



Dr. Dhananjay Yadav

Associate Professor

Mathematical and Physical Sciences - Mathematics Section

College of Arts and Sciences

University of Nizwa, Sultanate of Oman

Telephone: (+968)25446200

Extension: 910

eMail: dhananjay@unizwa.edu.om

Office Location: 11G-33.....

Time at UoN: Since 2017

Marital Status: Married.....

Dr. Dhananjay Yadav received his Ph.D. degree from Department of Mathematics, Indian Institute of Technology (IIT) Roorkee, India in 2013 and post-graduation (M.Sc.) in Mathematics from DDU University Gorakhpur, India in 2007. Prior to his appointment to University of Nizwa, Oman, he had worked as Principal Research Scientist at Athabasca University, Canada, Yonsei University, South Korea and Jeju National University, South Korea. He is a leading expert in CO₂ capture, storage and oil recovery, Computational sustainability and environmental analytics, Fluid mechanics, Numerical analysis, Hydrodynamic and Hydromagnetic stability, Nanofluids and Fluid flow in porous media. He has published more than 12 Books, 1 patent, more than 18 book chapters and more than 150 research articles (high impact factor) in various reputed international journals. He is also listed in the top 2% influential researchers in the World prepared by Stanford University based on Scopus data from 2020 onward and ranked 2nd worldwide in Porous Medium research, placing him among the top 0.05% of scholars according to ScholarGPS..

[Dr Dhananjay Yadav UoN CV.pdf](#)

Academic Qualifications

Ph.D., Indian Institute of Technology Roorkee (IITR) India, 2013

M.Sc., DDU University, Gorakhpur, India, 2007

B.Sc., DDU University, Gorakhpur, India, 2005

Teaching Activities

Calculus

Linear Algebra

Numerical Analysis

Mathematics for Teacher

Differential Equation for Engineers

Pre-Calculus

Ordinary and Partial Differential Equations

Mathematical Methods

Research Activities

- Research Interests

CO₂ capture, storage and oil recovery

Computational sustainability and environmental analytics

Nanofluids

Fluid flow in porous media

Modelling on Greenhouse gas emissions from agriculture field

- Publications

Article:

1. 2022 Dhananjay Yadav, MK Awasthi, US Mahabaleshwar, K Bhattacharyya, 2022, Numerical Treatment on the Convective Instability in a Jeffrey Fluid Soaked Permeable Layer with Through-Flow, Mathematical Modeling for Intelligent Systems Theory, Methods, and Simulation, CRC Press, Taylor & Francis Group, <https://doi.org/10.1201/9781003291916-10>, Scopus.

2. 2022 MK Awasthi, SK Pundir, M Devi, Dhananjay Yadav, V Kumar, AK Singh, 2022,

Instability of a Viscoelastic Cylindrical Jet: The VCVPF Theory, *Mathematical Modeling for Intelligent Systems Theory, Methods, and Simulation*, CRC Press, Taylor & Francis Group, <https://doi.org/10.1201/9781003291916-14>, Scopus.

3. 2022 S Rajput, K Bhattacharyya, AK Verma, MS Mandal, AJ Chamkha, Dhananjay Yadav, Unsteady stagnation-point flow of CNTs suspended nanofluid on a shrinking/expanding sheet with partial slip: multiple solutions and stability analysis, *Waves in Random and Complex Media*, 2022. <https://doi.org/10.1080/17455030.2022.2063986>(Taylor & Francis Publication, IF-4.05, H index-50, Scopus, Web of Science)

4. 2022 M.K. Awasthi, Dharamendra, Dhananjay Yadav, "Temporal instability of nanofluid layer in a circular cylindrical cavity". *The European Physical Journal Special Topics*, 231,2773–2779, 2022. <https://doi.org/10.1140/epjs/s11734-022-00599-2>. (Springer, Publication, IF: 4.99, H-Index: 183, Scopus, Web of Science)

5. 2022 M.K. Awasthi, Dharamendra, Dhananjay Yadav, "Stability characteristics of Walter's B viscoelastic fluid in a cylindrical configuration with heat transfer", *Proc IMechE Part C: J Mechanical Engineering Science*, 2022. <https://doi.org/10.1177/0954406222110183>. (SAGE Publication, IF-1.758. H index: 63, Scopus, Web of Science)

6. 2022 M.K. Awasthi, Dharamendra, Dhananjay Yadav, Instability of Rivlin-Ericksen fluid film with heat and mass transfer, *International Communications in Heat and Mass Transfer* 135, 106085, 2022. <https://doi.org/10.1016/j.icheatmasstransfer.2022.106085>. (Elsevier Publication, IF-6.78. H index: 121, Scopus, Web of Science).

7. 2022 S. K. Maurya, Ayan Banerjee, Anirudh Pradhan, Dhananjay Yadav, "Minimally deformed charged stellar model by gravitational decoupling in 5D Einstein–Gauss–Bonnet gravity", *European Physical Journal C*, 82, 552, 2022. <https://doi.org/10.1140/epjc/s10052-022-10496-6>. (Springer, Publication, IF: 4.99, H-Index: 183, Scopus, Web of Science)

8. 2022 U.S. Mahabaleshwar, T. Anusha, O.A. Bég, Dhananjay Yadav, T. Botmart, "Impact of Navier's slip and chemical reaction on the hydromagnetic hybrid nanofluid flow and mass transfer due to porous stretching sheet", *Scientific Reports*,12, 10451, 2022. <https://www.nature.com/articles/s41598-022-14692-y> (Nature Publication, United Kingdom, IF-4.996. H index: 242, Scopus, Web of Science)

9. 2022 A.K. Verma, S. Rajput, K. Bhattacharyya, A.J. Chamkha, Dhananjay Yadav, "Comparison between graphene-water and graphene oxide-water nanofluid flows over exponential shrinking sheet in porous medium: Dual solutions and stability analysis", *Chemical Engineering Journal Advances*, 2022. <https://doi.org/10.1016/j.cej.2022.100401>(Elsevier Publication, Scopus, Web of Science).

10. 2022 A.K. Verma, K. Bhattacharyya, S. Rajput, M.S. Mandal, A.J. Chamkha, Dhananjay Yadav, "Buoyancy driven non-Newtonian Prandtl-Eyring nanofluid flow in Darcy-Forchheimer porous medium over inclined non-linear expanding sheet with double stratification", *Waves in Random and Complex Media*, 1-33, 2022. (Taylor & Francis Publication, IF-4.05, H index-50, Scopus, Web of Science)
11. 2022 S. Shekhar, R. Ragoju, and Dhananjay Yadav, "The effect of variable gravity on rotating Rayleigh-Bénard convection in a sparsely packed porous layer," *Heat Transfer*, vol. 51, pp. 4187-4204, 2022. <https://doi.org/10.1002/htj.22495>. (Wiley Publication, H index-30, Scopus, Web of Science).
12. 2022 Dhananjay Yadav, "Thermal non-equilibrium effects on the instability mechanism in a non-Newtonian Jeffery fluid saturated porous layer," *Journal of Porous Media*, vol. 25, no. 2, pp. 1-12, 2022. (Begell House Publication, IF-1.78, H index-39, Scopus, Web of Science).
13. 2022 Dhananjay Yadav, "Effect of electric field on the onset of Jeffery fluid convection in a heat-generating porous medium layer," *Pramana*, vol. 96, no. 1, pp. 1-8, 2022. (Springer Publication, IF-2.69, H index-54, Scopus, Web of Science).
14. 2022 Dhananjay Yadav, M. Al-Siyabi, M.K. Awasthi, S. Al-Nadhairi, A. Al-Rahbi, M. Al-Subhi, R. Ragoju, K. Bhattacharyya, "Chemical Reaction and Internal Heating Effects on the Double Diffusive Convection in Porous Membrane Enclosures Soaked with Maxwell Fluid," *Membranes*, vol. 12, no. 3, p. 338, 2022. (MDPI Publication, IF-4.56, H index-48, Scopus, Web of Science).
15. 2022 Dhananjay Yadav, M.K. Awasthi, M. Al-Siyabi, S. Al-Nadhairi, A. Al-Rahbi, M. Al-Subhi, R. Ragoju, K. Bhattacharyya., "Double diffusive convective motion in a reactive porous medium layer saturated by a non-Newtonian Kuvshiniski fluid," *Physics of Fluids*, vol. 34, no. 2, p. 024104, 2022
16. 2021 H. Zuo, Z. Salahshoor, Dhananjay Yadav, M. R. Hajizadeh, and B. X. Vuong, "Investigation of thermal treatment of hybrid nanoparticles in a domain with different permeabilities," *Journal of Thermal Analysis and Calorimetry*, 145 2787-2794, 2021. <https://doi.org/10.1007/s10973-020-09824-3>. (Springer publication, IF-4.755, H index-101, Scopus, Web of Science).
17. 2021 Dhananjay Yadav, "The effect of viscosity and Darcy number on the start of convective motion in a rotating porous medium layer saturated by a couple-stress fluid," *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, 235, 999-1007, 2021. <https://doi.org/10.1177/0954406220942551>. (SAGE Publication, IF-1.758. H index: 63, Scopus, Web of Science).

18. 2021 Dhananjay Yadav, The Effect of Rotation and Pulsating Through flow on the Onset of Longitudinal Convective Rolls in a Porous Medium Saturated by Nanofluid, *Journal of Porous Media* 24, 10, 49-63, (Begell House Publication, IF-1.78, H index-39, Scopus, Web of Science).

19. 2021 M. K. Awasthi, A. K. Shukla, and Dhananjay Yadav, ``Rayleigh instability of power-law viscoelastic liquid with heat and mass transfer,`` *International Communications in Heat and Mass Transfer*, vol. 129, p. 105657, 2021. (Elsevier Publication, IF-6.78. H index: 121, Scopus, Web of Science). 24.

20. 2021 Dhananjay Yadav, and J. Wang, ``An improved UK-DNDC model for evaluations of soil temperature and nitrous oxide emissions from Canadian agriculture,`` *Plant and Soil*, vol. 469, no. 1, pp. 15-37, 2021. (Springer publication, IF-4.993, H index-200, Scopus, Web of Science).

21. 2021 A. Singha, G. Seth, K. Bhattacharyya, Dhananjay Yadav, A. K. Verma, and A. K. Gautam, ``Soret and Dufour Effects on Hydromagnetic Flow of H₂O-Based Nanofluids Induced by an Exponentially Expanding Sheet Saturated in a Non-Darcian Porous Medium,`` *Journal of Nanofluids*, vol. 10, no. 4, pp. 506-517, 2021. (American Scientific Publishers, H index-21, Scopus, Web of Science).

22. 2021 Dhananjay Yadav, A. A. Mohamad, and M. K. Awasthi, ``The Horton-Rogers-Lapwood problem in a Jeffrey fluid influenced by a vertical magnetic field,`` *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*, vol. 235, no. 6, pp. 2119-2128, 2021. (SAGE publication, IF-1.822, H index-34, Scopus, Web of Science).

23. 2021 Dhananjay Yadav, ``Influence of anisotropy on the Jeffrey fluid convection in a horizontal rotary porous layer,`` *Heat Transfer*, vol. 50, no. 5, pp. 4595-4606, 2021. (Wiley Publication, H index-30, Scopus, Web of Science).

24. 2021 Dhananjay Yadav, S. Haider, S. Khan, S. Khan, and M. M. Selim, ``Hybrid nanomaterial and instability analysis of convective flow in permeable media,`` *Applied Nanoscience*, pp. 1-15, 2021. (Springer publication, IF-3.869, H index-61, Scopus, Web of Science).

25. 2021 Dhananjay Yadav, Y.-M. Chu, and Z. Li, ``Examination of the nanofluid convective instability of vertical constant throughflow in a porous medium layer with variable gravity,`` *Applied Nanoscience*, pp. 1-14, 2021. (Springer publication, IF-3.869, H index-61, Scopus, Web of Science).

26. 2021 Dhananjay Yadav, A. Mohamad, and G. Rana, ``Effect of Throughflow on the Convective Instabilities in an Anisotropic Porous Medium Layer with Inconstant Gravity,``

Journal of Applied and Computational Mechanics, vol. 7, no. 4, pp. 1964-1972, 2021.
(Shahid Chamran University of Ahvaz Publication, H index-24, Scopus, Web of Science)

27. 2021 Dhananjay Yadav, U. Mahabaleshwar, A. Wakif, and R. Chand, ``Significance of the inconstant viscosity and internal heat generation on the occurrence of Darcy-Brinkman convective motion in a couple-stress fluid saturated porous medium: An analytical solution,`` International Communications in Heat and Mass Transfer, vol. 122, p. 105165, 2021. (Elsevier Publication, IF-6.78. H index: 121, Scopus, Web of Science).

28. 2020 Dhananjay Yadav, ``Numerical examination of the thermal instability in an anisotropic porous medium layer subjected to rotation and variable gravity field,`` Special Topics and Reviews in Porous Media, 11, 395-407, 2020.
<https://doi.org/10.1615/SpecialTopicsRevPorousMedia.2020031484>. (Begell Publication, H index-16, Scopus, Web of Science).

29. 2020 Dhananjay Yadav, ``Effects of rotation and varying gravity on the onset of convection in a porous medium layer: a numerical study,`` World Journal of Engineering, 17, 785-793, 2020. <https://doi.org/10.1108/WJE-03-2020-0086>. (Emerald Publication, H index-13, Scopus, Web of Science).

30. 2020 Dhananjay Yadav, ``The density-driven nanofluid convection in an anisotropic porous medium layer with rotation and variable gravity field: A numerical investigation,`` Journal of Applied and Computational Mechanics, vol. 6, no. 3, pp. 699-712, 2020, doi: 10.22055/jacm.2019.31137.1833. (Shahid Chamran University of Ahvaz Publication, H index-24, Scopus, Web of Science).

31. 2020 Y.-M. Chu, Dhananjay Yadav, A. Shafee, Z. Li, and Q.-V. Bach, ``Influence of wavy enclosure and nanoparticles on heat release rate of PCM considering numerical study,`` Journal of Molecular Liquids, 319, 114121, 2020.
<https://doi.org/10.1016/j.molliq.2020.114121>. (Elsevier Publication, IF-6.633. H index: 132, Scopus, Web of Science).

32. 2019 Dhananjay Yadav, ``The onset of longitudinal convective rolls in a porous medium saturated by a nanofluid with non-uniform internal heating and chemical reaction,`` Journal of Thermal Analysis and Calorimetry, vol. 135, no. 2, pp. 1107-1117, 2019. (Springer publication, IF-4.755, H index-101, Scopus, Web of Science).

33. 2019 Dhananjay Yadav, ``Numerical Investigation of the Combined Impact of Variable Gravity Field and Throughflow on the Onset of Convective Motion in a Porous Medium layer,`` International Communications in Heat and Mass Transfer, vol. 108, pp. 104274, 2019. <https://doi.org/10.1016/j.icheatmasstransfer.2019.104274>. (Elsevier Publication, IF-6.78. H index: 121, Scopus, Web of Science).

34. 2019 [Dhananjay Yadav, The effect of pulsating throughflow on the onset of magneto convection in a layer of nanofluid confined within a Hele-Shaw cell](#), Journal of Process Mechanical Engineering (SAGE Publishing), <https://doi.org/10.1177/0954408919836362> IF: 1.21
35. 2019 [Dhananjay Yadav, Impact of Chemical Reaction on the Convective Heat Transport in Nanofluid Occupying in Porous Enclosures: A Realistic Approach](#), International Journal of Mechanical Sciences Volumes 157-158, July 2019, Pages 357-373; ((Elsevier))IF:3.57
36. 2019 [Dhananjay Yadav, A. Wakif, Z. Boulahia, R. Sehaqui, Numerical Examination of the Thermo-Electro-Hydrodynamic Convection in a Horizontal Dielectric Nanofluid Layer Using the Power Series Method](#), Journal of Nanofluids 8 (1), 117-131
37. 2019 [Dhananjay Yadav, J. Wang 2019, Convective Heat Transport in a Heat Generating Porous Layer Saturated by a Non-Newtonian Nanofluid](#), Heat Transfer Engineering (Taylor & Francis Group Publications, IF-1.24, H- index: 50)
<https://doi.org/10.1080/01457632.2018.1470298>
38. 2018 [Dhananjay Yadav, The influence of pulsating throughflow on the onset of electro-thermo-convection in a horizontal porous medium saturated by a dielectric nanofluid](#), Journal of Applied Fluid Mechanics, 11, 1679-1689, 2018, IF: 1.1
39. 2018 [Dhananjay Yadav, Throughflow and Magnetic Field Effects on the Onset of Convection in a Hele Shaw Cell](#), Rev. Cubana Fis., 35, 108-114, 2018
40. 2018 [Dhananjay Yadav, The onset of longitudinal convective rolls in a porous medium saturated by a nanofluid with non-uniform internal heating and chemical reaction](#), Journal of Thermal Analysis and Calorimetry (IF: 2.2, H index-74)
41. 2017 [Dhananjay Yadav: 2017, Electrohydrodynamic instability in a heat generating porous layer saturated by a dielectric nanofluid](#), Article in Press, Journal of Applied Fluid Mechanics, 10 (3), 763-776 (IF-0.8).
42. 2017 [Dhananjay Yadav: 2017, Numerical solution of the onset of natural convection in a rotating nanofluid layer induced by purely internal heating](#), International Journal of Applied and Computational Mathematics, (Springer Publications)
<http://dx.doi.org/10.1007/s40819-017-0319-3>
43. 2017 [R. Chand, G.C. Rana, Dhananjay Yadav: 2017, Thermal instability in a layer of couple stress nanofluid saturated porous medium](#), Journal of Theoretical and Applied Mechanics 47 (1), 69-44
44. 2017 [R. Chand, Dhananjay Yadav, G.C. Rana: 2017, Thermal instability of couple-stress nanofluid with vertical rotation in a porous medium](#), Journal of Porous Media, 20, 635-648 (Bengell House Publications, IF-1.03)

45. 2017 [Dhananjay Yadav, J.Wang, and Jinho Lee: 2017, Onset of Darcy-Brinkman convection in a rotating porous layer induced by purely internal heating, Journal of Porous Media, 20, 691-706](#)
46. 2017 [Dhananjay Yadav, J. Wang: 2017, Modelling Carbon Dioxide Emissions from Agricultural Soils in Canada, Environmental Pollution, 230, 1040-1049 \(Elsevier Publications IF-5.1\).](#)
47. 2016 [Dhananjay Yadav, R. Bhargava and G.S. Agrawal: 2016 Erratum to: Thermal instability in a nanofluid layer with a vertical magnetic field, Journal of Engineering Mathematics 100, 1-1 \(Springer Publications, IF-1.07\).](#)
48. 2016 [Dhananjay Yadav, R.A. Mohammad, J. Lee and H.H. Cho: 2016, Thermal convection in a Kuvshiniski viscoelastic nanofluid saturated porous layer, Ain Shams Engineering Journal. <http://dx.doi.org/10.1016/j.asej.2015.11.023>](#)
49. 2016 [Dhananjay Yadav, G.S. Agrawal and Jinho Lee: 2016, Thermal instability in a rotating nanofluid layer: A revised model, Ain Shams Engineering Journal , 7, 431-440](#)
50. 2016 [R. Chand, G.C. Rana, Dhananjay Yadav: 2016, Electrothermo Convection in a Porous Medium Saturated by Nanofluid, Journal of Applied Fluid Mechanics, 9, 1081-1088 \(IF-0.9\)](#)
51. 2016 [Dhananjay Yadav, R.A. Mohamed, H.H. Cho and Jinho Lee: 2016, The effect of Hall current on the onset of MHD convection in a porous medium layer saturated by a nanofluid, Journal of Applied Fluid Mechanics, 9, 2379-2389 \(IF-0.9\)](#)
52. 2016 [Dhananjay Yadav, J. Lee, H. H. Cho: 2016, Electrothermal instability in a porous medium layer saturated by a dielectric nanofluid, Journal of Applied Fluid Mechanics, 9, 2123-2132 \(IF-0.9\)](#)
53. 2016 [Dhananjay Yadav, J. Lee, H.H. Cho: 2016, Throughflow and quadratic drag effects on the onset of convection in a Forchheimer-extended Darcy porous medium layer saturated by a nanofluid, Journal of the Brazilian Society of Mechanical Sciences and Engineering, 38, 2299-2309 \(Springer Publications, IF-1.3\)](#)
54. 2016 [Dhananjay Yadav and Jinho Lee: 2016, Onset of convection in a nanofluid layer confined within a Hele-Shaw cell, Journal of Applied Fluid Mechanics, 9, 519-527 \(IF-0.9\)](#)
55. 2016 [Dhananjay Yadav, D. Lee, H.H. Cho and J. Lee: 2016, The onset of double-diffusive nanofluid convection in a rotating porous medium layer with thermal conductivity and viscosity variation: A revised model, Journal of Porous Media 19, 1-16 \(Bengell House Publications, IF-1.03\).](#)
56. 2016 [Dhananjay Yadav, D. Nam, J. Lee: 2016, The onset of transient Soret-driven MHD](#)

[convection confined within a Hele-Shaw cell with nanoparticles suspension, Journal of the Taiwan Institute of Chemical Engineers, 58, 235-244 \(Elsevier Publications, IF-4.2\).](#)

57. 2016 [Dhananjay Yadav, J. Wang, R. Bhargava, J. Lee and H.H. Cho: 2016, Numerical investigation of the effect of magnetic field on the onset of nanofluid convection, Applied Thermal Engineering 103, 1441-1449 \(Elsevier Publications IF-3.4\)](#)

58. 2015 [R. Chand, Dhananjay Yadav, G.C. Rana: 2015, Electrothermo convection in a horizontal layer of rotating nanofluid, International Journal of Nanoparticles, 8, 241-261](#)

59. 2015 [Dhananjay Yadav and R. Srivastava: 2015, Vortex shedding past a single cylinder confined in a channel with blockage ratio 0.83, 0.85, 0.88 and 0.9, Elixir Mech. Engg. 85, 34557-34559](#)

60. 2015 [Dhananjay Yadav, R. Srivastava and Jinho Lee: 2015, Numerical simulation of vortex shedding past a single cylinder confined in a channel, Fluid Mechanics 1, 1-4](#)

61. 2015 [J.C. Umavathi, Dhananjay Yadav and M.B. Mohite: 2015, Linear and nonlinear stability analyses of double-diffusive convection in a porous medium layer saturated in a Maxwell nanofluid with variable viscosity and conductivity, Elixir Mech. Engg. 79, 30407-30426](#)

62. 2015 [Dhananjay Yadav and Jinho Lee: 2015, The effect of local thermal non-equilibrium on the onset of Brinkman convection in a nanofluid saturated rotating porous layer, Journal of Nanofluids 4, 335-342](#)

63. 2015 [G.C. Rana, R. Chand, Dhananjay Yadav: 2015, The onset of Electrohydrodynamic instability of an elastico-viscous Walters' \(Model B`\) dielectric fluid layer, FME Transactions 43, 154-160 \(IF-0.7\)](#)

64. 2015 [Dhananjay Yadav and M.C. Kim: 2015, The onset of transient Soret-driven buoyancy convection in nanoparticle suspensions with particle concentration dependent viscosity in a porous medium, Journal of Porous Media, 18, 369-378 \(Bengell House Publications, IF-1.04\).](#)

65. 2015 [Dhananjay Yadav, Changhoon Kim, Jinho Lee, Hyung Hee Cho: 2015, Influence of magnetic field on the onset of nanofluid convection induced by purely internal heating, Computers and Fluids 121, 26-36 \(Elsevier Publications, IF-2.3\).](#)

66. 2015 [Dhananjay Yadav, J. Lee, H.H. Cho: 2015, Brinkman convection induced by purely internal heating in a rotating porous medium layer saturated by a nanofluid, Powder Technology, 286, 592-601 \(Elsevier Publications, IF-3.0\).](#)

67. 2015 [Dhananjay Yadav and J. Lee: 2015, The onset of MHD nanofluid convection with Hall current effect, European Physical Journal Plus 130, 162-184 \(Springer Publications,](#)

[IF-1.8\).](#)

68. 2015 [Dhananjay Yadav and M.C. Kim: 2015, Linear and non-linear analyses of Soret-driven buoyancy convection in a vertically orientated Hele-Shaw cell with nanoparticles suspension, Computers and Fluids, 117, 139-148 \(Elsevier Publications, IF-2.3\).](#)
69. 2014 [Chandan Singh and Dhananjay Yadav: 2014, User Ranking by Monitoring Eye Gaze using Eye Tracker, Advances in Intelligent Systems and Computing 258, 235-246](#)
70. 2014 [Chandan Singh, Dhananjay Yadav and Jinho Lee: 2014, Reader Comprehension Ranking by Monitoring Eye Gaze using Eye Tracker, International Journal of Intelligent Systems Technologies and Applications 13, 294-307](#)
71. 2014 [M.K. Awasthi, Dhananjay Yadav and G.S. Agrawal: 2014, Viscous potential flow analysis of Electrohydrodynamic Rayleigh-Taylor instability, Journal of Applied Fluid Mechanics 7, 209-216 \(IF-0.8\).](#)
72. 2014 [Dhananjay Yadav, R. Bhargava, G.S. Agrawal, G.S. Hwang, J. Lee and M.C. Kim: 2014, Magneto-convection in a rotating layer of nanofluid, Asia-Pacific Journal of Chemical Engineering 9, 663-677 \(Wiley Online Library, IF-0.84\).](#)
73. 2014 [Dhananjay Yadav and M.C. Kim: 2014, Theoretical and Numerical Analyses on the Onset and Growth of Convective Instabilities in a Horizontal Anisotropic Porous Medium, Journal of Porous Media 17, 1061-1074 \(Bengell House Publications, IF-1.03\).](#)
74. 2014 [Dhananjay Yadav and M.C. Kim: 2014, The effect of rotation on the onset of transient Soret-driven buoyancy convection in a porous layer saturated by a nanofluid, Microfluidics and Nanofluidics 17, 1085-1093 \(Springer Publications, IF-2.3\)](#)
75. 2014 [M.C. Kim and Dhananjay Yadav: 2014, Linear and nonlinear analyses of the onset of buoyancy-induced instability in an unbounded porous medium saturated by miscible fluids, Transport in Porous Media, 104, 407-433 \(Springer Publications, IF-2.2\).](#)
76. 2014 [Dhananjay Yadav, R. Bhargava, G.S. Agrawal, N. Yadav, J. Lee and M.C. Kim: 2014, Thermal instability in a rotating porous layer saturated by a non-Newtonian nanofluid with thermal conductivity and viscosity variation, Microfluidics and Nanofluidics 16, 425-440 \(Springer Publications, IF-2.3\).](#)
77. 2013 [Dhananjay Yadav, G.S. Agrawal and R. Bhargava: 2013, The Onset of double-diffusive nanofluid convection in a layer of a saturated porous medium with thermal conductivity and viscosity variation, Journal of Porous media 16, 105-121 \(Bengell House Publications, IF-1.03\).](#)
78. 2013 [Dhananjay Yadav, R. Bhargava and G.S. Agrawal: 2013, Thermal instability in a nanofluid layer with vertical magnetic field, Journal of Engineering Mathematics 80,](#)

[147-164 \(Springer Publications, IF-1.07\).](#)

79. 2013 [Dhananjay Yadav, R. Bhargava and G.S. Agrawal: 2013, Numerical solution of a thermal instability problem in a rotating nanofluid layer, International Journal of Heat and Mass Transfer 63, 313-322 \(Elsevier Publications, IF-3.5\).](#)

80. 2012 [Dhananjay Yadav, G.S. Agrawal and R. Bhargava: 2012, Effect of magnetic field on the Rayleigh-Bénard convection in a nanofluid layer: Rigid-rigid boundaries, IEEE Xplore doi: 10.1109/AICERA.2012.6306678](#)

81. 2012 [Dhananjay Yadav, G.S. Agrawal and R. Bhargava: 2012, The onset of convection in a binary nanofluid saturated porous layer, International Journal of Theoretical and Applied Multiscale Mechanics 2, 198-224](#)

82. 2012 [Dhananjay Yadav, G.S. Agrawal and R. Bhargava: 2012, Effect of internal heat source on the onset of convection in nanofluid layer, Applied Mechanics and Materials 110-116, 1827-1832](#)

83. 2012 [Dhananjay Yadav, R. Bhargava and G.S. Agrawal: 2012, Boundary and internal heat source effects on the onset of Darcy-Brinkman convection in a porous layer saturated by nanofluid, International Journal of Thermal Sciences 60, 244-254 \(Elsevier Publications, IF-3.6\).](#)

84. 2011 [Dhananjay Yadav, G.S. Agrawal and R. Bhargava: 2011, Rayleigh-Bénard convection in nanofluid, International Journal of Applied Mathematics and Mechanics 7, 61-76](#)

85. 2011 [Dhananjay Yadav, G.S. Agrawal and R. Bhargava: 2011, Thermal instability in rotating nanofluid, International Journal of Engineering Science 49, 1171-1184 \(Elsevier Publications, IF-4.3\).](#)

Book:

1. 2014 [Yadav, D.: 2014, Hydrodynamic and Hydromagnetic Instability in Nanofluids, Lambert Academic Publishing, Germany. ISBN-13: 978-3659592010](#)

Consultancy Activities

Senior Post Doc. Fellow, Athabasca University Canada, 2016- 2017

Senior Post Doc. Fellow, Yonsei University, Seoul, South Korea, 2014- 2016

Post Doc. Fellow, Jeju National University, Jeju, South Korea, 2013- 2014

Assistant Professor, Mangalayatan University Aligarh, India, 2013- 2013

Teaching Assistantship, Indian Institute of Technology Roorkee (IITR), India, 2010- 2013

Membership in Professional Bodies

2019-Present: Editorial Board member of Probe-Chemical and Biochemical Engineering

2019-Present: Editorial board member of ``The Open Mechanical Engineering Journal

2018-Present: Editorial Board member of Fluid Mechanics Journal

2016-Present: Editor in Chief of International Journal of Energy and Thermal Fluids
(<http://issrpublishing.com/ijetf/>)

2012-Present: Senior Membership of Universal Association of Mechanical and Aeronautical Engineers (UAMAE) Member. No. SNM1010001050

2011-Present: Senior Membership of International Association of Computer Science and Information Technology (IACSIT) Member. No. 80341768

2011-Present: Senior Membership of International Association of Engineers (IAENG)
Member. No. 111612

...

[Dr Dhananjay Yadav UoN CV.pdf](#)

Ref.: <https://www.unizwa.edu.om/staff/cas/dhananjay>