

FACULTY MEMBERS' ACADEMIC PROFILE

1. **Name of the Faculty Member:** DR. KALIDAS DAS
2. **Designation :** Associated Professor in Mathematics and H.O.D
3. **Qualification:** M. Sc (K.U.), Ph. D. (K.U.)
4. **Specialization:** Solid Mechanics.
5. **E-mail address:** kd.kgec @gmail.com
6. **Date of Joining in W.B.E.S.:** 07. 08. 2001
7. **Date of Joining in this College:** 18. 09. 2018
8. **Total Teaching experience in College Level:** 19 years
9. **Research Interest:** Fluid Mechanics (M.H.D., C.F.D.), Nanofluidics, Bio-Mechanics
10. **Title of Thesis (Ph. D) with year:** “Studies on some problems in Magneto hydro Dynamics,”
1997
11. **Research Guidance (Ph.D):** No. of student enrolled-10 (Thesis Submitted: 02, Degree awarded:
05)



Sl. No.	Candidate's Name	Date of Registration with Index No.	Title of Thesis	Name of University	Remarks
1.	Dr. Subhrojyoti Debnath	11.08.2006 Ph.D./Math./SD/ 2013	Some Mathematical Models on Biofluid Mechanics	University of Kalyani	Awarded on 12.06.13
2.	Dr. Subrata Jana	22.10.2011 Index no. 198/11/ Maths/21	On Some mathematical Problems in Magneto hydrodynamics with Applications in Engineering	Jadavpur University	Awarded on 13.05.15
3.	Dr. Nilangshu Acharya	27.12.2013 Index no. 229/13/ Maths/22	Some aspects on the motion of electrically conducting fluid	Jadavpur University	Awarded on 22.07.16
4.	Dr. Pinaki Ranjan Duari	23.09.2013 Index no. 180/13/ Maths/22	Some mathematical models on nanofluid flow	Jadavpur University	Awarded on 25.11.16
5.	Dr. Tanmoy Chakraborty	16.10.2015 Index no. 209/15/ Maths/24	Some aspects on nanofluid flows	Jadavpur University	Awarded on 09.04.19
6	Md. Tausif Sk	29.06.16 Index no. 118/16/ Maths/24	Numerical Simulation of Conducting Nanofluid Flow	Jadavpur University	Thesis submitted
7	Shri Nilankush Acharya	21.06.16 Index no. 116/16/ Maths/24	On Boundary Layer Flow of Conducting Nanofluid	Jadavpur University	Thesis submitted

8	Sri Amit Sarkar	18.04.2016 Index no. 44/16/Maths/24	Aspects on Boundary Layer Flow of Electrically Conducting Nanofluid	Jadavpur University	Continuing
9	Smt. Amrita Roy	08.06.16 Index no. 117/16/ Maths/24	Some mathematical models on hydromagnetic boundary layer flow of nanofluids	Jadavpur University	Continuing
10	Shri Shib Sanakr Giri	26.04.17 Index no. 11/17/Maths/25	A Study capturing the Features of Magnetohydrodynamic Nanofluid Flow	Jadavpur University	Continuing

12. Research Project : Completed-01

Title of the Project: Lie group analysis of nanofluid flow over a stretching surface in presence of magnetic field, Funding Agency: UGC (Minor research project), Period: 2 years (2015-17), Grant/Amount Mobilized: Rs. 2,70,000.

13. List of Publications:

A. Published Papers in Journals:

1. K.Das, S.Giri, P. K. Kundu Induced magnetic field and second order velocity slip effects on TiO₂-water/ethylene glycol nanofluids, Physica Scripta, **IOP Publishing (USA)**, 2020, 95(1), 015803-14, **I.F.-2.151 (SCI)**
2. S.Giri, K.Das, P. K. Kundu, Homogeneous–heterogeneous reaction mechanism on MHD carbon nanotube flow over a stretching cylinder with prescribed heat flux using differential transform method A Computational Framework, Journal of Computational Design and Engineering, **Korea (Elsevier)**, 2020, 7(1), 1-15, **I.F.-1.352 (ESCI)**
3. N. Acharya, K. Das, P.K.Kundu, Effects of Aggregation Kinetics on Nanoscale Colloidal Solution inside a Rotating Channel: A Thermal Framework, Journal of Thermal Analysis and Calorimetry, **Hungary (Springer)**, 2019, 138(1), 461-477, **I.F.-2.209 (SCI)**
4. S.Giri, K.Das, P. K. Kundu, Dynamics of nonuniform viscosity of unsteady CuO–H₂O nanofluid flow from a spinning body, Heat transfer-Asian Research, **Japan (Wiley)**, 2019, 48(6), 2542-2556, **I.F.-0.170 (SCI)**
5. T. Chakraborty, K. Das, P.K. Kundu, Multiple convection-driven Falkner-Skan flow of Carreau nanofluid along a permeable wedge: An analytical approach, Heat Transfer-Asian Research, **Japan (Wiley)**, 2019, 48(3), 914-937 (**ISSN:1523-1496, ESCI**)

6. F. Mabood, K. Das, Outlining the impact of melting on MHD Casson fluid flow past a stretching sheet in a porous medium with radiation, *Heliyon*, (**Elsevier**), 2019, 5, 1-17, (**ISSN: 2405-8440, ESCI**)
7. S.S.Giri, K.Das, P. K. Kundu, Heat conduction and mass transfer in a MHD nanofluid flow subject to generalized Fourier and Fick's law, *Mechanics of Advanced Materials and Structures*, **Italy (Taylor & Francis)**, 2019, <https://doi.org/10.1080/15376494.2018.1525780>,
I.F.-1.094 (SCIE)
8. N. Acharya, K. Das, P. K. Kundu, Influence of Multiple slips and Chemical reaction on Radiative MHD Williamson nanofluid flow in porous medium: A Computational Framework, *Multidiscipline Modeling in Materials and Structures*, **China (Emerald)**, 2019, 15 (3), 630-658, **I.F.- 0.59 (ESCI)**.
9. K. Das, T. Chakraborty, P. K. Kundu Lie group transformation for double-diffusive free convection nanofluid flow over an inclined plane. *Proceedings of National Academy of Sciences Section A: Physical Sciences*, **India (Springer)**, 2019, 89 (2), 387-396, **I.F.-0.754 (SCI)**.
10. N. Acharya, K. Das, P. K. Kundu, On the Heat Transport Mechanism and Entropy Generation in a Nozzle of Liquid Rocket Engine using Ferrofluid (CoFe₂O₄): A Computational Framework, *Journal of Computational Design and Engineering*, **Korea (Elsevier)**, 2019, 6(4), 739-750, **I.F.-1.352 (ESCI)**
11. S.S.Giri, K.Das, P. K. Kundu, Inclined magnetic field effects on unsteady nanofluid flow and heat transfer in a finite thin film with non-uniform heat source/sink, *Multidiscipline Modeling in Materials and Structures*, **China (Emerald)**, 2019, 15 (1), 265-282, **I.F.- 0.59 (ESCI)**.
12. N.Acharya, S. Jana, K.Das, Impact of Transverse Magnetic Field Thermal Radiation on Non-darcy Forced Convection Flow, *Journal of Siberian Federal University. Mathematics & Physics* **Russia**, 2018, 11(1), 1-12, **I.F.-0.216**
13. S.S.Giri, K.Das, P. K. Kundu. Framing the features of a Darcy-Forchheimer nanofluid flow past a Riga plate with chemical reaction by HPM, *The European Physical Journal – Plus*, **Italy (Springer)**, 2018, 133, 365-382, **I.F.-1.302 (SCI)**
14. T. Chakraborty, K. Das, P. K. Kundu , Framing the impact of external magnetic field on Bioconvection of a nanofluid flow containing gyrotactic microorganisms with convective boundary conditions, *Alexandria Engineering Journal*, **Egypt (Elsevier)**, 2018, 57, 61-71. **I.F.-0.23 (ESCI)**

15. K. Das, N. Acharya, P. K. Kundu, Influence of variable fluid properties on nanofluid flow over a wedge with surface slip, *The Arabian Journal for Science and Engineering, Saudi Arabia (Springer)*, 2018, 43, 2119-2131, **I.F.- 1.092 (SCIE)**.
16. M. T. Sk, K. Das, P. K. Kundu, Consequences of nanoparticle diameter and solid-liquid interfacial layer on the SWCNT / EO nanofluid flow over various shaped thin slendering needles, *Chinese Journal of Physics, China (Elsevier)*, 2018, 56, 2439–2447, **I.F.-1.051 (SCI)**
17. P. K. Kundu, T. Chakraborty, K. Das, Framing the Cattaneo-Christov heat flux phenomena on CNT based Maxwell nanofluid along stretching sheet with multiple slips, *The Arabian Journal for Science and Engineering, Saudi Arabia (Springer)*, 2018, 43 (3), 1177-1188. **I.F.-1.092 (SCIE)**
18. N. Acharya, K. Das, P. K. Kundu, Outlining the impact of second order slip and multiple convective conditions on nanofluid flow, *Canadian Journal of Physics, Canada*, 2018, 96 (1), 104-111, **I.F.-0.983 (SCI)**.
19. K. Das, T. Chakraborty, P. K. Kundu , Effect of Magnetic Field on Oldroyd-B type nanofluid flow over a permeable stretching surface, *Propulsion and Power Research, China (Elsevier)*, 2018, 7(3), 238–246, **ISSN: 2212-540X**.
20. N. Acharya, K. Das, P. K. Kundu, **Rotating Flow of Carbon Nanotube over a Stretching Surface in Presence of Magnetic Field: A Comparative Study, Applied Nanoscience, Saudi Arabia (Springer), 2018, 8 (3), 369-378, I.F- 3.325 (SCIE)**.
21. K. Das, M. T. Sk, P. K. Kundu Steady nanofluid flow with variable fluid possessions over a linearly extending surface: A Lie group exploration. *Alexandria Engineering Journal, Egypt (Elsevier)*, 2018, 57, 415–425, **I.F.-0.23 (ESCI)**
22. K. Das, A.Sarkar, P. K. Kundu , Cu-water nanofluid flow induced by a vertical stretching sheet in presence of a magnetic field with convective heat transfer, *Propulsion and Power Research, China (Elsevier)*, 2017, 6(3), 206–213, **ISSN: 2212-540X**
23. N. Acharya, K.Das, P. K. Kundu, Fabrication of active and passive controls of nanoparticles of unsteady nanofluid flow from a spinning body using HPM, *The European Physical Journal – Plus, Italy (Springer)*, 2017, 132, 323-343, **I.F.-2.240 (SCI)**.
24. M. T. Sk, K. Das, P. K. Kundu, Presence of different shapes of ZrO₂ nanoparticles in the melting heat transfer of a Casson flow, *The European Physical Journal – Plus, Italy (Springer)*, 2017, 132, 425-439, **I.F.-1.302 (SCI)**.

25. T. Chakraborty, K. Das, P. K. Kundu, Analytical exploration of TiO₂ - nanofluid along rotating disk with homogeneous-heterogeneous chemical reactions and non-uniform heat source/sink, The European Physical Journal Plus, **Italy (Springer)**, 2017, 132, 555-576, **I.F.- 2.240 (SCI)**.
26. K.Das, P.R.Duari, Micropolar Nanofluid Flow Over an Stretching Sheet with Chemical Reaction, International Journal of Applied and Computational Mathematics, **India (Springer)**, 2017, 3(4), 3229–3239, **ISSN 2349-5103**.
27. N. Acharya, K.Das, P. K. Kundu, Cattaneo–Christov intensity of magnetised upper-convected Maxwell nanofluid flow over an inclined stretching sheet: A generalised Fourier and Fick’s perspective, International Journal of Mechanical Sciences, **UK (Elsevier)**, 2017, 130, 167-173, **I.F.-3.570 (SCI)**
28. T. Chakraborty, K. Das, P. K. Kundu, Ag-water nanofluid flow over an inclined porous plate embedded in a non-Darcy porous medium due to solar radiation, Journal of Mechanical Science and Technology, **Korea (Springer)**, 2017, 31 (5), 2443-2449, **I.F.-1.194 (SCI)**
29. K. Das, N. Acharya, P. K. Kundu. Thin film flow over an unsteady stretching sheet with thermocapillarity in presence of magnetic fields. Thermal Science, **Serbia**, 2017, 21(6A), 2369-2378, **I.F.-1.431 (SCI)**
30. T. Chakraborty, K. Das, P. K. Kundu, Analytical approach to a Jeffrey nanofluid flow towards a Stagnation point coexisting with Magnetic field and Melting heat effects, Journal of Molecular Liquids, **Netherlands (Elsevier)**, 2017, 229, 443-452, **I.F.-4.513 (SCI)**
31. K. Das, A.Sarkar, P. K. Kundu, Nanofluid flow over a stretching surface in presence of chemical reaction and thermal radiation: An application of Lie group transformation, Journal of Siberian Federal University. Mathematics & Physics, **Russia**, 2017, 10(2), 146-157
32. S.S.Giri, K.Das, P. K. Kundu. Stefan blowing effects on MHD bioconvection flow of nanofluid in presence of gyrotactic microorganism with active and passive nanoparticles flux, The European Physical Journal – Plus, **Italy (Springer)**, 2017, 132, 101-14, **I.F.-1.302 (SCI)**
33. K.Das, N.Acharya, P.R.Duari, Forced convective flow over a porous plate with variable Fluid properties and chemical reaction: an application of the Lie group transformation, Moldavian Journal of Physical Sciences, **Moldavia**, 2017, 16(2), 46-63, **ISSN 1810-648X**
34. K. Das, N.Acharya, P. K. Kundu, Radiative nanofluid flow over a heated stretching surface in presence of magnetic field, Acta Technica., **Czech Republic**, 2017, 62(1), 41-52, **ISSN: 0001-7043**

35. K.Das, P.R.Duari, Cu-water and Ag-water nanofluids flow over a stretching surface in presence of magnetic field, Acta Technica, **Czech Republic**, 2017, 62(1), 27-40, **ISSN: 0001-7043**
36. N.Acharya, K. Das, P. K. Kundu Framing the features of MHD boundary layer flow past an unsteady stretching cylinder in presence of non-uniform heat source., Journal of Molecular Liquids, **Netherlands (Elsevier)**, 2017, 225, 418-425, **I.F.-4.513 (SCI)**
37. F. Mabood and K. Das. Melting heat transfer on hydromagnetic flow of a nanofluid over a stretching sheet with radiation and second-order slip. The European Physical Journal – Plus, **Italy (Springer)**, 2016, 131: 3-15, **I.F.-1.302 (SCI)**
38. A. Sarkar, K. Das, P. K. Kundu, On the onset of bioconvection in nanofluid containing gyrotactic microorganisms and nanoparticles saturating a non-Darcian porous medium, Journal of Molecular Liquids, **Netherlands (Elsevier)**, 2016, 223, 725-733, **I.F.-2.74 (SCI)**.
39. K. Das, T. Chakraborty, P. K. Kundu,. Slip effects on nanofluid flow over a non-linear permeable stretching surface with chemical reaction. Journal of Mechanical Engineering Science, **UK (SAGE)**, 2016, 230, 2473-2482, **I.F.-1.302 (SCI)**
40. T. Sk, K. Das, P. K. Kundu. Multiple slip effects on bioconvection of nanofluid flow containing gyrotactic microorganisms and nanoparticles, Journal of Molecular Liquids, **Netherlands (Elsevier)**, 2016, 220, 518–526, **I.F.-2.74 (SCI)**
41. K. Das, N. Acharya, P. K. Kundu, The onset of nanofluid flow past a convectively heated shrinking sheet in presence of heat source/sink: A Lie group approach, Applied Thermal Engineering, **UK (Elsevier)**, 2016, 103, 38–46, **I.F.-3.043 (SCI)**
42. T. Sk, K. Das, P. K. Kundu, Effect of magnetic field on slip flow of nanofluid induced by a non-linear permeable stretching surface, Applied Thermal Engineering, **UK (Elsevier)**, 2016, 104 (2016) 758–766, **I.F.-3.043 (SCI)** .
43. K. Das, N. Acharya, P. K. Kundu, Framing the effects of solar radiation on magneto-hydrodynamics bioconvection nanofluid flow in presence of gyrotactic microorganisms, Journal of Molecular Liquids, **Netherlands (Elsevier)**, 2016, 222, 28–37, **I.F.-2.74 (SCI)**
44. K. Das, N. Acharya, P. K. Kundu, Effect of thermal radiation on MHD boundary-layer flow of a perfectly conducting fluid, Heat transfer research, **Russia (Begell House Pub Inc)**, 2016, 47, 529-543, **I.F.-0.84 (SCI)**

45. N. Acharya, K. Das, P. K. Kundu, The squeezing flow of Cu-water and Cu-kerosene nanofluids between two parallel plates, Alexandria Engineering Journal, **Egypt (Elsevier)**, 2016, 55, 1177–1186, **I.F.-0.436 (SCI)**.
46. K. Das, S.Jana, N. Acharya, Slip effects on squeezing flow of nanofluid between two parallel disks, International Journal of Applied Mechanics and Engineering, **Poland**, 2016, 2, 5-20 **I.F.-0.16**
47. K. Das, P. R. Duari, P. K. Kundu, Effects of magnetic field on an unsteady mixed convection flow of nanofluids containing spherical and cylindrical nanoparticles, Journal of Heat Transfer, **USA (ASME)**, 2016, 138, 061901-1, **I.F.-1.788 (SCI)**
48. M. T. Sk, K. Das, P. K. Kundu, Non-Darcy effect on boundary layer flow of TiO₂-water/kerosene nanofluid over an extensible sheet, The European Physical Journal – Plus, **Italy (Springer)**, 2016, 131: 314-325, **I.F.-1.302 (SCI)**
49. N. Acharya, K. Das, P. K. Kundu, Ramification of variable thickness on MHD TiO₂ and Ag nanofluid flow over a slendering stretching sheet using NDM, The European Physical Journal – Plus, **Italy (Springer)**, 2016, 131: 303-312, **I.F.-1.302 (SCI)**
50. K. Das, A. Sarkar, Effect of melting on an MHD micropolar fluid flow toward a shrinking sheet with thermal radiation, Journal of Applied Mechanics and Technical Physics, **Russia (Springer)**, 2016, 57 (4) 225-234, **I.F.-0.274 (SCI)**
51. K.Das, P.R.Duari, Micropolar nanofluid flow over a stretching sheet with chemical reaction, International Journal of Applied and Computational Mathematics, **(Springer)** 2016, 2(4), 1-13, **ISSN 2349-5103**
52. K. Das, N.Acharya, P. K. Kundu. MHD micropolar fluid flow over a moving plate under slip conditions: an application of lie group analysis, U.P.B. Sci. Bull. Series A., **Romania**, 2016, 78(2) 225-234, **I.F.-0.451 (SCI)**
53. K. Das, R. P. Sharma, A. Sarkar, Heat and mass transfer of a second grade magnetohydrodynamic fluid over a convectively heated stretching sheet, Journal of Computational Design and Engineering, **Korea (Elsevier)**, 2016, 3, 330-336, **I.F.-1.352 (ESCI)**
54. K. Das, U. Mohammed, Radiation effects on unsteady squeezing flow in presence of magnetic field, Moldavian Journal of Physical Sciences, **Moldavia**, 2016, 15(2), 1-10, **ISSN 1810-648X**

55. K. Das, N.Acharya, P. K. Kundu. Investigation of different models of nanofluid on flow and heat transfer characteristics. Journal of the Korean Physical Society, **Korea (Springer)**, 2015, 67(7), 1167-1174, **I.F.-0.418 (SCI)**
56. P. K. Kundu, K. Das, S. Jana. Thermophoretic MHD slip flow over a permeable surface with variable fluid properties. Alexandria Engineering Journal, **Egypt (Elsevier)**, 2015, 54, 35–44 **I.F.-0.23 (ESCI)**.
57. P. K .Kundu, K. Das, S. Jana. MHD micropolar fluid flow with thermal radiation and thermal diffusion in a rotating frame, Bulletin of Malaysian Mathematical Science Society, **Malaysia (Springer)**, 2015, 38, 1185-1205, **I.F.-0.779 (SCI)**
58. K. Das, P. R. Duari, P. K. Kundu. Nanofluid bioconvection in presence of gyrotactic microorganisms and chemical reaction in a porous medium. Journal of Mechanical Science and Technology, **Korea (Springer)**, 2015, 29 (11), 4841-4849, **I.F.-0.703 (SCI)**
59. P. K. Kundu, K. Das, P. R. Duari. Numerical simulation of nanofluid flow with convective boundary condition. Journal of the Egyptian Mathematical Society, **Egypt (Elsevier)**, 2015, 23, 435-439
60. K. Das, N. Acharya, P. K. Kundu, Radiative flow on MHD Jeffery fluid past a stretching surface with partial slip and melting heat transfer. Alexandria Engineering Journal. **Egypt (Elsevier)**, 2015, 54, 815–821, **I.F.-0.23 (ESCI)**.
61. K. Das, N. Acharya, P. K. Kundu, Effect of magnetic field on thermosolutal Marangoni boundary layer flow, Acta Technica, **Czech Republic**, 60 (2015), 237–252
62. K. Das. Nanofluid flow over a non-linear permeable stretching sheet with partial slip. Journal of the Egyptian Mathematical Society, **Egypt (Elsevier)**, 2015, 23, 451-456
63. S.Jana, K.Das, Influence of variable fluid properties, thermal radiation and chemical reaction on MHD slip flow over a flat plate. Italian Journal of Pure and Applied Mathematics, **Italy**, 2015, 34, 29-44, **ISSN 2239-0227**
64. P.K.Kundu, K.Das, S.Jana. Impact of chemical reaction on MHD mixed convection heat and mass transfer flow with thermophoresis. Walailak Journal of Science and Technology. **Thailand**, 2014, 11(2), 149-170, **I.F.-0.086**
65. K. Das, P. R. Duari, P. K. Kundu. Solar radiation effects on Cu-water nanofluid flow over a stretching sheet surface slip and temperature jump. The Arabian Journal for Science and Engineering, **Saudi Arabia (Springer)**, 2014, 39(12), 9015-9023, **I.F.-0.328 (SCI)**.

66. K. Das. Nanofluid flow over a shrinking sheet with surface slip, *Microfluidics and Nanofluidics*, **Germany (Springer)**, 2014, 16(1), 391-401, **I.F.-3.317 (SCI)**
67. P. K. Kundu, K. Das, S. Jana. Unsteady MHD free convection flow near a moving vertical plate with ramped wall temperature. *International Journal of Fluid Mechanics Research*, **Russia (Begell House, Inc)**, 2014, 41(1), 71-90, **ISSN 1064-2277**
68. K.Das. Convective slip flow of rarefied fluids over a permeable wedge plate embedded in a Darcy-Forchheimer porous medium. *The European Physical Journal – Plus*, **Italy (Springer)**, 2014, 129, 50: 1-15, **I.F.-1.302 (SCI)**
69. K. Das. Influence of chemical reaction and viscous dissipation on MHD mixed convection flow, *Journal of Mechanical Science and Technology*, **Korea (Springer)**, 2014, 28 (5), 1881-1885, **I.F.-0.703 (SCI)**
70. K.Das. Flow and heat transfer characteristic of Nanofluids in a rotating frame. *Alexandria Engineering Journal*, **Egypt (Elsevier)**, 2014, 53, 757-766, **I.F.-0.23 (SCI)**
71. K.Das. Radiation and melting effects on MHD boundary layer flow over a moving surface. *Ain Shams Engineering Journal*, **Egypt (Elsevier)**, 2014, 5, 1207-1214, **I.F.-0.362 (SCI)**.
72. P.K.Kundu, K.Das, S.Jana. Nanofluid flow towards a convectively heated stretching surface with heat source/sink: A lie group analysis, *Afrika Matematika*, **South Africa (Springer)**, 2014, 25, 363–377, **ISSN 1012-9405**
73. P. K. Kundu, K. Das, N. Acharya. Flow features of a conducting fluid near an accelerated vertical plate in porous medium with ramped wall temperature, *Journal of Mechanics*, **Taiwan (Cambridge University Press)**, 2014, 30(3), 277-288, **I.F.-0.333 (SCI)**
74. K. Das, P.R.Duari, P. K .Kundu. Nanofluid flow over an unsteady stretching surface in presence of thermal radiation. *Alexandria Engineering Journal*, **Egypt (Elsevier)**, 2014, 53, 737-745, **I.F.-0.23 (SCI)**.
75. K.Das, Cu-water nanofluid flow and heat transfer over a shrinking sheet. *Journal of Mechanical Science and Technology*, **Korea (Springer)**, 2014, 28 (12), 5089-5094, **I.F.-0.703 (SCI)**
76. K.Das. Lie group analysis of stagnation point nanofluid. *Microfluidics and Nanofluidics*. **Germany (Springer)**, 2013, 15(2), 267-274, **I.F.-3.317 (SCI)**
77. K.Das. Lie group analysis for nanofluid flow past a convectively heated stretching surface. *Applied Mathematics and Computation*, **U.S.A. (Elsevier)**, 2013, 221, 547-557, **I.F.-3.317 (SCI)**
78. K.Das. Effects of thermophoresis and thermal radiation on MHD mixed convective heat and mass transfer. *Afrika Matematika*, **South Africa (Springer)**, 2013, 24(4), 511-524, **ISSN 1012-9405**

79. K. Kundu, K. Das, S. Jana. Combined effects of thermophoresis and chemical reaction on MHD mixed convection flow, *Journal of thermophysics and heat transfer*, **USA (AIAA)**, 2013, 27(4), 741-747, **I.F.-0.739 (SCI)**
80. K.Das and S.Debnath. Influence of slip condition and heat transfer on MHD pulsatile flow of third order fluid in an asymmetric channel, *Afrika Matematika*, **South Africa (Springer)**, 2013, 24(4), 597-613, **ISSN 1012-9405**
81. K.Das. Mixed convection stagnation point flow and heat transfer of CU-water nanofluids towards a shrinking sheet, *Heat transfer-Asian Research*, **Japan (Wiley)**, 2013, 42(3), 230-242, **I.F.-0.170**
82. K.Das, L. Zheng. Melting effects on stagnation point flow of a Jeffrey fluid in presence of magnetic field, *Heat transfer research*, **Russia (Begell House Pub.)**, 2013, 44 (6), 493-506, **I.F.-0.078 (SCI)**
83. K.Das, Numerical simulation on MHD flow of an electrically conducting micropolar fluid with chemical reaction, *Indian Jour. of Mathematics*. **India**, 2013, 55(2), 203-222, **ISSN 0019-5324**.
84. K.Das, A mathematical model on MHD slip flow and heat transfer over a non-linear stretching sheet. *Thermal Science*. **Serbia**, 2014, 18(2), 475-488, **I.F.-1.45 (SCI)**
85. K.Das. Influence of thermophoresis and chemical reaction on MHD micropolar fluid flow with variable fluid properties. *International Journal of Heat and Mass Transfer*, **Netherlands (Elsevier)**, 2012, 55(11) 7166-7174, **I.F.-2.913 (SCI)**
86. K.Das. Slip effects on MHD mixed convection stagnation point flow of a micropolar fluid towards a shrinking vertical sheet. *Computers and Maths with Applications*. **U.S.A (Elsevier)** 2012, 63(1) 255-267, **I.F.-1.747 (SCI)**
87. K.Das. Impact of thermal radiation on MHD thermal boundary layer slip flow over a flatplate with variable fluid properties. *Heat and Mass Transfer*. **Germany (Springer)** 2012, 48(5), 767-778, **I.F.-0.896 (SCI)**
88. K.Das, Slip flow and convective heat transfer of nanofluids over a permeable stretching surface. *Computers and Fluids*, **U.S.A. (Elsevier)**, 2012, 64, 34-42, **I.F.-1.859 (SCI)**
89. K.Das. Slip effects on heat and mass transfer in MHD micropolar fluid flow over an inclined plate with thermal radiation and chemical reaction. *International Journal of Numerical Methods in Fluids*, **New Jersey, USA (John Wiley & Sons Ltd.)** 2012, 70, 96-113, **I.F.-1.176 (SCI)**
90. K.Das and G.Saha. Pulsatile motion of blood in a circular tube of varying cross-section with slip flow, [*International Journal of Engineering, Transactions B: Applications*, **Iran**, 2012, 25\(1\), 9-18, **I.F.-0.13**](#)

91. K.Das, MHD free convection flow of a radiating and chemically reacting fluid past an impulsively moving plate with ramped wall temperature. *Journal of Applied Mechanics. ASME. USA.*, 2012, 79(6) 061017-1-11, **I.F.-0.628 (SCI)**
92. K.Das and S.Jana. A two layered blood flow model of Bingham type non-Newtonian fluid. *International Journal of Applied Mechanics & Engineering, Poland*, 2012, 17(1), 17-26, **ISSN 1425-1655**
93. K.Das, Influence of slip and heat transfer on MHD peristaltic flow of a Jeffrey fluid in an inclined asymmetric porous channel. *Indian Jour. of Mathematics. India*, 2012, 54(1), 19-45, **ISSN 0019-5324**
94. K.Das. Slip effects on heat transfer and Peristaltic Pumping of a Johnson-Segalman fluid in an inclined asymmetric channel, *Arab. Jour. Maths, Saudi Arabia (Springer)*, 2012, 1(2), 159-174, **ISSN 2193-5351**
95. K.Das Simultaneous effects of slip conditions and wall properties on MHD peristaltic flow of a Maxwell fluid with heat transfer. *Journal of Siberian Federal University. Mathematics & Physics, Russia*, 2012, 5(3), 303-315, **I.F.-0.216**
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- 114.** K.Das and G.C.Saha, Analysis on Relative Coefficient of Viscosity of Blood Through Narrow Vessel, Antarctica Journal of Mathematics, **India**, 2009, 6(2),113-129, **ISSN 0972-8643**
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- 120.** D.C.Sanyal, K.Das and S.Debnath, Effect of magnetic field on pulsatile blood flow through an inclined circular tube with periodic body acceleration, *Journal of Physical Sciences*, **India**, 2007, 11(1), 43-56, **ISSN 0972-8791**
- 121.** K.Das and D.C.Sanyal, Stratified convective flow of a conducting fluid through an inclined porous channel, *Acta Ciencia Indica*, **India**, 2006, 32(3), 1167-1172, **ISSN 0970-0455**
- 122.** K.Das and D.C.Sanyal, Hydromagnetic unsteady free convection flow past a hot vertical plate, *The Mathematics Education*, **India**, 1996, 30(4), 227-236, **ISSN 0047-6269**
- 123.** K.Das and D.C.Sanyal, Slow flow of a conducting fluid past a non conducting porous sphere with variable permeability, *Czechoslovakia Journal of Physics*, **Czechoslovakia (Springer)**, 1994, 44(8), 737-743, **I. F.-0.42**
- 124.** K.Das and D.C.Sanyal. Hydromagnetic convecting slip flow through a horizontal channel, *Indian Journal of Theoretical Physics*, **India**, 1994, 42(1), 63-72, **ISSN 0019-5693**

B. Published Books:

Sl. No.	Title of the Book	Type of the Book & Authorship	Publisher & ISSN/ISBN No.	No. of co-authors
1.	A Text Book of Numerical Analysis	Text Book Joint Authorship	U. N. Dhur and Sons Pvt. Ltd., Kolkata; 978-93-80673-65-3	One
2.	Hydrostatics	Text Book Joint Authorship	U. N. Dhur and Sons Pvt. Ltd., Kolkata; 978-93-80673-33-2	One
3.	Linear Programming and Game Theory	Text Book Joint Authorship	U. N. Dhur and Sons Pvt. Ltd., Kolkata; 978-93-80673-73-8	One
4.	Numerical Methods (Theoretical and Practical)	Text Book Sole author	U. N. Dhur and Sons Pvt. Ltd., Kolkata; 978-93-80673-46-2	Nil
5.	Engineering Mathematics Vol. I-IV	Text Book Joint Authorship	U. N. Dhur and Sons Pvt. Ltd., Kolkata; 978-93-80673-16-5	One
6.	B.C.A Mathematics Vol. I-IV	Text Book Joint Authorship	U. N. Dhur and Sons Pvt. Ltd., Kolkata; 978-93-80673-34-9	One
7.	B.B.A Mathematics Vol. I, II	Text Book Joint Authorship	U. N. Dhur and Sons Pvt. Ltd., Kolkata; 978-93-80673-07-3	One

8.	Discrete Mathematics	Text Book Joint Authorship	U. N. Dhur and Sons Pvt. Ltd., Kolkata; 978-93-80673-74-5	One
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C. Chapter Contributed in Edited Books:

1. K.Das: Nantotechnology: Properties of Nanomaterials, Chapter Title: “A Mathematical Model on Nanofluid Flow and Heat Transfer Characteristics,” Vol. 3, Chapter-8, Page. nos. 205-221, Publisher: Studium Press LLC, Houston, TX 77072-USA, 1-62699-000-X

14. Membership of Learned Societies / Editorial Boards

1. Life Member of Calcutta Mathematical Society
2. Member of ISI, Kolkata
3. Member of Proceedings of The Mathematical Society, Banaras Hindu University
4. Member of Editorial Board of Reason-A Technical Journal

15. Patents: Nil

16. Awards: SIKSHA RATNA AWARD-2019, Department of Higher Education, Government of West Bengal.

17. Other notable activities: Reviewer of 24 peer reviewed National / International Journals

18. Participation in Seminars/Symposia/Conferences/Workshops:

A. Conferences / Seminars

1. **Participated** in the **International conference** on “ Frontier of Mathematics and Applications,” organized by Dept. of Mathematics, University of Burdwan, 2008
2. **Presented a paper** entitled “ A Mathematical Model on Nanofluid Flow and Heat Transfer Characteristics, ” in the **International Seminar** on ‘The 12th International conference of Ten. Soc. On diff gre. And its appl. and infor. Besides,’ organized by Dept. of pure Mathematics, University of Calcutta, 2012
3. **Presented a paper** entitled “ Effects of magnetic field and slip velocity on nanofluid flow and heat transfer characteristics, ” in the **National Seminar** on ‘National conference on emerging trends in physics of fluids and solids,’ organized by Dept. of Mathematics, Jadavpur University, 2013
4. **Presented a paper** entitled “ Effects of magnetic field on an unsteady mixed convection flow of nanofluids containing spherical and cylindrical nanoparticles, ” in the **National Seminar** on

‘National conference on emerging trends in physics of fluids and solids,’ organized by Dept. of Mathematics, Jadavpur University, 2014

5. **Presented a paper** entitled “ MHD boundary layer flow of a nanofluid over a convectively heated stretching sheet, ” in the **National Seminar** on ‘National conference on emerging trends in physics of fluids and solids,’ organized by Dept. of Mathematics, Jadavpur University, 2015

B. Invited Lectures and Chairmanship

1. **Invited Lecture** on “An over view of Nanofluid flow and its applications, ” and **Chaired** a Session in the National Seminar on ‘Recent trends in mathematical analysis and modeling, ‘organized by The mathematical society, Banaras Hindu University& Dept. of Applied Mathematics, BIT, Patna, 2013
2. **Chaired a Technical Session** in the UGC-CPE assisted National Seminar on “ Frontiers in Science and Technology Towards National Development ” organized by A.B.N.Seal College, Cooch Behar, 2016
3. **Chaired a Technical Session** on Plenary Lecture – VII and Oral Presentation in the Interdisciplinary (Science) National Seminar on “ Science and Mankind – A Better Tomorrow ” organized by A.B.N.Seal College, Cooch Behar, 2018

19. Faculty Development Programmes:

A. Participation in OP/RC

1. Participated in UGC Sponsored Orientation Programme, organized by UGC-Academic Staff College Jadavpur University from 5th July, 2004-31st July, 2004
2. Participated in UGC Sponsored Refresher Course, organized by Dept. of CSE, Phys. and Maths., University of Kalyani from 8th January , 2008-28th January, 2008
3. Participated in UGC Sponsored Refresher Course, organized by UGC-Academic Staff College Jadavpur University from 16th February, 2009 – 7th March, 2009
4. Participated in UGC Sponsored Refresher Course, organized by UGC-Academic Staff College, University of Burdwan, from 26th November , 2014– 16th December, 2014

B. Participation in Teaching-Learning-Evaluation Technology Programmes

1. Participated in Pedagogy and Teaching Methodology Training Programme, organized by Center for Personal Transformation, IIT Kharagpur and Kalyani. Govt. Engg. College from 17th March, 2009 – 30th March, 2009