects of wall conductances on hydromagnetic convection of a radiating gas in a vertical channel, *Int. J. Heat Mass Transfer*, **9**(1976), pp.1015-1019.
- [195] A. Ogulu and S. Motsa, Radiative heat transfer to magnetohydrodynamic Couette flow with variable wall temperature, *Physica Scripta*, **71**(2005), pp.336-339.
- [196] B.K. Sharma, M. Agarwal and R.C. Chaudhary, Radiation effect on temperature distribution in three-dimensional Couette flow with suction or injection, *Appl. Math. Mech.(English Edition)*, **28(3)**(2007), pp.309-316.
- [197] M. Guria, B.K. Das, R.N. Jana and S.K. Ghosh, Effects of wall conductance on MHD fully developed flow with asymmetric heating of the walls, *Int. J. Fluid Mech.Research*, **34(6)**(2007), pp.521-534.
- [198] A. Pantokratoras, Fully developed laminar free convection with variable thermo-physical properties between two open-ended vertical parallel plates heated asymmetrically with large temperature differences, *ASME J. Heat Transfer*, **128**(2006), pp.405-408.
- [199] T. Grosan and I. Pop, Thermal radiation effect on fully developed mixed convection flow in a vertical channel, *Technische Mechanik*, **27(1)**(2007), pp.37-47.
- [200] S. Suneetha, N. Bhaskar Reddy and V. Ramachandra Prasad, Radiation and mass transfer effects on MHD free convective dissipative fluid in the presence of heat source/sink, *J. Applied Fluid Mechanics*, **4(1)**(2011), pp.107-113.
- [201] I.G. Baoku, C. Israel-Cookey and B.I. Olajuwon, Influence of thermal radiation on a transient MHD Couette flow through a porous medium, *J. Applied Fluid Mechanics*, **5(1)**(2012), pp.81-87.
- [202] O.D. Makinde and T. Chinyoka, Numerical study of unsteady hydromagnetic generalized Couette flow of a reactive third-grade fluid with asymmetric convective cooling, *Computers and Mathematics with Applications*, **61(4)**(2011), pp.1167-1179.
- [203] L. Rundora and O.D. Makinde, Effects of a reactive variable viscosity non-Newtonian fluid through a porous saturated medium with asymmetric convective boundary conditions, *J. Hydrodynamics*, **27(6)**(2015), pp.934-944.

- 
- [204] L. Rundora and O.D. Makinde, Unsteady MHD flow of non-Newtonian fluid in a channel filled with a saturated porous medium with asymmetric Navier slip and convective heating, *Appl. Math. Information Sc.*, **12(3)**(2018), pp.483-493.
- [205] P.K. Gaur, R.P. Sharma and A.K. Jha, Transient free convective radiative flow between vertical parallel plates heated/cooled asymmetrically with heat generation and slip condition, *Int. J. Appl. Mech. Engg.*, **23(2)**(2018), pp.365-384.
- [206] R.S. Nanda and H.K. Mohanty, Hydromagnetic flow in a rotating channel, *Appl. Sci. Res.*, **24**(1977), pp.65-72.
- [207] B.S. Mazumder, Effect of wall conductance on hydromagnetic flow and heat transfer in a rotating channel, *Acta Mechanica*, **28**(1977), pp.85-99.
- [208] N. Datta, R.N. Jana and B.S. Mazumder, Hydromagnetic Couette flow and heat transfer in a rotating system, *J. Phys. Soc., Japan*, **44**(1978), pp.363-370.
- [209] T. Nagy and Z. Demendy, Influence of wall properties of Hartmann flow and heat transfer in a rotating system, *Acta Physica hungaria*, **73**(1995), pp.291-310.
- [210] T. Nagy and Z. Demendy, Effects of Hall currents and Coriolis force on Hartmann flow under general wall condition, *Acta Mechanica*, **113**(1995), pp.77-91.
- [211] M. Guria, B.K. Das and R.N. Jana, Oscillatory Couette flow in the presence of an inclined magnetic field, *Meccanica*, **44(5)**,(2009), pp.555-564.
- [212] M. Guria, R.N. Jana and S.K. Ghosh, Unsteady Couette flow in a rotating system, *Int. J. non-linear Mech.*, **41**(2006), pp.838-843.
- [213] R. Ganapaty, A note on oscillatory Couette flow in a rotating system, *ASME J. of Applied Mechanics*, **61**(1994), pp.208-209.
- [214] M. Guria, B.K. Das and R.N. Jana, Unsteady Couette flow in a rotating system, *Mechanica*, **43**(2008), pp.517-521.
- [215] S. Das, B.C. Sarkar and R.N. Jana, Hall effects on hydromagnetic rotating Couette flow, *Int. J. Comp. Applications*, **83**(2013), pp.20-26.
- [216] G.S. Seth, S.M. Hussain and S. Sarkar, Hydromagnetic oscillatory Couette flow in rotating system with induced magnetic field, *Applied Mathematics and Mechanics*, **35**(2014), pp.1331-1344.

- [217] S. Das, R.N. Jana and O.D Makinde, Transient hydromagnetic reactive Couette flow and heat transfer in a rotating frame of reference, Alexandria Engg. Journal, **55**(2016), pp.635-644.
- [218] V.G. Gupta, Ajay Jain, An analysis of unsteady MHD Couette flow and heat transfer in a rotating horizontal channel with injection/suction, IJLTEMAS(Int. Journal of Latest Technology in Engineering, Management and Applied Sciences), **V(VI)**(2016), pp.28-45.
- [219] K. Rajesh, A. Govindarajan and E.P. Siva, An analysis of oscillatory hydromagnetic Couette flow through a porous medium in a rotating system, Journal of Physics: Conf. Sciries, **1000**(2018)012145(NCMTA18), pp.1-7.
- [220] G.K. Batchelor, An introduction to fluid dynamics, Cambridge University Press, (First Indian Edition)(1993).
- [221] A.S. Berman, Laminar flow in channels with porous walls, J. Appl. Phys., **24**(1953), pp.1232-1235.
- [222] J.R. Sellars, Laminar flow in channels with porous walls at high suction Reynolds numbers, J. Appl. Phys., **26**(1955), pp.489-490.
- [223] S.W. Yuan, Further investigation in lammar flow in channels with porous walls, J. Appl. Phys., **27**(1956), pp.267-269.
- [224] M. Morduchow, On laminar flow through a channel or tube with injection-application of method of averages, Q. J. Appl. Math., **14**(1956), pp.361-368.
- [225] A.S. Berman, Laminar flow in an annulus with porous walls, J. Appl. Phys., **29**(1958), pp.71-75.
- [226] G. Radhakrishnamacharya and M.K. Maiti, Heat transfer to pulsatile flow in a porous channel, Int. J. Heat Mass Transfer, **20**(1977), pp.171-173.
- [227] W.G. Esmond and H. Clark, Mathematical analysis and mass transfer optimization of a compact, low cost, pumples system for hemodialysis (Dialung), in Proceedings, Biomedical Fluid Mechanics Symposium, ASME, New York (1966).
- [228] R. Moreau, Magnetohydrodynamics, Kluwer Academic Publishers, Dordrecht(1990).

- 
- [229] K.R. Cramer and S.I. Pai, *Magnetofluid Dynamics for Engineers and Applied Physicists*, McGrawHill, New York (1973).
- [230] H.A. Attia, Effect of Hall current on transient hydromagnetic Couette-Poiseuille flow of a viscoelastic fluid with heat transfer, *Appl. Math. Model.*, **32**(2008), pp.375-388.
- [231] K. Michaeli, K.S. Tikhonov and A.M. Finkelstein, Hall Effect in superconducting films, *Physical Review*, **B86**(2012), pp.145-150.
- [232] A.S. Gupta, Heat transfer in hydromagnetic Couette flow with Hall effects, *Math. Student*, **LX**(1972), pp.103106.
- [233] V.M. Soundalgekar, G.A. Dessai and A.S. Gupta, Hall effects on generalized MHD Couete flow with heat transfer, *Bull. Classe Sci.*, **LX**(1974), pp.332-345.
- [234] H.A. Attia and N.A. Kotb, MHD flow between parallel plates with heat transfer, *Acta Mechanica*, **117**(1996), pp.215-220.
- [235] A.J. Chamkha, Unsteady laminar hydromagnetic flow and heat transfer in porous channels with temperature-dependent properties, *Int. J. Numer. Methods for Heat and Fluid Flow*, **11**(2001), pp.430-448.
- [236] N.T.M. Eldabe, A.A. Hassan and M.A.A. Mohamed, Effect of couple stresses on the MHD of a non-Newtonian unsteady flow between two parallel porous plates, *Z. Naturforsch.*, **58a**(2003), pp.204-210.
- [237] O.A. Bég, J. Zueco and H.S. Takhar, Unsteady magnetohydrodynamic Hartmann-Couette flow and heat transfer in a Darcian channel with Hall current, ion slip, viscous and Joule heating effects: network numerical solutions, *Commun. Nonlinear Sci. Numer. Simul. J.*, **14**(2009), pp.1082-1097.
- [238] O.D. Makinde and T. Chinyoka, MHD transient flows and heat transfer of dusty fluid in a channel with variable physical properties and Navier slip condition, *Comput. Math. Appl.*, **60**(2010), pp.660-669.
- [239] O.D. Makinde and T. Chinyoka, Numerical investigation of transient heat transfer to hydromagnetic channel flow with radiative heat and convective cooling, *Commun. Nonlinear Sci. Numer. Simul.*, **15**(2010), pp.3919-3930.
- [240] B.K. Jha and C.A. Apere, Time-dependent MHD Couette flow in a rotating system with suction/injection, *Z. Angew. Math. Mech.*, **91**(2011), pp.832-842.

- 
- [241] Md.S. Ansari, G.S. Seth and N. Nandkeolyar, Unsteady Hartmann flow in a rotating channel with arbitrary conducting walls, *Math. Comp. Model.*, **54**(2011), pp.765-779.
- [242] M. Rahman, R. Saidur and N. Rahim, Conjugated effect of Joule heating and magneto-hydrodynamic on double-diffusive mixed convection in a horizontal channel with an open cavity, *Int. J. Heat Mass Transfer*, **54(15-16)**(2011), pp.3201- 3213.
- [243] O.D. Makinde and O.O. Onyejekwe, A numerical study of MHD generalized Couette flow and heat transfer with variable viscosity and electrical conductivity, *J. Magn. Mater.*, **323**(2011), pp.2757-2763.
- [244] O.D. Makinde and A.S. Eegunjobi, Analysis of inherent irreversibility in a variable viscosity MHD generalized Couette flow with permeable walls, *J. Therm. Sci. Tech.*, **8**(2013), pp.240-253.
- [245] R.H. Dieke, Internal rotation of the sun, in: L. Goldberg (Ed.), *Annual Reviews of Astronomy and Astrophysics*, **8**(1970).
- [246] R.N. Jana, N. Datta and B.S. Mazumder, Magneto-hydrodynamic Couette flow and heat transfer in a rotating system, *J. Phys. Soc. Jpn.*, **42**(1977), pp.1034-1039.
- [247] A.K. Borkakati and A. Bharali, Heat transfer in a hydromagnetic flow between two porous disks-one rotating and other at rest, under uniform suction, *Appl. Sci. Research*, **35**(1979), pp.161-175.
- [248] R.N. Jana and N. Datta, Hall effects on MHD Couette flow in a rotating system, *Czech. J. Phys.*, **30**(1980), pp.659-667.
- [249] G.S. Seth, R.N. Jana and M.K. Maity, Unsteady hydromagnetic Couette flow in a rotating system, *Int. J. Eng. Sci.*, **20**(1982), pp.989-999.
- [250] S.K. Ghosh, O.A. Bég and M. Narahari, Hall effects on MHD flow in a rotating system with heat transfer characteristics, *Meccanica*, **44**(2009), pp.741-765.
- [251] G.S. Seth, R. Nandkeolyar and M.S. Ansari, Hall effects on oscillatory hydromagnetic Couette flow in a rotating system, *Int. J. Acad. Res.*, **1**(2009), pp.6-17.
- [252] S. Das, S.L. Maji, M. Guria and R.N. Jana, Unsteady MHD Couette flow in a rotating system, *Math. Comp. Model.*, **50**(2009), pp.1211-1217.

- [253] S.K. Ghosh, O.A. Bég, J. Zueco and V.R. Prasad, Transient hydromagnetic flow in a rotating channel permeated by an inclined magnetic field with magnetic induction and Maxwell displacement current effects, *Z. Angew. Math. Phys.*, **61**(2010), pp.147-169.
- [254] S. Das, H.K. Mondal and R.N. Jana, Hall effects on unsteady rotating MHD flow through porous channel with variable pressure gradient, *Int. J. Comp. Appl.*, **83**(2013), pp.7-18.
- [255] S. Guchhait, S. Das, R.N. Jana and S.K. Ghosh, Combined effects of Hall current and rotation on unsteady Couette flow in a porous channel, *World J. Mech.*, **1**(2011), pp.87-99.
- [256] B.C. Sarkar, S. Das and R.N. Jana, Combined effects of Hall currents and rotation on steady hydromagnetic Couette flow, *Res. J. Appl. Sci. Eng. Technol.*, **5(6)**(2013), pp.1864-1875.
- [257] A.S. Eegunjobi and O.D. Makinde, Entropy analysis of variable viscosity Hartmann flow through a rotating channel with hall effects, *Appl. Math. Inf. Sci.*, **10(4)**(2016), pp.1415-1423.
- [258] O.D. Makinde, T. Iskander, F. Maboodc, W.A. Khan and M.S. Tshehl, MHD Couette-Poiseuille flow of variable viscosity nanofluids in a rotating permeable channel with Hall effects, *Journal of Molecular Liquids*, **221**(2016), pp.778-787.
- [259] S.K. Ghosh, MHD rotating flow and heat transfer through a channel with Hall effects, *J. Magn. Magn. Mater.*, **404**(2016), pp.221-229.
- [260] R. Mahmoud, S. Nadeem and S. Masood, Effects of transverse magnetic field on a rotating micropolar fluid between parallel plates with heat transfer, *J. Magn. Magn. Mater.*, **401**(2016), pp.1006-1014.
- [261] A.O. Ali, O.D. Makinde and Y. Nkansah-Gyekye, Numerical study of unsteady MHD Couette flow and heat transfer of nanofluids in a rotating system with convective cooling, *Int. J. Numer. Meth. Heat Fluid Flow*, **26(5)**(2016), pp.1567-1579.
- [262] A.S. Eegunjobi and O.D. Makinde, Inherent irreversibility in a variable viscosity Hartmann flow through a rotating permeable channel with Hall effects, *Defect Diffus. Forum*, **377**(2017), pp.180-188.

- 
- [263] E.A. Salem, M.F. Khalil and S.A. Hakim, Thermohydrodynamic lubrication of rotating magnetohydrodynamic thrust bearings, *Wear*, **62(2)**(1980), pp.337-348.
- [264] N.C. Das, A study of optimal load-bearing capacity for slider bearing lubricated with couple stress fluids in magnetic field, *Tribol Int.*, **31**(1998), pp.393-400.
- [265] O.D. Makinde, Thermal ignition in a reactive viscous flow through a channel filled with a porous medium, *ASME, J. Heat Transf.*, **128**(2006), pp.601-604.
- [266] O.D. Makinde, On steady flow of a reactive variable viscosity fluid in a cylindrical pipe with an isothermal wall, *Int. J. Numer. Meth. Heat Fluid Flow*, **17(2)**(2007), pp.187-194.
- [267] O.D. Makinde, Thermal stability of a reactive third grade fluid in a cylindrical pipe: an exploitation of Hermite-Padé approximation technique, *Appl. Math. Comput.*, **189**(2007), pp.690-697.
- [268] O.D. Makinde, On thermal stability of a reactive third-grade fluid in a channel with convective cooling the walls, *Appl. Math. Comput.*, **213**(2009), pp.170-176.
- [269] O.D. Makinde and O.A. Bég, On inherent irreversibility in a reactive hydromagnetic channel flow, *J. Thermal Sci.*, **19(1)**(2010), pp.72-79.
- [270] N.S. Kobo and O.D. Makinde, Second law analysis for a variable viscosity reactive Couette flow under Arrhenius kinetics, *Math. Prob. Eng.*, **Article ID 278104**(2010), pp.1-15.
- [271] O.D. Makinde and T. Chinkyoka, Numerical study of unsteady hydromagnetic generalized Couette flow of a reactive third-grade fluid with asymmetric convective cooling, *Comput. Math. Appl.*, **61**(2011), pp.1167-1179.
- [272] O.D. Makinde and O. Franks, On MHD unsteady reactive Couette flow with heat transfer and variable properties, *Cent. Eur. J. Eng.*, **4**(2014), pp.54-63.
- [273] O.D. Makinde, Thermal analysis of a reactive generalized Couette flow of power law fluids between concentric cylindrical pipes, *Eur. Phys. J. Plus*, **129**(2014), pp.2-9.
- [274] S. Srinivas, T. Malathy and A. Subramanyam Reddy, A note on thermal-diffusion and chemical reaction effects on MHD pulsating flow in a porous channel with slip and convective boundary conditions, *J. King Saud University Eng. Sci.*, **28**(2016), pp.213-221.



- [275] L. Rundora and O.D. Makinde, Analysis of unsteady MHD reactive flow of non-newtonian fluid through a porous saturated medium with asymmetric boundary conditions, *Iran J. Sci. Technol. Trans. Mech. Eng.*, **40**(2016), pp.189-201.
- [276] B.S. Yilbas, M.M. Hussain and I.Dincer, Heat and moisture diffusion in slab products due to convective boundary condition, *Heat Mass Transfer*, **39**(2003), pp.471-476.
- [277] B.S. Yilbas and M. Kalyon, Analytical solution for pulsed laser heating process: convective boundary condition case, *Int. J. Heat Mass Transfer*, **45**(2002), pp.1571-1582.
- [278] J. Wang, H. Wang, J. Sun and J. Wang, Numerical simulation of control ablation by transpiration cooling, *Heat Mass Transfer*, **43**(2007), pp.471-478.
- [279] R.D. Skeel and M. Berzins, A method for the spatial discretization of parabolic equations in one space variable, *SIAM Journal on Scientific and Statistical Computing*, **11**(1990), pp.1-32.
- [280] V.K. Stokes, Couple stresses in fluid, *Phys. Fluids*, **9**(9)(1966), pp.1709-1715.
- [281] V.K. Stokes, *Theories of Fluids with Microstructure: An Introduction*, Springer Verlag, New York, (1984).
- [282] G. Shantha and B. Shanker, Free convection flow of a conducting couple stress fluid in a porous medium, *Int. J. Numer. Methods Heat Fluid Flow*, **20**(2010), pp.250-264.
- [283] D. Srinivasacharya and K. Kaladhar, Mixed convection flow of couple stress fluid in a non-darcy porous medium with Soret and Dufour effects, *J. Appl. Sci. Eng.*, **15**(2012), pp.415-422.
- [284] P.G. Siddheshwar, G.N. Sekhar and A.S. Chethan, MHD Flow and heat transfer of an exponential stretching sheet in a Boussinesq-Stokes suspension, *J. Appl. Fluid Mech.*, **7**(1)(2014), pp.169-176.
- [285] S. Das, A. Ali and R.N. Jana, Slip flow of an optically thin radiating non-gray couple stress fluid past a stretching sheet, *J. Heat Mass Transfer Res.*, **1**(2016), pp.21-30.
- [286] E.G. Fischer, *Extrusion of plastics*. Wiley, New York, (1976).

- [287] P.S. Gupta and A.S. Gupta, Heat and mass transfer on a stretching sheet with suction or blowing, *Canad. J. Chem. Engg.*, **55**(1977), pp.744-746.
- [288] B.C. Sakiadis, Boundary layer behaviour on continuous solid surfaces: II, The boundary layer on a continuous flat surface, *AIChE J.*, **7**(1961), pp.221-225.
- [289] K.R. Rajagopal, T.Y. Na and A.S. Gupta, Flow of viscoelastic fluid due to a stretching sheet, *Rheol. Acta.*, **23**(1984), pp.213-215.
- [290] B. Siddappa and M.S. Abel, Non-Newtonian flow past a stretching surface, *Z. Angew. Math. Phys.*, **36**(1985), pp.890-892.
- [291] H.I. Andersson, MHD flow of a viscoelastic fluid past a stretching surface, *Acta Mech.*, **95**(1992), pp.227-230.
- [292] B. Siddappa and S. Abel, Non-Newtonian flow past a stretching surface, *Z. Angew. Math. Phys.*, **36**(1985), pp.890-892.
- [293] H.I. Andersson, MHD flow of a viscoelastic fluid past a stretching surface. *Acta Mech.*, **95**(1992), pp.227-230.
- [294] E. Magyari and B. Keller, Heat and mass transfer in the boundary layers on an exponentially stretching continuous surface, *J. Phys. D: Appl. Phys.*, **32**(1999), pp.577-585.
- [295] E.M.A. Elbashaeshy, Heat transfer over an exponentially stretching continuous surface with suction, *Arch. Mech.*, **53**(6)(2001), pp.643-651.
- [296] W. Ibrahim, B. Shankar and M.M. Nandeppanavar, MHD stagnation point flow and heat transfer due to nanofluid towards a stretching sheet, *Int. J. Heat Mass Transfer*, **56**(2013), pp.1-9.
- [297] M.A. Seddeek, Effects of radiation and variable viscosity on a MHD free convection flow past a semi-infinite flat plate with an aligned magnetic field in the case of unsteady flow, *Int. J. Heat Mass Transfer*, **45**(2003), pp.931-935.
- [298] M. Turkyilmazoglu, Exact analytical solutions for heat and mass transfer of MHD slip flow in nanofluids, *Chem. Eng. Sci.*, **84**(2012), pp.182-187.
- [299] R. Cortell, Flow and heat transfer of an electrically conducting fluid of second grade over a stretching sheet subject to suction and to a transverse magnetic field, *Int. J. Heat Mass Transfer*, **49**(2006), pp.1851-1856.

- [300] T. Hayat, Z. Abbas, I. Pop and S. Asghar, Effects of radiation and magnetic field on the mixed convection stagnation-point flow over a vertical stretching sheet in a porous medium, *Int. J. Heat Mass Transf.*, **53**(2010), pp.466-474.
- [301] H.M. Shawky, Magnetohydrodynamic Casson fluid flow with heat and mass transfer through a porous medium over a stretching sheet, *J. Porous Media*, **15**(2012), pp.393-401.
- [302] S. Nadeem, R.U. Haq, N.S. Akbar and Z.H. Khan, MHD threedimensional Casson fluid flow past a porous linearly stretching sheet, *Alexandria Eng. J.*, **52**(2013), pp.577-582.
- [303] R.N. Jat, G.S.L. Krishna Chand, S. Chand and D. Rajotia, MHD heat and mass transfer for viscous flow over nonlinearly stretching sheet in a porous medium, *Therm. Energy and Power Eng.*, **3**(2014), pp.191-197.
- [304] G.S. Beavers and D.D. Joseph, Boundary conditions at a naturally permeable wall, *J. Fluid Mech.*, **30**(1967), pp.197-207.
- [305] M. Gad-el-Hak, The fluid mechanics of microdevices-the freeman scholar lecture, *J. Fluids Eng.*, **121**(1999), pp.5-33.
- [306] P.D. Ariel, T. Hayat and S. Asghar, The flow of an elastico-viscous fluid past a stretching sheet with partial slip, *Acta Mech.*, **187**(2006), pp.29-36.
- [307] C.Y. Wang, Analysis of viscous flow due to a stretching sheet with surface slip and suction, *Non-linear Analysis: Real World Appl.*, **10**(2009), pp.375-380.
- [308] T. Fang, J. Zhang and S. Yao, Slip MHD viscous flow over a permeable shrinking sheet, *Chinese Phys. Letters*, **27**(12)(2010).
- [309] M.M. Nandeppanavar, K. Vajravelu, M.S. Abel and M.N. Siddalingappa, Second order slip flow and heat transfer over a stretching sheet with non-linear Navier boundary condition, *Int. J. Therm. Sci.*, **58**(2012), pp.143-150.
- [310] J. Zhu, L. Zheng, L. Zheng and X. Zhang, Second-order slip MHD flow and heat transfer of nanofluids with thermal radiation and chemical reaction, *Appl. Math. Mech.*,(Engl. Ed.), **36**(9)(2015), pp.1131-1146.
- [311] I. Ullah, S. Shafie and I. Khan, Effects of slip condition and Newtonian heating on MHD flow of Casson fluid over a nonlinearly stretching sheet saturated in a porous medium, *J. King Saud University-Science*, **29**(2017), pp.250-259.

- [312] R.U. Haq, S. Nadeem, Z.H. Khan and N.S. Akbar, Thermal radiation and slip effects on MHD stagnation point flow of nanofluid over a stretching sheet, *Phys. E.*, **65**(2015), pp.17-23.
- [313] P.R. Sharma, S. Choudhary and O.D. Makinde, MHD slip flow and heat transfer over an exponentially stretching permeable sheet embedded in a porous medium with heat source, *Front. Heat Mass Transfer*, **9(18)**(2017), pp.1-7.
- [314] H.B. Santhosh, Mahesha and C.S.K. Raju, Partial slip flow of radiated Carreau dusty nanofluid over exponentially stretching sheet with non-uniform heat source or sink, *J. Nanofluids*, **7(1)**(2018), pp.72-81.
- [315] M.K. Partha, P. Murthy and G.P. Rajashekhar, Effect of viscous dissipation on the mixed convection heat transfer from an exponentially stretching surface, *Heat Mass Transfer*, **41**(2005), pp.360-366.
- [316] S.K. Khan and E. Sanjayanand, Viscoelastic boundary layer flow and heat transfer over an exponential stretching sheet, *Int. J. Heat and Mass Transfer*, **48(8)**(2005), pp.1534-1542.
- [317] F.T. Akyildiz, M. Bellout and K. Vajravelu, Diffusion of chemically reactive species in a porous medium over a stretching sheet, *J. Math. Anal, Appl.*, **320(1)**(2006), pp.322-339.
- [318] R. Cortell, Viscous flow and heat transfer over a nonlinearly stretching sheet, *Appl. Math. Comput.*, **184(2)**(2007), pp.8640-873.
- [319] E. Sanjayanand and S.K. Khan, On the heat and mass transfer in a viscoelastic boundary layer flow over an exponentially stretching sheet, *Int. J. Therm. Sci.*, **45**(2006), pp.819-828.
- [320] M. Sajid and T. Hayat, Influence of thermal radiation on the boundary layer flow due to an exponentially stretching sheet, *Int. Commu. Heat Mass Transf.*, **35**(2008), pp.347-356.
- [321] M.S. Abel and G. Begum, Heat transfer in MHD viscoelastic fluid flow on stretching sheet with heat source/sink, viscous dissipation, stress work, and radiation for the case of large Prandtl number, *Chem. Eng. Comm.*, **195**(2008), pp.1503-1523
- [322] B. Bidin and N. Nazar, Numerical solution of the boundary layer flow over an exponentially stretching sheet with thermal radiation, *Eur. J. Sci. Res.*, **33(4)**(2009), pp.710-717.

- [323] T.G. Fang and J. Zhang, Thermal boundary layers over a shrinking sheet: an analytical solution, *Acta Mech.*, **209**(2010), pp.325-343.
- [324] J.C. Arnold, A.A. Asir, S. Somasundaram and T. Christopher, Heat transfer in a visco-elastic boundary layer flow over a stretching sheet, *Int. J. Heat Mass Transfer*, **53**(2010), pp.1112-1118.
- [325] E.M.A. Elbashbeshy, T.G. Emam and K.M. Abdelgaber, Effects of thermal radiation and magnetic field on unsteady mixed convection flow and heat transfer over an exponentially stretching surface with suction in the presence of internal heat generation/absorption, *J. Egypt. Math. Soc.*, **20**(2012), pp.215-222.
- [326] G. Singh and O.D. Makinde, MHD slip flow of viscous fluid over an isothermal reactive stretching sheet, *ANNALS of Faculty Engineering Hunedoara Int. J. Engn. Tome*, **XI** (2013), pp.41-46.
- [327] Y.I. Seini and O.D. Makinde, MHD boundary layer flow due to exponential stretching surface with radiation and chemical reaction, *Math. Prob. Eng.*, **2013(Article ID 163614)**(2013), pp.1-7.
- [328] T. Hayat, M. Mustafa, Z. Iqbal and A. Alsaedi, Stagnation-point flow of couple stress fluid with melting heat transfer, *Appl. Math. Mech.(Eng. Ed)*, **34**(2013), pp.167-176.
- [329] S. Mukhopadhyay, MHD boundary layer flow and heat transfer over an exponentially stretching sheet embedded in a thermally stratified medium, *Alexandria Eng. J.*, **52(3)**(2013), pp.259-265.
- [330] M. Turkyilmazoglu, Exact solutions for two-dimensional laminar flow over a continuously stretching or shrinking sheet in an electrically conducting quiescent couple stress fluid, *Int. J. Heat Mass Transfer*, **72**(2014), pp.1-8.
- [331] M. Sheikholeslami, M.M. Rashidi and D.D. Ganji, Numerical investigation of magnetic nanofluid forced convective heat transfer in existence of variable magnetic field using two phase model, *J. Molecular Liquids*, **212**(2015), pp.117-126.
- [332] M. Sheikholeslami, M.M. Rashidi and D.D. Ganji, Effect of non-uniform magnetic field on forced convection heat transfer of Fe<sub>3</sub>O<sub>4</sub>- water nanofluid, *Comput. Methods Appl. Mech. Eng.*, **294**(2015), pp.299-312.

- [333] M.S. Kandelousi, Effect of spatially variable magnetic field on ferrofluid flow and heat transfer considering constant heat flux boundary condition, *Eur. Phys. J. Plus*, **129**(2014), pp.1-12.
- [334] K. Ahmad and A. Ishak, MHD flow and heat transfer of a Jeffrey fluid over a stretching sheet with viscous dissipation, *Malaysian J. Math. Sci.*, **10**(2016), pp.311-323.
- [335] N. Sandeep, C. Sulochana and B. Rushi Kumar, Unsteady MHD radiative flow and heat transfer of a dusty nanofluid over an exponentially stretching surface, *Eng. Sci. Tech.*, **19**(2016), pp.227-240.
- [336] M. Ferdows, A.A. Afify and E.E. Tzirtzilakis, Hall current and viscous dissipation effects on boundary layer flow of heat transfer past a stretching sheet, *Int. J. Appl. Comp. Math.*, **3**(4)(2017), pp.3471-3487.
- [337] F. Mabood, W.A. Khan and A.I.M. Ismail, MHD flow over exponential radiating stretching sheet using homotopy analysis method, *J. King Saud University - Eng. Sci.*, **29**(1)(2017), pp.68-74.
- [338] F. Shahzad, M. Sagheer and S. Hussain, Numerical simulation of magnetohydrodynamic Jeffrey nanofluid flow and heat transfer over a stretching sheet considering Joule heating and viscous dissipation, *AIP Advances*, **8**(2018), pp.1-16.
- [339] K. Sharada and B. Shankar, Effect of partial slip on MHD mixed convection flow of carreau nanofluid over an exponentially stretching sheet with convective boundary condition, Soret and Dufour, *J. Nanofluids*, **7**(4)(2018), pp.711-717.
- [340] L.F. Shampine, I. Gladwell and S. Thompson, *Solving ODEs with MATLAB*, Cambridge University Press, Cambridge, (2003).
- [341] S. Rosseland, *Theoretical Astrophysics*, Oxford University, New York, USA, (1936).
- [342] R. Mehmood, R. Tabassum, S. Kuharat, O.A. Beg and M. Babaie, Thermal slip in oblique radiative nano-polymer gel transport with temperature-dependent viscosity: Solar collector nanomaterial coating manufacturing simulation, *Arabian Journal for Science and Engineering*, **44**(2)(2019), pp.1525-1541.
- [343] E.M. Sparrow and R. D. Cess, *Radiation Heat Transfer*, Hemisphere, Washington, DC, USA, (1978).

- [344] R.C. Bataller, Similarity solutions for boundary layer flow and heat transfer of a FENE-P fluid with thermal radiation, *Phys. Lett., Section A*, **372(14)**(2008), pp.2431-2439.
- [345] T.Y. Na, *Computational Method in Engineering Boundary Value Problems*, Academic Press, New York, (1974).
- [346] K.P. Crammer and S.L. Pai, *Magneto Fluid Dynamics for Engineers and Applied Physics*, McGraw-Hill, New York, (1978).
- [347] A.S. Gupta, Combined free and forced convection effects on the magnetohydrodynamic flow through a channel, *ZAMP*, **20(4)**(1969), pp.506-513.
- [348] G. Sarojamma and D.V. Krishna, Transient hydromagnetic convective flow in a rotating channel with porous boundaries, *Acta Mechanica*, **40**(1981), pp.277-288.
- [349] B.S. Mazumder, A.S. Gupta and N. Datta, Hall effects on combined free and forced convective hydromagnetic flow through a channel, *Int. J. Eng. Sci.*, **14**(1976), pp.285-292.
- [350] B.K. Jha, Natural convection in unsteady MHD Couette flow, *Heat and Mass Transfer*, **37**(2001), pp.329-331.
- [351] B.C. Sarkar, S. Das and R.N. Jana, Effects of radiation on MHD free convective Couette flow in a rotating system, *Int. J. Eng. Res. Appl.*, **2(4)**(2012), pp.2346-2359.
- [352] S. Das, S.K. Guchhait and R.N. Jana, Effects of radiation on free convection MHD Couette flow with variable wall temperature in presence of heat generation, *Adv. Theo. Appl. Math.*, **7(2)**(2012), pp.171-190.
- [353] S.O. Adesanya, E.O. Oluwadare, J.A. Falade and O.D. Makinde, Hydromagnetic natural convection flow between vertical parallel plates with time-periodic boundary conditions, *J. Magn. Magn. Mater.*, **396**(2015), pp.295-303.
- [354] M. VeeraKrishna and G. Subba Reddy, Unsteady MHD convective flow of second grade fluid through a porous medium in a rotating parallel plate channel with temperature dependent source, *IOP Conf. Ser.: Mater. Sci. Eng.*, **149**(2016), pp.210-216.
- [355] G.W. Sutton and A. Sherman, *Engineering Magnetohydrodynamics*, McGraw-Hill, New York, (1965).

- [356] M.J. Lighthill, Studies on MHD waves and other anisotropic wave motion, *Philosophical Transactions of the Royal Society London A*, **252** (1960), pp.397-430.
- [357] I. Khan, F. Ali, S. Shafie and N. Mustapha, Effects of Hall current and mass transfer on the unsteady magnetohydrodynamic flow in a porous channel, *J. Phys. Soc. Jpn.*, **80**(2011), pp.396-401.
- [358] A. Mishra and B.K. Sharma, MHD mixed convection flow in a rotating channel in the presence of an inclined magnetic field with the Hall effect, *J. Eng. Phys. and Thermophysics*, **90(6)**(2017), pp.1488-1499.
- [359] S. Das, B.C. Sarkar and R.N. Jana, Hall effects on MHD free convection boundary layer flow past a vertical flat plate, *Meccanica*, **48(6)**(2013), pp.1387-1398.
- [360] G.S. Seth, S. Sarkar, S.M. Hussain and 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), pp.159-171.
- [361] S. Das, S.K. Guchhait, R.N. Jana and O.D. Makinde, Hall effects on an unsteady magneto-convection and radiative heat transfer past a porous plate, *Alex. Eng.J.*, **55**(2016), pp.1321-1331.
- [362] S. Das, R.N. Jana and S.K. Ghosh, Hall effects on unsteady MHD natural convective flow past an impulsively moving plate with ramped temperature and concentration, *Indian J. Pure Appl. Phys.*, **54(8)**(2016), pp.517-534.
- [363] G.S. Seth, A. Bhattacharyya and R. Tripathi, Effect of Hall current on MHD natural convection heat and mass transfer flow of rotating fluid past a vertical plate with ramped wall temperature, *Front. Heat Mass Transf.*, **9**(2017), pp.1-12.
- [364] S.M. Hussain, J. Jain, G.S. Seth and M.M. Rashidi, Free convective heat transfer with Hall effects, heat absorption and chemical reaction over an accelerated moving plate in a rotating system, *J. Magnet. Magnet. Mater.*, **422**(2017), pp.112-123.
- [365] A.S. Eegunjobi and O.D. Makinde, Inherent irreversibility in a variable viscosity Hartmann flow through a rotating permeable channel with Hall effects, *Defect Diffus. Forum*, **377**(2017), pp.180-188.
- [366] M. VeeraKrishna and A.J. Chamkha, Hall effects on unsteady MHD flow of second grade fluid through porous medium with ramped wall temperature and ramped surface concentration, *Phys. Fluids*, **30:053101**(2018), pp.1-13.



- [367] S. Das, B. Tarafdar and R.N. Jana, Hall effects on unsteady MHD rotating flow past a periodically accelerated porous plate with slippage, *European J. Mech. / B Fluids*, **72**(2018), pp.135-143.
- [368] P.C. Ram, Unsteady MHD free convective flow through a porous medium with Hall currents, *Astrophys. Space Sci.*, **149**(1)(1988), pp.171-174.
- [369] I. Pop, S.K. Ghosh and D.K. Nandi, Effects of the Hall currents on free and forced convection flows in a rotating channel in the presence of an inclined magnetic field, *Magnetohydrodynamics*, **37**(4)(2001), pp.348-359.
- [370] M. Katagiri, G.S. Seth and M.S. Ansari, Magnetohydrodynamic convective flow in a rotating channel with Hall effects, *Int. J. Theory Appl. Mech.*, **4**(2009), pp.205-222.
- [371] Z. Zhang, B. Li and Y. Chen, Hall effects on natural convection of participating MHD with thermal radiation in a cavity, *Int. J. Heat Mass Transfer*, **66**(2013), pp.838-843.
- [372] G.S. Seth, S. Sarkar and O.D. Makinde, Combined free and forced convection Couette-Hartmann flow in a rotating channel with arbitrary conducting walls and Hall effects, *J. Mech.*, **32**(2016), pp.613-629.
- [373] M. Veera Krishna, G. Subba Reddy and A.J. Chamkha, Hall effects on unsteady MHD oscillatory free convective flow of second grade fluid through porous medium between two vertical plates, *Phys. Fluids*, **30**(2):023106(2018), pp.1-9.
- [374] Y.S. Muzychka and M.M. Yovanovich, Unsteady viscous flows and Stokes' first problem, *Proc. IMECE*, **14301**(2006), pp.1-11.
- [375] A.S. Gupta, Heat transfer in hydromagnetic couette flow with Hall effects, *Math. Student*, **LX**(1972), pp.103-106.
- [376] R.N. Jana, N. Datta and B.S. Mazumder, Magnetohydrodynamic Couette flow and heat transfer in a rotating system, *J. Phys. Soc. Japan*, **42**(1977), pp.1034-1039.
- [377] V.M. Soundalgekar, G.A. Dessai and A.S. Gupta, Hall effects on generalized MHD Couette flow with heat transfer, *Bulletin De La Classe Des Sciences*, **LX**(1974), pp.332-345.

- 
- [378] R.N. Jana and N. Datta, Couette flow and heat transfer in a rotating system, *Acta Mech.*, **26**(1977), pp.301-306.
- [379] R.N. Jana and N. Datta, Hall effects on MHD Couette flow in a rotating system, *Czech J. Phys.*, **30**(1980), pp.659-667.
- [380] G.S. Seth, R.N. Jana and M.K. Maity, Unsteady hydromagnetic Couette flow in a rotating system, *Int. J. Eng. Sci.*, **20**(1982), pp.989-999 .
- [381] M. Guria, R.N. Jana and S.K. Ghosh, Unsteady Couette flow in a rotating system, *Int. J. Non-linear Mech.*, **41**(2006), pp.838-843.
- [382] O.D. Makinde, On steady flow of a reactive variable viscosity fluid in a cylindrical pipe with an isothermal wall, *Int. J. Numerical Methods for Heat Fluid Flow*, **17**(2)(2007), pp.187-194.
- [383] B.K. Das, M. Guria and R.N. Jana, Unsteady Couette flow in a rotating system, *Meccanica*, **43**(2008), pp.517-521.
- [384] S. Das, S.L. Maji, M. Guria and R.N. Jana, Unsteady MHD Couette flow in a rotating system, *Mathematical and Computer Modelling*, **50**(2009), pp.1211-1217.
- [385] O.D. Makinde and T. Chinyoka, MHD transient flows and heat transfer of dusty fluid in a channel with variable physical properties and Navier slip condition, *Comput. Math. Appl.*, **60**(2010), pp.660-669.
- [386] M. Guria and R.N. Jana, Hall effects on the hydromagnetic convective flow through a rotating channel under general wall conditions, *Magnetohydrodynamics*, **43**(3)(2007), pp.287-300.
- [387] M. Katagiri, G.S. Seth and Md.S. Ansari, Magnetohydrodynamic convective flow in a rotating channel with Hall effects, *Int. J. Theory and Application Mechanism*, **4**(2009), pp.205-222.
- [388] G.S. Seth, R. Nandkeolyar and Md.S. Ansari, Hall effects on oscillatory hydro-magnetic Couette flow in a rotating system, *Int. J. Acad. Res.*, **1**(2009), pp.6.
- [389] S.K. Ghosh, O.A. Bég and M. Narahari, Hall effects on MHD flow in a rotating system with heat transfer characteristics, *Meccanica*, **44**(2009), pp.741-765.

- 
- [390] S.K. Guchhait, S. Das, R.N. Jana and S.K. Ghosh, Combined effects of Hall current and rotation on unsteady Couette flow in a porous channel, *World J. Mechanics*, **1**(2011), pp.87-99.
- [391] B.K. Jha and C.A. Apere, Time-dependent MHD Couette flow in a rotating system with suction/injection, *Z. Angew. Math. Mech.*, **91**(10)(2011), pp.832-842.
- [392] S. Asghar and A. Ahmad, Unsteady Couette flow of viscous fluid under a non-uniform magnetic field, *Appl. Math. Lett.*, **25**(2012), pp.1953-1958.
- [393] W. Abd El-Meged, H. Attia and M. Elbarawy, Analytical solution of a transient Hartmann flow with Hall current and ion slip using finite Fourier transform, *Bulgarian Chem. Communications*, **46**(3)(2014), pp.611-615.
- [394] S. Das, B.C. Sarkar and R.N. Jana, Hall effects on MHD Couette flow in rotating system, *Int. J. Computer Applications*, **35**(13)(2011), pp.22-30.
- [395] T. Chinyoka and O.D. Makinde, Analysis of transient Generalized Couette flow of a reactive variable viscosity third-grade liquid with asymmetric convective cooling, *Math. Comput. Model.*, **54**(2011), pp.160-174.
- [396] D. Theuri and O.D. Makinde, Thermodynamic analysis of variable viscosity MHD unsteady generalized Couette flow with permeable walls, *Appl. Comput. Math.*, **3**(1)(2014), pp.1-8.
- [397] S. Das, R.N. Jana, O.D. Makinde, Transient hydromagnetic reactive Couette flow and heat transfer in a rotating frame of reference, *Alexandria Engineering Journal*, **55**(2016), pp.635-644.
- [398] M. Veera Krishna and B.V. Swarnalathamma, Hall effects on unsteady MHD reactive flow of second grade fluid through porous medium in a rotating parallel plate channel, *AIP Conference Proceedings*, **1859**, 020097 (2017).

