

# Mahmood Norouzi

## **Personal Information**

**Name:** Mahmood

**Surname:** Norouzi

**Academic Degree:** Ph.D. in Mechanical Engineering

**Position:** Associate Professor in Mechanical Engineering

**Place of Birth:** Tehran, Iran

**Nationality:** Iranian (Persian)

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University Boul., Shahrood, Iran, P.O. Box 316, Post Code 361 9995161

## **Research Interests**

- Rheology and non-Newtonian Fluid Mechanics
- Fluid Dynamics (Specially instability of fluid flows) and Heat Transfer
- Numerical Methods and Computational Fluid Dynamics
- Composite Materials
- Ventilation and Air Condition
- Machines and Mechanisms

## **Educations**

### **Shahrood University of Technology (2005–2009)**

Expected Degree: Ph.D. in Fluid Mechanics

Thesis: Investigation of viscoelastic flow and heat transfer in stationary and rotating curved rectangular ducts

GPA: **19.50** / 20.00 (Equivalent to **3.90** / 4.00)

### **National University of Singapore (NUS), (2008–2009)**

Visiting research for a half of year

### **Shahrood University of Technology (2002–2005)**

Expected Degree: Master of Science in Fluid Mechanics

Thesis: A numerical modeling for internal cooling of gas turbine blades

GPA: **18.88** / 20.00 (Equivalent to **3.78** / 4.00)

### **Sharif University of Technology (1998–2002)**

Expected Degree: Bachelor of Science in Solid Mechanics

Final Project: Optimization of pressure angle and Hertzian stress in disk cams with different types of reciprocating followers

GPA: **16.01** / 20.00 (Equivalent to **3.20** / 4.00)

## **Membership**

- Member of National Elites Foundation of Iran
- Member of Rheology Society
- Member of Iranian Association of Mechanical Engineering

## **Taught Courses**

- Non-Newtonian Fluid Mechanics
- Computational Fluid Dynamics
- Advanced Fluid Mechanics
- Advanced Numerical Methods
- Advances Engineering Mathematics
- Fluid Mechanics
- Numerical Methods
- Engineering Mathematics
- Dynamics
- Machine Elements Design

## **Professional Experiences**

- Associate Professor in Mechanical Engineering Department, Shahrood University of Technology, Shahrood, Iran, Feb 2010–Present.
- Head of University-Industry Relation Office of Shahrood University of Technology, Shahrood, Iran, June 2014–Present.
- Director-in-Charge of Journal of Solid and Fluid Mechanics, 2013–Present.
- Management Editor of Journal of Solid and Fluid Mechanics, 2011–2013.
- Member of Railway Committee in Iranian National Standard Institute, 2008–2009.
- R&D Expert in RAJA Inc., 2006–2009.
- Manager of Machinery Design Group in Saba Battery Co., 2003–2006.
- Expert in Design and R&D Groups of Havasaz Inc., 2001–2003.

## **Technical Skills**

- Programming the CFD codes
- Measuring the rheological properties of complex fluids, semi solid materials and rubbers
- Piping and Design of HVAC equipment
- Design of industrial ventilation equipment
- Design of test systems for HVAC equipment
- Design of composite vessels

### **Awards and Honors:**

- Research award and grant of young assistant professor from National Elites Foundation of Iran (2012)
- Superior research award of Semnan state (2017)
- Superior teaching awards of Shahrood University of Technology for ten years (Since 2011-2021)
- Superior research awards of Shahrood University of Technology for ten years (Since 2012-2021)
- The first rank in the entrance exam of Ph.D. degree (2005)
- Superior research award for graduate students (2009)

### **Reviewer for:**

- Journal of Heat Transfer–Transactions of The ASME
- International Journal of Heat and Mass Transfer (Elsevier)
- International Journal of Thermal Sciences (Elsevier)
- Applied Thermal Engineering (Elsevier)
- Journal of The Franklin Institute (Elsevier)
- Ain Shams Engineering Journal (Elsevier)
- Scientia Iranica (Elsevier)
- Nonlinear Dynamics (Springer)
- Korea-Australia Rheology Journal (Springer)
- British Journal of Applied Science & Technology
- Journal of Flow Chemistry
- The Modares Journal of Mechanics Engineering
- Journal of Applied and Computational Science in Mechanics (Publisher: Ferdowsi University of Mashhad)
- Mechanical Engineering Journal of Tabriz University
- Journal of Energy Engineering Management
- Journal of Solid and Fluid Mechanics
- Journal of Mining and Environment
- Journal of Modeling in Engineering
- 8<sup>th</sup> International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT 2011.
- 23<sup>rd</sup> Annual International Mechanical Engineering Conference (ISME-2015), Amirkabir University of Technology, Tehran, Iran, 2015.
- 26<sup>rd</sup> Annual International Mechanical Engineering Conference (ISME-2018), Semnan University, Semnan, Iran, 2018.

## Publications

### *Books*

1. **M. Norouzi**, M.H. Kayhani, *Internal flows of non-Newtonian fluids*, In: V.M. Petrova (Ed.), *Advances in Engineering Research*, Vol. 3, Nova Publishers, New York, USA, 285–332, 2012.
2. **M. Norouzi**, M. Karimi Demneh, *Simulation of Machines and Mechanisms with MATLAB (SimMechanics)*, Dibagaran, Tehran, 2005.

### *Translated Book to Persian*

1. J. Kiusalaas, *Numerical Methods in Engineering with MATLAB*, 2<sup>nd</sup> Edition, Cambridge University Press, 2009, Translators: **M. Norouzi**, M. Karimi-Demneh, M. Mahmoodi, 2014.

### *Journal Papers*

1. M.M. Sharghi, **M. Norouzi**, P. Akbarzadeh, A. Abbaspor, An investigation on nonlinear viscoelastic lubrication using FENE-P constitutive equation, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 44, 196, 2022, DOI: 10.1007/s40430-022-03497-9, ISSN: 1678-5878, IF: 2.220, (SCIE).
2. A Emamian, **M Norouzi**, M Davoodi, “Drops with circular stagnation lines: combined effects of viscoelastic and inertial forces on drop shape”, *Journal of Non-Newtonian Fluid Mechanics*, *Journal of non-Newtonian Fluid Mechanics*, In Press (Available online 6 April 2022), DOI: 10.1016/j.jnnfm.2022.104795, ISSN: 0377-0257, IF: 2.670 (SCIE).
3. P. Akbarzadeh, **M. Norouzi**, R. Ghasemi, S.Z. Daghigh, “Experimental study on the entry of solid spheres into Newtonian and non-Newtonian fluids”, *Physics of Fluids*, vol.34, no.3, pp.033111, 2022, DOI: 10.1063/5.0081002, ISSN: 1070-6631, IF: 3.521, (SCIE).
4. A. Yaghoobi, A. Jalali, **M. Norouzi**, M. Ghatee, “Aspect Ratio Dependency of Magneto-Rheological Elastomers in Dynamic Tension-Compression Loading”, *IEEE Transactions on Magnetics*, 2022, DOI: 10.1109/TMAG.2022.3152031, ISSN: 0018-9464, IF: 1.700, (SCIE).
5. A. Minaeian, M. Nili-AhmadAbadi, **M. Norouzi**, K.C. Kim, “Effects of viscoelasticity on the onset of vortex shedding and forces applied on a cylinder in unsteady flow regime”, *Physics of Fluids*, vol.34, no.1, pp.013106, 2022, DOI: 10.1063/5.0080956, ISSN: 1070-6631, IF: 3.521, (SCIE).
6. B.E. Manesh, M.M. Shahmardan, **M. Norouzi**, H. Rahmani, “Unsteady anisotropic heat conduction in heterogeneous composite conical shells with temperature-dependent thermal conductivities: an analytical study”, *Journal of Thermal Analysis*

- and Calorimetry, vol.147, pp.1773–1792, 2022 DOI: 10.1007/s10973-020-10434-2, ISSN: 1388-6150, IF: 4.626, (SCIE).
7. M. Mahmoodi, M. Nili-Ahmadabadi, A. Minaeian, M.R. Tavakoli, **M. Norouzi**, K.C. Kim, “Secondary flow structures in developing viscoelastic fluid flow through curved ducts with square cross section”, *Meccanica*, vol. 56, pp.2979–2999, 2021, DOI: 10.1007/s11012-021-01438-9, ISSN: 0025-6455, IF: 2.258, (SCIE).
  8. A.B. Bahambari, M.H. Kayhani, **M. Norouzi**, “On the effect of geometry of w-wave trenches on film cooling performance of gas turbine blades”, *Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy*, vol.235, no.7, pp.1595-1618, 2021, DOI: 10.1177/09576509211008277, ISSN: 0957-6509, IF: 1.882, (SCIE).
  9. M.R. Rezaie, **M. Norouzi**, M.H. Kayhani, S.M. Taghavi, “Numerical analysis of the drop impact onto a liquid film of non-linear viscoelastic fluids”, *Meccanica*, vol.56, pp.2021–2038, 2021, DOI: 10.1007/s11012-021-01363-x, ISSN: 0025-6455, IF: 2.258, (SCIE).
  10. A. Abbaspur, **M. Norouzi**, P. Akbarzadeh, S.A. Vaziri, “Analysis of nonlinear viscoelastic lubrication using Giesekus constitutive equation”, *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, 235(6): 1124-1138, 2021, DOI: 10.1177/1350650120944280, ISSN: 1350-6501, IF: 1.674, (SCIE).
  11. M.H. Sedaghat, A.A.H. Bagheri, M.M. Shahmardan, **M. Norouzi**, B.C. Khoo, P. Jayathilake, “A hybrid immersed boundary-lattice Boltzmann method for simulation of viscoelastic fluid flows interaction with complex boundaries”, *Communications in Computational Physics*, 29(5): 1411-1445, 2021, DOI: 10.4208/cicp.OA-2019-0158, ISSN: 1815-2406, IF: 3.246, (SCIE).
  12. **M. Norouzi**, A. Emamian, M. Davoodi, “A new mathematical technique for analysis of internal viscoplastic flows through rectangular ducts”, *Journal of Engineering Mathematics*, 127, 27, 2021, DOI: 10.1007/s10665-021-10090-x, ISSN: 0022-0833, IF: 1.509, (SCIE).
  13. **M. Norouzi**, S. Dorrani, H. Shokri, O. Anwar Bég, “Linear stability analysis and CFD simulation of thermal viscous fingering instability in anisotropic porous media”, *Journal of Engineering Mechanics*, 147(4): 04021006, 2021, DOI: 10.1061/(ASCE)EM.1943-7889.0001906, ISSN: 0733-9399, IF: 2.620, (SCIE).
  14. M. A. Hasani, **M. Norouzi**, M.M. Larimi, R. Rooki, “Computational study on drilling mud flow through wellbore annulus by Giesekus viscoelastic model”, *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*, 235(1): 66-79, 2021, DOI: 10.1177/0954408920943809, ISSN: 0954-4089, IF: 1.620, (SCIE).
  15. **M. Norouzi**, M.K. Sheykhan, M.M. Shahmardan, A. Shahbani-Zahiri, “Experimental investigation of spreading and receding behaviors of Newtonian and viscoelastic droplet impacts on inclined dry surfaces”, *Meccanica*, 56: 125–145, 2021, DOI: 10.1007/s11012-020-01285-0, ISSN: 0025-6455, IF: 2.258, (SCIE).
  16. A. Jalali, H. Dianati, **M. Norouzi**, H. Vatandoost, M. Ghatee, “A novel bi-directional shear mode magneto-rheological elastomer vibration isolator”, *Journal of Intelligent*

- Material Systems and Structures”, 31(17): 2002-2019, 2020, DOI: 10.1177/1045389X20942314, ISSN: 1045-389X, IF: 2.569, (SCIE).
17. A. Minaeian, M. Nili-Ahmadabadi, **M. Norouzi**, K.C. Kim, “Effects of elasticity on unsteady forced convective heat transfer of viscoelastic fluid around a cylinder in the presence of viscous dissipation”, *Physics of Fluids*, 32(8): 083102, 2020, DOI: 10.1063/5.0009948, ISSN: 1070-6631, IF: 3.521, (SCIE).
  18. H. Shokri, M. H. Kayhani, **M. Norouzi**, “Nonlinear Simulation of viscoelastic fingering instability in miscible displacement through homogeneous and heterogeneous porous media”, 145(12), 2019, DOI: 10.1061/(ASCE)EM.1943-7889.0001687, ISSN: 0733-9399, IF: 2.620, (SCIE).
  19. M.G.E. Moghadam, M.M. Shahmardan, **M. Norouzi**, “Magneto-rheological damper modeling by using dissipative particle dynamics method”, *Computational Particle Mechanics*, 7(3): 567-592, 2020, DOI: 10.1007/s40571-019-00280-x, ISSN: 2196-4386, IF: 1.95, (SCIE).
  20. A. Minaeian, M. Nili-Ahmadabadi, **M. Norouzi**, “Forced convective heat transfer of nonlinear viscoelastic flows over a circular cylinder at low Reynolds inertia regime”, *Communications in Nonlinear Science and Numerical Simulation*, 83: 105134, 2020, DOI: 10.1016/j.cnsns.2019.105134, ISSN: 1007-5704, IF: 4.260, (SCIE).
  21. A.H. Dorosti, M. Ghatee, **M. Norouzi**, “Preparation and characterization of water-based magnetorheological fluid using wormlike surfactant micelles, *Journal of Magnetism and Magnetic Materials*”, 498: 166193, 2020, DOI: 10.1016/j.jmmm.2019.166193, ISSN: 0304-8853, IF: 2.993, (SCIE).
  22. M.G.E. Moghadam, M.M. Shahmardan, **M. Norouzi**, “Investigation on surface roughness of piston in mini-magnetorheological damper using dissipative particle dynamics modeling”, *Journal of Intelligent Material Systems and Structures*, 31(3): 408-424, 2020, DOI: 10.1177/1045389X19888797, ISSN: 1045-389X, IF: 2.569, (SCIE).
  23. **M. Norouzi**, M.R. Rezaie, “Forced Convection Heat Transfer of a Giesekus Fluid in Circular Micro-Channels Subjected to a Constant Wall Temperature”, *Journal of Thermal Science and Engineering Applications*, 12(1): 011020, 2020, DOI: 10.1115/1.4044346, ISSN: 1948-5093, IF: 1.27, (SCIE).
  24. S.M.H. Razavi, M.M. Shahmardan, M. Nazari, **M. Norouzi**, “Experimental study of the effects of surfactant material and hydrocarbon agent on foam stability with the approach of enhanced oil recovery”, 585: 124047, 2020, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, DOI: 10.1016/j.colsurfa.2019.124047, ISSN: 0927-7757, IF: 4.539, (SCIE).
  25. S. Bahrami, **M. Norouzi**, “Hemodynamic impacts of hematocrit level by two-way coupled FSI in the left coronary bifurcation”, *Clinical Hemorheology and Microcirculation*, 76(1): 9-26, 2020, DOI: 10.3233/CH-200854, ISSN: 1386-0291, IF: 2.375, (SCIE).
  26. A. Nazemi, M. Baou, A. Jabari-Moghadam, **M. Norouzi**, “A numerical study on viscoelastic boundary layer on flat plate”, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 42, 11, 2020, DOI: 10.1007/s40430-019-2087-y, ISSN: 1678-5878, IF: 2.220, (SCIE).

27. B. Norouzi, A. Ahmadi, **M. Norouzi**, M. Lashkarbolouk, “Numerical modeling of the fluid hammer phenomenon of viscoelastic flow in pipes”, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 41(12):1-14, 2019, DOI: 10.1007/s40430-019-2046-7, ISSN: 1678-5878, IF: 2.220, (SCIE).
28. H. Shokri, M.H. Kayhani, **M. Norouzi**, “On the miscible thermo-viscous fingering instability of non-Newtonian fluids in heterogeneous porous media”, *Rheologica Acta*, 58(11): 755-769, 2019, DOI: 10.1007/s00397-019-01176-6, ISSN: 0035-4511, IF: 2.627, (SCIE).
29. B.E. Manesh, M. M. Shahmardan, H. Rahmani, **M. Norouzi**, “Heterogeneous anisotropic conductive heat transfer in composite conical shells: An exact analysis”, *International Journal of Heat and Mass Transfer*, 144: 118614, 2019, DOI: 10.1016/j.ijheatmasstransfer.2019.118614, ISSN: 0017-9310, IF: 5.584, (SCIE).
30. H. Vatandoost, S.M.S. Alehashem, **M. Norouzi**, H. Taghavifar, Y.Q. Ni, “A supervised artificial neural network-assisted modeling of magnetorheological elastomers in tension–compression mode”, *IEEE Transactions on Magnetics*, 55(12): 2502008, 2019, DOI: 10.1109/TMAG.2019.2942804, ISSN: 0018-9464, IF: 1.700, (SCIE).
31. S.Z. Daghighi, **M. Norouzi**, “Analysis of forced convection of Phan–Thien–Tanner fluid in slits and tubes of constant wall temperature with viscous dissipation”, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 41(11): 1-23, 2019, DOI: 10.1007/s40430-019-1992-4, ISSN: 1678-5878, IF: 2.220, (SCIE).
32. H. Rahmani, **M. Norouzi**, Alireza K. Birjandi, Amir K. Birjandi, “An exact solution for transient anisotropic heat conduction in composite cylindrical shells”, *Journal of Heat Transfer*, 141(10): 101301, 2019, DOI: 10.1115/1.4044157, ISSN: 0022-1481, IF: 2.021, (SCIE).
33. **M. Norouzi**, H. Rahmani, A.K. Birjandi, “A new exact analysis for anisotropic conductive heat transfer in truncated composite spherical shells”, *Journal of Mechanics*, 35(5): 677-691, 2019, DOI: 10.1017/jmech.2018.54, ISSN: 1727-7191, IF: 1.119, (SCIE).
34. A. Minaeian, M. Nili-Ahmadabadi, **M. Norouzi**, “Numerical study of Phan-Thien–Tanner viscoelastic fluid flow around a two-dimensional circular cylinder at a low Reynolds number: A new classification for drag variations regimes”, *Meccanica*, 54(11): 1717-1745, 2019, DOI: 10.1007/s11012-019-01049-5, ISSN: 0025-6455, IF: 2.258, (SCIE).
35. M.G.E. Moghadam, M.M. Shahmardan, **M. Norouzi**, “Dissipative particle dynamics modeling of a mini-MR damper focus on magnetic fluid”, *Journal of Molecular Liquids*, 283: 736-747, 2019, DOI: 10.1016/j.molliq.2019.03.131, ISSN: 0167-7322, IF: 6.165, (SCIE).
36. **M. Norouzi**, A. Emamian, M. Davoodi, “An analytical and experimental study on dynamics of a circulating Boger drop translating through Newtonian fluids at inertia regime”, *Journal of Non-Newtonian Fluid Mechanics*, 269: 1-13, 2019, DOI: 10.1016/j.jnnfm.2019.03.005, ISSN: 0377-0257, IF: 2.670 (SCIE).
37. M.M. Zolfagharian, M.H. Kayhani, **M. Norouzi**, “Parametric investigation of twin tube magnetorheological dampers using a new unsteady theoretical analysis”, *Journal*

- of Intelligent Material Systems and Structures, 30(6): 878-895, 2019, DOI: 10.1177/1045389X19828494, ISSN: 1045-389X, IF: 2.569, (SCIE).
38. **M. Norouzi**, H. Abdolnezhad, S. Mandani, “An experimental investigation on inertia motion and deformation of Boger drops falling through Newtonian media”, *Meccanica*, 54(3): 473-490, 2019, DOI: 10.1007/s11012-019-00961-0, ISSN: 0025-6455, IF: 2.258, (SCIE).
  39. A.J. Gharibvand, **M. Norouzi**, M.M. Shahmardan, “Dissipative particle dynamics simulation of magnetorheological fluids in shear flow”, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 41(2): 1-16, 2019, DOI: 10.1007/s40430-019-1592-3, ISSN: 1678-5878, IF: 2.220, (SCIE).
  40. **M. Norouzi**, S. Dorrani, H. Shokri, O. Anwar Bég, “Effects of viscous dissipation on miscible thermo-viscous fingering instability in porous media”, *International Journal of Heat and Mass Transfer* 129: 212-223, 2019, DOI: 10.1016/j.ijheatmasstransfer.2018.09.048Get, ISSN: 0017-9310, IF: 5.584, (SCIE).
  41. M. Davoodi, S. Lerouge, **M. Norouzi**, R.J. Poole, “Secondary flows due to finite aspect ratio in inertialess viscoelastic Taylor–Couette flow”, *Journal of Fluid Mechanics*, 857: 823-850, 2018, DOI: 10.1017/jfm.2018.746, ISSN: 0022-1120, IF: 3.627, (SCIE).
  42. S. Bahrami, **M. Norouzi**, “A numerical study on hemodynamics in the left coronary bifurcation with normal and hypertension conditions”, *Biomechanics and Modeling in Mechanobiology*, 17(6): 1785-1796, 2018, DOI: 10.1007/s10237-018-1056-1, ISSN: 1617-7959, IF: 2.963, (SCIE).
  43. S.Z. Daghighi, **M. Norouzi**, “Effects of viscous dissipation on heat convection of viscoelastic flow inside isothermal channels and tubes”, *Korea-Australia Rheology Journal*, 30(4): 273-292, 2018, DOI: 10.1007/s13367-018-0026-6, ISSN: 1226-119X, IF: 1.446, (SCIE).
  44. A. Shahbani-Zahiri, M.M. Shahmardan, H. Hassanzadeh, **M. Norouzi**, “Effects of fluid inertia and elasticity and expansion angles on recirculation and thermal regions of viscoelastic flow in the symmetric planar gradual expansions”, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 40(10): 1-20, 2018, DOI: 10.1007/s40430-018-1398-8, ISSN: 1678-5878, IF: 2.220, (SCIE).
  45. **M. Norouzi**, A.A. Yazdi, A.K. Birjandi, “A numerical study on Saffman-Taylor instability of immiscible viscoelastic-Newtonian displacement in a Hele-Shaw cell”, *Journal of Non-Newtonian Fluid Mechanics*, 260: 109-119, 2018, DOI: 10.1016/j.jnnfm.2018.06.007, ISSN: 0377-0257, IF: 2.670, (SCIE).
  46. **M. Norouzi**, M.R. Rezaie, “An exact analysis on heat convection of nonlinear viscoelastic flows in isothermal microtubes under slip boundary condition”, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 40(9):1-17, 2018, DOI: 10.1007/s40430-018-1389-9, ISSN: 1678-5878, IF: 2.220, (SCIE).
  47. **M. Norouzi**, M. Davoodi, O. Anwar Beg, MD. Shamshuddin, “Theoretical study of Oldroyd-B visco-elastic fluid flow through curved pipes with slip effects in polymer flow processing”, *International Journal of Applied and Computational Mathematics*, 4, 108, 2018, DOI: 10.1007/s40819-018-0541-7, ISSN: 23495103, IF: 1.65, (SCIE).



48. A. Shahbani Zahiri, M.M. Shahmardan, H. Hassanzadeh, **M. Norouzi**, “Numerical simulation of inertial flow of heated and cooled viscoelastic fluids inside a planar sudden expansion channel: investigation of stresses effects on the total dissipation”, *Meccanica*, 53(11-12): 2897-2920, 2018, DOI: 10.1007/s11012-018-0871-x, ISSN: 0025-6455, IF: 2.258, (SCIE).
49. H. Shokri, M.H. Kayhani, **M. Norouzi**, “Saffman–Taylor instability of viscoelastic fluids in anisotropic porous media”, *International Journal of Mechanical Sciences*, 135: 1-13, 2018, DOI: 10.1016/j.ijmecsci.2017.11.008, ISSN: 0020-7403, IF: 5.329, (SCIE).
50. A.A. Yazdi, **M. Norouzi**, “Numerical study of Saffman-Taylor instability in immiscible nonlinear viscoelastic flows”, *Rheologica Acta*, 57: 575–589, 2018, DOI: 10.1007/s00397-018-1101-0, ISSN: 0035-4511, IF: 2.627, (SCIE).
51. **M. Norouzi**, S. Z. Daghighi, O. Anwar Bég, “Exact analysis of heat convection of viscoelastic FENE-P fluids through isothermal slits and tubes”, *Meccanica*, 53: 817-831, 2018, DOI: 10.1007/s11012-017-0782-2, ISSN: 0025-6455, IF: 2.258, (SCIE).
52. A. Shahbani Zahiri, H. Hassanzadeh, M.M. Shahmardan, **M. Norouzi**, “Investigation of pitchfork bifurcation phenomena effects on heat transfer of viscoelastic flow inside a symmetric sudden expansion”, *Physics of Fluids*, 29, 113101 (2017), DOI: 10.1063/1.5009434, ISSN: 1070-6631, IF: 3.521, (SCIE).
53. **M. Norouzi**, M. Davoodi, “Analytical study on motion and shape of creeping Boger drops falling through viscoelastic media”, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 40(3): 125, 2018, DOI: 10.1007/s40430-018-1046-3, ISSN: 1678-5878, IF: 2.220, (SCIE).
54. S. Mandani, **M. Norouzi**, M.M. Shahmardan, “An experimental investigation on impact process of Boger drops onto solid surfaces”, *Korea-Australia Rheology Journal*, 30(2): 99-108, 2018, DOI: 10.1007/s13367-018-0011-0, ISSN: 1226-119X, IF: 1.446, (SCIE).
55. H. Delaram, A. Dastfan, **M. Norouzi**, “Optimal thermal placement and loss estimation for power electronic modules”, *IEEE Transactions on Components, Packaging and Manufacturing Technology*, 8(2): 236–243, 2018, DOI: 10.1109/TCPMT.2017.2781282, ISSN: 2156-3950, IF: 1.738, (SCIE).
56. **M. Norouzi**, A. Jafari, M. Mahmoudi, “A numerical study on nonlinear dynamics of three-dimensional time-depended viscoelastic Taylor-Couette flow”, *Rheologica Acta*, 57(2): 127-140, 2017, DOI: 10.1007/s00397-017-1059-3, ISSN: 0035-4511, IF: 2.627, (SCIE).
57. A. Abbas Nejad, Z. Talebi, D. Cheraghali, A. Shahbani-Zahiri, **M. Norouzi**, “Pulsatile flow of non-Newtonian blood fluid inside stenosed arteries: Investigating the effects of viscoelastic and elastic walls, arteriosclerosis, and polycythemia”, *Computer methods and programs in biomedicine*, 154: 109-122, 2018, DOI: 10.1016/j.cmpb.2017.11.016, ISSN: 0169-2607, IF: 5.428, (SCIE).
58. M.R. Rezaie, **M. Norouzi**, “Numerical investigation of MHD flow of non-Newtonian fluid over confined circular cylinder: a lattice Boltzmann Approach”, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 40(4): 185, 2018, DOI: 10.1007/s40430-018-1128-2, ISSN: 1678-5878, IF: 2.220, (SCIE).

59. **M. Norouzi**, H. Rahmani, “An exact analysis for transient anisotropic heat conduction in truncated composite conical shells”, *Applied Thermal Engineering*, 124: 422-431, 2017, DOI: 10.1016/j.applthermaleng.2017.06.039, ISSN: 1359-4311, IF: 5.295, (SCIE).
60. **M. Norouzi**, A. Shahbani Zahiri, M.M. Shahmardan, H. Hassanzadeh, Z. Talebi, “A numerical study on pressure losses in asymmetric viscoelastic flow through symmetric planar gradual expansions”, *European Journal of Mechanics - B/Fluids*, 65: 199–212, 2017, DOI: 10.1016/j.euromechflu.2017.04.006, ISSN: 0997-7546, IF: 2.183, (SCIE).
61. **M. Norouzi**, S.M. Sajjadi Alehashem, H. Vatandoost, “Dynamic characterization and modeling of isotropic magnetorheological elastomers under tensile-compressive loadings”, *IEEE Transaction on Magnetics*, 53 (9): 2900412, 2017, DOI: 10.1109/TMAG.2017.2698403, ISSN: 0018-9464, IF: 1.700, (SCIE).
62. M. Halimi, A. Abbas Nejad, **M. Norouzi**, “A comprehensive experimental investigation of the performance of closed-loop pulsating heat pipes”, *Journal of Heat Transfer*, 139(9): 092003, 2017, DOI: 10.1115/1.4036460, ISSN: 0022-1481, IF: 2.021, (SCIE).
63. A.K. Birjandi, **M. Norouzi**, M.H. Kayhani, “A numerical study on drop formation of viscoelastic liquids using a nonlinear constitutive equation”, *Meccanica*, 52(15): 3593–3613, 2017, DOI: 10.1007/s11012-017-0669-2, ISSN: 0025-6455, IF: 2.258, (SCIE).
64. H. Shokri, M. H. Kayhani, **M. Norouzi**, “Nonlinear simulation and linear stability analysis of viscous fingering instability of viscoelastic liquids”, *Physics of Fluids*, 29, 033101, 2017, DOI: 10.1063/1.4977443, ISSN: 1070-6631, IF: 3.521, (SCIE).
65. H. Vatandoost, **M. Norouzi**, S.M. Sajjadi Alehashem, S. K. Smoukov, “A novel phenomenological model for dynamic behavior of magnetorheological elastomer in tension-compression mode”, *Smart Materials and Structures*, 26: 065011, 2017, DOI: 10.1088/1361-665X/aa6126, ISSN: 0964-1726, IF: 3.585, (SCIE).
66. **M. Norouzi**, A. Shahbani Zahiri, M.M. Shahmardan, H. Hassanzadeh, M. Davoodi, “Investigation of stresses and normal stress differences behavior on symmetric and asymmetric polymeric fluid flow through planar gradual expansions”, *Meccanica*, 52(8): 1889–1909, 2017, DOI: 10.1007/s11012-016-0531-y, ISSN: 0025-6455, IF: 2.258, (SCIE).
67. A. Shahbani Zahiri, M.M. Shahmardan, H. Hassanzadeh, **M. Norouzi**, Numerical study of Brinkman number effects on heated viscoelastic fluid flow in channel with sudden expansion, *AUT Journal of Mechanical Engineering*, In Press, (In Persian).
68. A. Shahbani Zahiri, H. Hassanzadeh, M.M. Shahmardan, **M. Norouzi**, Investigation of inertial force effects on the heat transfer of viscoelastic fluid flow inside expanded planar channel with the symmetric abrupt expansion, *The Modares Journal of Mechanics Engineering*, 17(6): 139-148, 2017, (In Persian).
69. S. Z. Daghighi, **M. Norouzi**, Closed-form solution for forced convection of power-law fluid flow through isothermal tubes, *The Tabriz Journal of Mechanical Engineering*, In Press, (In Persian).

70. S. Dorani, **M. Norouzi**, Nonlinear simulation of thermo-viscous fingering instability in anisotropic porous media, *The Modares Journal of Mechanics Engineering*, 18(3): 9-18, 2018, (In Persian).
71. H. Shokri, M. H. Kayhani, **M. Norouzi**, Simulation of viscoelastic fingering instability in anisotropic velocity-dependent dispersion tensor, *The Tabriz Journal of Mechanical Engineering*, In Press, (In Persian).
72. **M. Norouzi**, A.A. Haji Bagheri, M.H. Sedaghat, M.M. Shahmardan, Numerical study of three dimensional instability of nonlinear viscoelastic fluid flow around a sphere, *The Modares Journal of Mechanics Engineering*, 17(12): 213-222, 2018, (In Persian).
73. M.K. Sheykhan, **M. Norouzi**, M.M. Shahmardan, Experimental study of contact velocity effect on spreading factor of non-Newtonian and Newtonian droplets during collision with dry solid surface, *The Modares Journal of Mechanics Engineering*, 18(3): 146-152, 2018, (In Persian).
74. A. Abbasi-Yazdi, **M. Norouzi**, A numerical study on the effects of viscoelastic properties of upper convected Maxwell fluid on immiscible Saffman-Taylor instability, *The Modares Journal of Mechanics Engineering*, 18(3): 271-281, 2018, (In Persian).
75. H. Shokri, M. H. Kayhani, **M. Norouzi**, Numerical simulation of viscous fingering instability in displacement of Newtonian fluid by White-Metzner viscoelastic fluid in heterogeneous media, *The Modares Journal of Mechanics Engineering*, 18(5): 156-166, 2018, (In Persian).
76. M.M. Shahmardan, **M. Norouzi**, M. H. Sedaghat, An exact analytical solution for convective heat transfer in elliptical pipes, *AUT Journal of Mechanical Engineering*, 1(2): 131-138, 2017.
77. M.M. Shahmardan, **M. Norouzi**, A. Shahbani-Zahiri, Numerical investigation of vortices effect on the pressure drop and flow loss in a channel with planar gradual expansion, *Journal of Modeling in Engineering*, 15(48): 45-60, 2017, (In Persian).
78. M. H. Sedaghat, M. M. Shahmardan, **M. Norouzi**, M. Heydari, Effect of cilia beat frequency on muco-ciliary clearance, *Journal of Biomedical Physics and Engineering (JBPE)*, 6(4): 265-278, 2016. (Journal Information: Publisher: Shiraz University)
79. A. Emamian, **M. Norouzi**, M. Davoodi, An analytical investigation on shape of a falling viscose drop at low Reynolds number, *The Modares Journal of Mechanics Engineering*, 17(2): 251-262, 2017, (In Persian).
80. M. Davoodi, **M. Norouzi**, An investigation on the motion and deformation of nonlinear viscoelastic drops descending in another viscoelastic media, *Physics of Fluids*, 28: 103103, 2016. (Publisher: [American Institute of Physics \(AIP\)](#))
81. S. Majid Khatibi, A. Khaleghi, **M. Norouzi**, An experimental investigation on viscous fingering instability of Newtonian fluid in transparent porous media with compact structure consist of glass beads, *The Modares Journal of Mechanics Engineering*, 17(9): 245-253, 2017, (In Persian).
82. A. Emamian, **M. Norouzi**, M. Davoodi, Study of the effect of elastic properties on non-Newtonian drop motion in inertia regime, *The Modares Journal of Mechanics Engineering*, 17(9): 165-174, 2017, (In Persian).

83. B.Z. Vamerzani, **M. Norouzi**, B. Firoozabadi, Theoretical and experimental study on the motion and shape of viscoelastic falling drops through Newtonian media, *Rheologica Acta*, 55(11-12): 935-955, 2016. (Publisher: [Springer](#), *Rheologica Acta* is the official journal of The European Society of Rheology)
84. **M. Norouzi**, Analytical solution for the convection of Phan-Thien-Tanner fluids in isothermal pipes, *International Journal of Thermal Sciences*, 108: 165–173, 2016. (Publisher: [Elsevier](#))
85. **M. Norouzi**, S.R. Varedi, M. Zamani, Wake instability of viscoelastic flows past an unconfined inclined square cylinder, *Physics of Fluids*, 28, 023101, 2016. (Publisher: [American Institute of Physics \(AIP\)](#))
86. M.H. Kayhani, H. Shokri, **M. Norouzi**, Nonlinear simulation of viscoelastic fingering instability, *The Modares Journal of Mechanics Engineering*, 16(8): 47-54, 2016, (In Persian).
87. A. Montahaee, M.M. Shahmardan, **M. Norouzi**, The numerical simulation of flow and heat transfer of temperature dependent properties of viscoelastic fluid in an axisymmetric sudden expansion, *The Modares Journal of Mechanics Engineering*, 16(12): 39-49, 2017, (In Persian).
88. M.H. Sedaghat, M.M. Shahmardan, **M. Norouzi**, M. Nazari, Numerical simulation of muco-ciliary clearance: immersed boundary-lattice Boltzmann method, *Computers and Fluids*, 131: 91–101, 2016. (Publisher: [Elsevier](#), IF=1.619)
89. E. Kiyumarsi, A. Jalali, **M. Norouzi**, M. Ghatee, An experimental investigation of iron based magnetorheological fluid stability and rheology, *The Modares Journal of Mechanics Engineering*, 16(2): 301–308, 2016, (In Persian).
90. **M. Norouzi**, M.A. Pooladi, M. Mahmoudi, Numerical investigation of drag reduction in a Class 5 medium duty truck, *Journal of Mechanical Engineering and Sciences (JMES)*, (10): 3, 2387–2400, 2016. (Publisher: [UMP Publisher](#), Indexed in Scopus)
91. M. Baou, **M. Norouzi**, A. Jabari-Moghadam, Numerical investigation of hydrodynamic and thermal Falkner–Skan boundary layer of viscoelastic fluids, *The Modares Journal of Mechanics Engineering*, 16(2): 69–78, 2016, (In Persian).
92. M.H. Sedaghat, M.M. Shahmardan, **M. Norouzi**, M. Nazari, On the effect of mucus rheology on the muco-ciliary transport, *Mathematical Biosciences*, 272: 44–53, 2016. (Publisher: [Elsevier](#))
93. **M. Norouzi**, H. Rahmani, A.K. Birjandi, A.A. Joneidi, A general exact analytical solution for anisotropic non-axisymmetric heat conduction in composite cylindrical shells, *International Journal of Heat and Mass Transfer*, 93: 41–56, 2016. (Publisher: [Elsevier](#))
94. S. Bahrami, **M. Norouzi**, Numerical investigation of the effects of artery elasticity on wall shear stress and oscillatory shear index in the left coronary bifurcation, *Iranian Journal of Biomedical Engineering*, 10(2), 175-186, 2016, (In Persian).
95. M.R. Shoghi, **M. Norouzi**, Linear stability analysis and nonlinear simulation of non-Newtonian viscous fingering instability in heterogeneous porous media, *Rheologica Acta*, 54(11): 973–991, 2015. (Publisher: [Springer](#), *Rheologica Acta* is the official journal of The European Society of Rheology)

96. **M. Norouzi**, H. Rahmani, On exact solutions for anisotropic heat conduction in composite conical shells, *International Journal of Thermal Sciences*, 94: 110–125, 2015. (Publisher: [Elsevier](#))
97. A.A. Delouei, **M. Norouzi**, Exact analytical solution for unsteady heat conduction in fiber-reinforced spherical composites under the general boundary conditions, *Journal of Heat Transfer (ASME Transaction)*, 137: 101701-1 – 101701-8, 2015. (Publisher: [American Society of Mechanical Engineering \(ASME\)](#))
98. **M. Norouzi**, S.M. Sajjadi Alehashem, H. Vatandoost, Y.Q. Ni, M.M. Shahmradan, A new approach for modeling of magneto-rheological elastomers, *Journal of Intelligent Material Systems and Structures*, 27(8): 1121–1135, 2016. (Publisher: [SAGE](#))
99. A. Shariatkhah, **M. Norouzi**, M.R.H. Nobari, Numerical simulation of blood flow through a capillary using a non-linear viscoelastic model, *Clinical Hemorheology and Microcirculation*, 62: 109–121, 2015. (Publisher: [IOS Press](#))
100. Z. Talebi, A. Abbas Nejad, **M. Norouzi**, Analysis of pulsatile flow of blood non-Newtonian fluid in interaction with the elastic and viscoelastic artery for the percentage of different stenosis, *Mechanical and Aerospace Engineering Journal*, 3(4): 1–16, 2015, (In Persian).
101. M M Shahmardan, M H Sedaghat, **M Norouzi**, M Nazari, Immersed boundary-lattice Boltzmann method for simulation of muco-ciliary transport: effect of mucus depth at various amounts of cilia beat frequency, IOP Conf. Series: Materials Science and Engineering 100, 2015.
102. **M. Norouzi**, S.R. Varedi, M. Zamani, Numerical study of vortex shedding in viscoelastic flow past an unconfined square cylinder, *Korea–Australia Rheology Journal*, 27(3): 1–13, 2015. (Publisher: [Springer](#))
103. M.H. Sedaghat, M.M. Shahmardan, M. Norouzi, M. Nazari, Numerical investigation of the effect of ASL depth on the mucociliary transport, *The Modares Journal of Mechanics Engineering*, 15(9): 161-169, 2015, (In Persian).
104. **M. Norouzi**, M.R. Shoghi, Nonlinear simulation of non-Newtonian viscous fingering instability in anisotropic porous media, *The Modares Journal of Mechanics Engineering*, 15(7): 415–425, 2015, (In Persian).
105. **M. Norouzi**, B.Z. Vamerzani, M. Davoodi, N. Biglari, M.M. Shahmardan, An exact analytical solution for creeping Dean flow of Bingham plastics through curved rectangular ducts, *Rheologica Acta*, 54: 391–402, 2015. (Publisher: [Springer](#), *Rheologica Acta is the official journal of The European Society of Rheology*)
106. **M. Norouzi**, M. Davoodi, O. Anwar Bég, An analytical solution for convective heat transfer of viscoelastic flows in rotating curved pipes, *International Journal of Thermal Sciences*, 90, 90–111, 2015. (Publisher: [Elsevier](#))
107. **M. Norouzi**, M.H. Sedaghat, M.M. Shahmardan, M.R.H. Nobari, On the origin of viscoelastic Taylor–Couette instability resulted from normal stress differences, *Korea–Australia Rheology Journal*, 27(1): 41–53, 2015. (Publisher: [Springer](#))

108. **M. Norouzi**, M.R. Shoghi, A numerical study on miscible viscous fingering instability in anisotropic porous media, *Physics of Fluids*, 26, 084102, 2014. (Publisher: [American Institute of Physics \(AIP\)](#))
109. **M. Norouzi**, M. Davoodi, Exact analytical solution on convective heat transfer of isothermal pipes, *Journal of Thermophysics and Heat Transfer*, 29 (3): 632–635, 2015. (Publisher: [The American Institute of Aeronautics and Astronautics \(AIAA\)](#))
110. **M. Norouzi**, M.M. Shahmardan, A. Shahbani-Zahiri, Bifurcation phenomenon of inertia viscoelastic flow through gradual expansions, *Rheologica Acta*, 54 (5): 423–435, 2015. (Publisher: [Springer](#), *Rheologica Acta is the official journal of The European Society of Rheology*)
111. A. Majd, A. Ahmadi, **M. Norouzi**, Investigation of non-Newtonian fluid effects in unsteady flow of pipe system, *Journal of Solid and Fluid Mechanics*, 5(1): 211–219, 2015, (In Persian).
112. M. Izadi, M. M. Shahmardan, **M. Norouzi**, A. M. Rashidi, A. Behzadmehr, Cooling performance of a nanofluid flow in a heat sink microchannel with axial conduction, *Applied Physics A*, 117 (4): 1821–1833, 2014. (Publisher: [Springer](#))
113. H. Delaram, A. Dastfan, **M. Norouzi**, A numerical study on efficiency improvement of heat transfer for a 3-phase inverter, *The Modares Journal of Mechanics Engineering*, 15(2): 13–24, 2015, (In Persian).
114. R. Rooki, F.D. Ardejani, A. Moradzadeh, **M. Norouzi**, CFD simulation of rheological model effect on cuttings transport, *Journal of Dispersion Science and Technology*, 36: 402–410, 2015. (Publisher: [Taylor & Francis](#))
115. **M. Norouzi**, M.H. Sedaghat, M.M. Shahmardan, An analytical solution for viscoelastic Dean flow in curved pipes with elliptical cross section, *Journal of non-Newtonian Fluid Mechanics*, 204: 62–71, 2014. (Publisher: [Elsevier](#))
116. M.M. Shahmardan, M.H. Sedaghat, **M. Norouzi**, Instability investigation of creeping viscoelastic flows between the rotating cylinders, *Theoretical Foundations of Chemical Engineering*, 49(5): 592–605, 2015. (Publisher: [Springer](#))
117. **M. Norouzi**, B.Z. Vamerzani, B. Firoozabadi, Analysis of motion and shape of non-Newtonian falling drops in a viscous liquid, *The Modares Journal of Mechanics Engineering*, 14(15): 183–190, 2015, (In Persian).
118. M.M. Shahmardan, M.H. Sedaghat, **M. Norouzi**, An analytical solution for fully developed forced convection in triangular ducts, *Heat Transfer - Asian Research*, 44(6): 489–498, 2015. (Publisher: [John Wiley and Sons Inc.](#))
119. O. Anwar Bég, J. Zueco, **M. Norouzi**, M. Davoodi, A.A. Joneidi, A. F. El Sayed, Network and Nakamura tridiagonal computational simulation of electrically-conducting biopolymer micro-morphic transport phenomena, *Computers in Biology and Medicine*, 44: 44–56, 2014. (Publisher: [Elsevier](#))
120. **M. Norouzi**, A. Amiri Deloui. M. Seilsepour, Heat conduction in spherical composite vessels, *Journal of Mechanical Research and Application*, 4(3): 29–35, 2012, (In Persian).

121. B.Z. Vamerzani, **M. Norouzi**, B. Firoozabadi, An analytical solution for creeping motion of a viscoelastic drop falling through a Newtonian fluid, *Korea–Australia Rheology Journal*, 26:1, 91–104, 2014. (Publisher: [Springer](#))
122. M.H. Sedaghat, M.M. Shahmardan, M. Nazari, **M. Norouzi**, Immersed boundary-lattice Boltzmann method for modeling non-Newtonian flow around curved boundaries, *The Modares Journal of Mechanics Engineering*, 14(8): 146–156, 2014, (In Persian).
123. R. Rooki, F.D. Ardejani, A. Moradzadeh, **M. Norouzi**, Simulation of cuttings transport with foam in deviated wellbores using computational fluid dynamics, *Journal of Petroleum Exploration and Production Technology*, 4:263–273, 2014. (Publisher: [Springer](#)).
124. **M. Norouzi**, A.A. Delouei, M. Seilsepour, A general exact solution for heat conduction in multilayer spherical composite laminates, *Composite Structures*, 106: 288–295, 2013. (Publisher: [Elsevier](#))
125. **M. Norouzi**, N. Biglari, An analytical solution for Dean flow in curved ducts with rectangular cross section, *Physics of Fluids*, (25) 053602: 1–15, 2013. (Publisher: [American Institute of Physics \(AIP\)](#))
126. **M. Norouzi**, S.R. Varedi, M.J. Maghrebi, M.M. Shahmardan, Numerical investigation of viscoelastic flow around a circular cylinder, *Journal of non-Newtonian Fluid Mechanics*, 197: 31–40, 2013 (*Selected as one of the most downloaded article of Journal of non-Newtonian Fluid Mechanics for three months (from May to Aug 2013) - Selected as one of the top 25 hottest articles of Journal of non-Newtonian Fluid Mechanics in April to June 2013*). (Journal Information: Publisher: [Elsevier](#))
127. M.M. Shahmardan, **M. Norouzi**, A. Naghikhani, Numerical simulation of non-Newtonian fluid flows through a channel with a cavity, *The Modares Journal of Mechanics Engineering*, 14(6): 35–40, 2014, (In Persian).
128. **M. Norouzi**, M. Davoodi, O. Anwar Bég, A.A. Joneidi, Analysis of the effect of normal stress differences on heat transfer in creeping viscoelastic Dean flow, *International Journal of Thermal Sciences*, 69: 61–69, 2013. (Publisher: [Elsevier](#))
129. A. Jalali, M.A. Hulsen, **M. Norouzi**, M.H. Kayhani, Numerical simulation of 3D viscoelastic developing flow and heat transfer in a rectangular duct with a nonlinear constitutive equation, *Korea–Australia Rheology Journal*, 25(2): 95–105, 2013. (Publisher: [Springer](#))
130. S.H. Mirmahdi, **M. Norouzi**, On the comparative optimal analysis and synthesis of four-bar function generating mechanism using different heuristic methods, *Meccanica*, 48: 1995–2006, 2013. (Publisher: [Springer](#), *The official journal of the Italian Association of Theoretical and Applied Mechanics, was established in 1966*)
131. R. Rooki, **M. Norouzi**, F.D. Ardejani, A. Moradzadeh, Numerical investigation of foam drilling fluid flow in the oil wells annulus, *The Modares Journal of Mechanics Engineering*, 13(7): 74–86, 2013, (In Persian).

132. M.J. Maghrebi, S.R. Varedi, **M. Norouzi**, M.M. Shahmardan, Numerical investigation of transient laminar flow of a Giesekus viscoelastic fluid around a circular cylinder, *Applied and Numerical Science in Mechanics*, Publisher: Ferdowsi University of Mashhad, 24(2): 67–80, 2013, (In Persian).
133. M.M. Shahmardan, **M. Norouzi**, A. Shahbani-Zahiri, Instability investigation of Newtonian flow in a planar gradual expansion, *The Modares Journal of Mechanics Engineering*, 13(3): 28–36, 2013, (In Persian).
134. R. Rooki, F.D. Ardejani, A. Moradzadeh, **M. Norouzi**, Cuttings transport modeling in foam drilling using computational fluid dynamics (CFD), *International Journal of Petroleum & Geoscience Engineering (IJPGE)*, 1(2): 115–127, 2013.
135. **M. Norouzi**, S.M. Rezaei Niya, M.H. Kayhani, M. Shariati, M. Karimi Demneh, M.S. Naghavi, Exact solution of unsteady conductive heat transfer in cylindrical composite laminates, *Journal of Heat Transfer (ASME Transaction)*, 134: 1–10, 2012 (*Selected as one of the top 10 most downloaded articles for two times in August and September 2012*). (Publisher: [American Society of Mechanical Engineering \(ASME\)](#))
136. M.M. Shahmardan, **M. Norouzi**, A. Shahbani-Zahiri, Numerical investigation of Newtonian flow in gradual expansions, *Journal of Solid and Fluid Mechanics*, 2(1): 67–82, 2012, (In Persian).
137. R. Rooki, F.D. Ardejani, A. Moradzadeh, H. Mirzaei, V. Kelessidis, R. Maglione, **M. Norouzi**, Optimal determination of Rheological parameters for Herschel–Bulkley drilling fluids using genetic algorithms (GAs), *Korea–Australia Rheology Journal*, 24(3): 163–170, 2012 (*Selected as one of the popular content of Korea–Australia Rheology Journal in 2013*). (Publisher: [Springer](#))
138. M.M. Shahmardan, **M. Norouzi**, M.H. Kayhani, A.A. Delouei, An exact analytical solution for convective heat transfer in rectangular ducts, *Journal of Zhejiang University–SCIENCE A (Applied Physics & Engineering)*, 13(10): 768–781, 2012 (*Selected as one of the top 10 downloads of journal of Zhejiang University–SCIENCE A*). (Publisher: [Springer](#))
139. M.H. Kayhani, **M. Norouzi**, A.A. Delouei, Analytical investigation of heat conduction in graphite–epoxy cylindrical composite laminates, *Mechanical and Aerospace Engineering Journal*, 8(2): 31–44, 2012, (In Persian).
140. M.M. Shahmardan, **M. Norouzi**, S. Mosayebidorcheh, Non-Newtonian fluid flow in axisymmetric sudden expansions, *Journal of Solid and Fluid Mechanics*, 1(3): 69–79, 2012, (In Persian).
141. R. Rooki, F.D. Ardejani, A. Moradzadeh, V. Kelessidis, R. Maglione, **M. Norouzi**, Prediction of terminal velocity of solid spheres falling through Newtonian and non-Newtonian pseudoplastic power law fluid using artificial neural network, *International Journal of Mineral Processing*, 110–111: 53–61, 2012 (*Selected as one of the top 25 hottest articles of Journal of Mineral Processing in April to June 2012*). (Publisher: [Elsevier](#))
142. A.A. Delouei, M.H. Kayhani, **M. Norouzi**, Exact analytical solution of unsteady axi-symmetric conductive heat transfer in cylindrical orthotropic composite laminates,



- International Journal of Heat and Mass Transfer*, 55: 4427–4436, 2012. (Publisher: Elsevier)
143. M.H. Kayhani, **M. Norouzi**, A.A. Delouei, A general analytical solution for heat conduction in cylindrical multilayer composite laminates, *International Journal of Thermal Sciences*, 52: 73–82, 2012 (*Selected as one of the most downloaded article of International Journal of Thermal Sciences for three months (from February to May 2012)*). (Publisher: Elsevier)
144. M.H. Kayhani, **M. Norouzi**, A.A. Delouei, Analytical investigation of orthotropic unsteady heat transfer in composite pin fins, *The Modares Journal of Mechanics Engineering*, 11(4): 21–32, 2012.
145. **M. Norouzi**, M.R.H. Nobari, M.H. Kayhani, F. Talebi, Instability investigation of creeping viscoelastic flow in a curved duct with rectangular cross-section, *International Journal of Non-Linear Mechanics*, 47(1): 14–25, 2012. (Publisher: Elsevier)
146. A. Jalali, M.H. Kayhani, **M. Norouzi**, Numerical simulation of the laminar flow and heat transfer of the viscoelastic duct flows with the entrance effects, *Journal of Solid and Fluid Mechanics*, 1(2): 69–79, 2011, (In Persian).
147. M. Shariati, **M. Norouzi**, Optimal synthesis of function generator of four-bar linkages based on distribution of precision points, *Meccanica*, 46(5): 1007–1021, 2011. (Publisher: Springer, The official journal of the Italian Association of Theoretical and Applied Mechanics, was established in 1966)
148. A. Jalali, M.H. Kayhani, **M. Norouzi**, Three-Dimensional simulation of entrance region effect for viscoelastic flows in a rectangular duct, *The Modares Journal of Mechanics Engineering*, 11(2): 27–37, 2011, (In Persian).
149. **M. Norouzi**, M.H. Kayhani, M.R.H. Nobari, F. Talebi, Analytical investigation of viscoelastic creeping flow and heat transfer inside a curved rectangular duct, *Theoretical Foundations of Chemical Engineering*, 45(1): 53–67, 2011. (Publisher: Springer)
150. **M. Norouzi**, M.H. Kayhani, M.R.H. Nobari, F. Talebi, A numerical investigation of convective heat transfer of viscoelastic fluid in a curved square duct, *Journal of Computational Methods in Engineering*, Publisher: Isfahan University of Technology, 29(2): 85–101, 2011, (In Persian).
151. **M. Norouzi**, M.H. Kayhani, C. Shu, M.R.H. Nobari, Flow of second order fluid in a curved duct with square cross-section, *Journal of non-Newtonian Fluid Mechanics*, 165: 323–339, 2010 (*Selected as one of the top 25 hottest articles of Journal of non-Newtonian Fluid Mechanics in April to June 2010*). (Publisher: Elsevier)
152. **M. Norouzi**, M.H. Kayhani, M.R.H. Nobari, A.A. Joneidi, Convective heat transfer for viscoelastic fluid in a curved pipe, *Heat Mass Transfer*, 46(8–9): 975–987, 2010. (Publisher: Springer)
153. **M. Norouzi**, M.H. Kayhani, M.R.H. Nobari, A.A. Joneidi, Analytical investigation of viscoelastic fluid's time constants on flow in curved pipes, *Mechanical and Aerospace Engineering Journal*, 6(1): 41–55, 2010, (In Persian).

154. M.H. Kayhani, M. Shariati, **M. Norouzi**, An analytical solution of steady state conductive heat transfer in cylindrical composite laminates, *Modares Technical and Engineering*, 37: 135–151, 2010, (In Persian).
155. **M. Norouzi**, M.H. Kayhani, M.R.H. Nobari, A.A. Joneidi, An analytical investigation of second order fluid flow inside a curved circular pipe, *International Journal of Nonlinear Dynamics in Engineering and Sciences*, 2(1): 93–113, 2010.
156. M.H. Kayhani, M. Shariati, **M. Norouzi**, M. Karimi Demneh, Exact solution of conductive heat transfer in cylindrical composite laminate, *Heat Mass Transfer*, 46(1): 83–94, 2009. (Publisher: [Springer](#))
157. **M. Norouzi**, M.H. Kayhani, M.R.H. Nobari, Mixed and forced convection of viscoelastic materials in straight duct with rectangular cross section, *World Applied Sciences Journal*, 7(3): 285–296 2009.
158. M.H. Kayhani, M.R.H. Nobari, **M. Norouzi**, A numerical investigation of fluid flow and heat transfer in rotating U shape duct, *Mechanical and Aerospace Engineering Journal*, 3(2): 59–72, 2007, (In Persian).
159. **M. Norouzi**, M. Shariati, M.H. Kayhani, Optimization of pressure angle and Hertzian stress in disk cams with different types of reciprocating followers, *Modares Technical and Engineering*, 28: 113–131, 2007, (In Persian).

### *Conference Papers*

1. A. Abbasi-Yazdi, **M. Norouzi**, A comparison between the effect of Newtonian and non-Newtonian fluid on immiscible Saffman-Taylor instability, *26 Annual (International) Conference on Mechanical Engineering of Iran (ISME-2018)*, Semnan University, Semnan, Iran, 2018.
2. **M. Norouzi**, D. Cheraghali, Numerical study on non-Newtonian pulsatile blood flow through artery with stenosis using fluid-solid interaction approach, *Higher Education Forum (TICEAS-2649)*, Singapore, 2017.
3. A. Shahbani Zahiri, M.M. Shahmardan, H. Hassanzadeh, **M. Norouzi**, Effect of elasticity number on the heated flow of viscoelastic fluid inside planner channel with a symmetric abrupt expansion, *Higher Education Forum (TICEAS-2757)*, Singapore, 2017.
4. A. Shahbani Zahiri, M.M. Shahmardan, H. Hassanzadeh, **M. Norouzi**, A study on the effect of viscous dissipation on non-isothermal viscoelastic flow inside the symmetric planner sudden expansion, *25 Annual (International) Conference on Mechanical Engineering of Iran (ISME-2017)*, Tarbiat Modares University, Tehran, Iran, 2017.
5. H. Shokri, M. H. Kayhani, **M. Norouzi**, A numerical study on miscible viscous fingering instability in second order fluid-Newtonian fluid displacement, *24 Annual (International) Conference on Mechanical Engineering of Iran (ISME-2016)*, Yazd University, Yazd, Iran, 2016.

6. **M. Nourozi**, A. Pooladi, A numerical study on methods of drag reduction of class 5 trucks, The 3<sup>rd</sup> International Conference on Mechanical Engineering Research (ICMER), University of Malaysia Pahang, Pahang, Malaysia, August, 2015.
7. M. Baou-Dizabadi, **M. Nourozi**, A. Jabbari Moghadam, Numerical analysis of viscoelastic boundary layer over a flat plate under the pressure gradient, *The 3rd Conference on Processing Engineering*, Tehran, Iran, January, 2015.
8. M. Baou-Dizabadi, **M. Nourozi**, A. Jabbari Moghadam, Boundary layer and heat transfer numerical analysis for the Falkner-Skan wedge flow, *The 3rd Conference on Processing Engineering*, Tehran, Iran, January, 2015.
9. **M. Norouzi**, A.A. Delouei, M. Seilsepour, An exact analytical solution for two-dimensional steady heat conduction in spherical composite vessels, *The 3rd International Conference on Composites: Characterization, Fabrication and Application (CCFA-3)*, 43–44, Tehran, Iran, Dec. 18–19, 2012.
10. R. Rooki, F.D. Ardejani, A. Moradzadeh, **M. Norouzi**, Effect of rheological model on cuttings transport in foam drilling, *The Second Scientific Conference of Hydrocarbon Reservoir Engineering, Science and Related Industries (reservoir02)*, Tehran, Iran, May, 2013.
11. R. Rooki, F.D. Ardejani, A. Moradzadeh, **M. Norouzi**, Study of non-Newtonian properties of foam and determination of its rheological parameters using genetic algorithm, *1<sup>th</sup> Petroleum Technical Conference and Exhibition*, Tehran, Iran, May, 2013.
12. R. Rooki, F.D. Ardejani, A. Moradzadeh, **M. Norouzi**, Cuttings transport modeling in foam drilling using computational fluid dynamics (CFD), *1<sup>th</sup> Petroleum Technical Conference and Exhibition*, Tehran, Iran, May, 2013.
13. R. Rooki, F.D. Ardejani, A. Moradzadeh, **M. Norouzi**, Prediction of pressure drop of three phase flow in inclined wells using Neural Network model, *4<sup>th</sup> Iranian Mining Engineering Conference*, Tehran University, Tehran, Iran, October, 2012.
14. S.R. Varedi, M.J. Maghrebi, M.M. Shahmardan, **M. Norouzi**, Numerical modeling of viscoelastic flow around a cylinder and comparing the results with Newtonian flow, *20 Annual (International) Conference on Mechanical Engineering*, Shiraz University, Shiraz, Iran, 2012.
15. A.A. Delouei, M.H. Kayhani, **M. Norouzi**, An analytical solution for heat conduction in non-axi-symmetric composite laminates under the general boundary condition, *20 Annual (International) Conference on Mechanical Engineering*, Shiraz University, Shiraz, Iran, 2012.
16. **M. Norouzi**, M.M. Shahmardan, M.J. Maghrebi, S.R. Varedi, Effects of viscoelasticity on the flow past a circular cylinder, *3rd International Conference on Engineering & ICT (ICEI)*, Malaysia, 2012.
17. S.R. Varedi, **M. Norouzi**, A. Sarreshtehdari, M.M. Shahmardan, M.J. Maghrebi, Investigation of Kármán vortices in the viscoelastic flow behind a cylinder, *Open Source CFD International Conference*, France, 2011.
18. A. Jalali, M.H. Kayhani, **M. Norouzi**, 3D Numerical modeling of developing viscoelastic flow in a straight rectangular duct, *19 Annual (International) Conference on Mechanical Engineering*, Birjand University, Birjand, Iran, 2011.

19. M.H. Kayhani, **M. Norouzi**, A.A. Delouei, Analytical solution of transient conductive heat transfer in composite cooling pipes under the variable heat flux, *19 Annual (International) Conference on Mechanical Engineering*, Birjand University, Birjand, Iran, 2011.
20. M.H. Kayhani, **M. Norouzi**, A.A. Delouei, On heat conduction problem in multi-layer composite pin fins, 3rd International Conference, *Advanced Composite Materials Engineering, COMAT*, Universitatea Transilvania, Romani, 2010.
21. M.H. Kayhani, **M. Norouzi**, A.A. Delouei, Numerical modeling of 3D unsteady conductive heat transfer in composite tanks, *Advanced Composite Materials Engineering, COMAT*, Universitatea Transilvania, Romani, 2010.
22. M.H. Kayhani, **M. Norouzi**, A.A. Delouei, An exact solution of axi-symmetric conductive heat transfer in cylindrical composite laminate under the general boundary condition, *International Conference on Fluid Mechanics (ICFM)*, Netherland, 2010.
23. **M. Norouzi**, M.H. Kayhani, M.R.H. Nobari, M. Karimi Demneh, Convective heat transfer of viscoelastic flow in a curved duct, *International Congress on Mechanical, Aeronautical and Manufacturing Engineering*, Singapore, 2009.
24. **M. Norouzi**, M.H., Kayhani, M.R.H. Nobari, A numerical investigation of viscoelastic flow in curved square ducts, *17 Annual (International) Conference on Mechanical Engineering*, Tehran University, Tehran, Iran, 2009.
25. M.H. Kayhani, M.R.H. Nobari, **M. Norouzi**, Numerical modeling for internal cooling of gas turbine blades, *4th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT*, Egypt, 2005.
26. M.H. Kayhani, M.R.H. Nobari, **M. Norouzi**, A numerical investigation of internal cooling in gas turbine blades, *EUROTHERM 82*, University of Cracow, Poland, 2005.

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**Last Update: May, 2022.**