

## List of Publications

1. Muhammad Danial Hisham, **Aziz Ullah Awan**, Nehad Ali Shah, Iskander Tlili, Unsteady two-dimensional flow of pseudo-blood fluid in an arterial duct carrying stenosis, *Physica A*, 2020, <https://doi.org/10.1016/j.physa.2019.124126>. **(IF=2.500)**
2. Muhammad Tahir, **Aziz Ullah Awan**, Optical singular and dark solitons with Biswas-Arshed model by modified simple equation method, *Optik*, 202 (2020) 163523. **(IF=1.914)**
3. Takasar Hussain, Muhammad Ozair, Kazeem Oare Okosun, Muhammad Ishfaq, **Aziz Ullah Awan**, Adnan Aslam, Dynamics of swine influenza model with optimal control, *Advances in Difference Equations*, (2019) 2019:508 <https://doi.org/10.1186/s13662-019-2434-4>. **(IF=1.510)**
4. M. Tahir, **A. U. Awan**, The study of complexitons and periodic solitary wave solutions with fifth order KdV equation in (2+1)-dimensions, *Modern Physics Letters B*, 33 (2019) 1950411 (13 pages). **(IF=0.929)**
5. Muhammad Tahir, **Aziz Ullah Awan**, Analytical solitons with the Biswas-Milovic equation in the presence of spatio-temporal dispersion in non-Kerr law media, *European Physical Journal Plus*, 134 (2019) 464. **(IF=2.612)**
6. Muhammad Tahir, **Aziz Ullah Awan**, Hamood ur Rehman, Optical solitons to Kundu–Eckhaus equation in birefringent fibers without four-wave mixing, *Optik*, 199 (2019) 163297. **(IF=1.914)**
7. **Aziz Ullah Awan**, Nehad Ali Shah, Najma Ahmed, Qasim Ali, Samia Riaz, Analysis of free convection flow of viscous fluid with damped thermal and mass fluxes, *Chinese Journal of Physics*, 60 (2019) 98-106. **(IF=2.544)**
8. Nauman Raza, **Aziz Ullah Awan**, Ehsan Ul Haque, Muhammad Abdullah, Muhammad Mehdi Rashidi, Unsteady flow of a Burgers' fluid with Caputo fractional derivatives: A hybrid technique, *Ain Shams Engineering Journal*, 10 (2019) 319-325. **(IF=3.091)**
9. M. Tahir, **A. U. Awan**, H. U. Rehman, Dark and singular optical solitons to the Biswas-Arshed model with Kerr and power law nonlinearity, *Optik*, 185 (2019) 777-783. **(IF=1.914)**
10. **A. U. Awan**, M. Tahir, H. U. Rehman, On travelling wave solutions: The Wu-Zhang system describing dispersive long waves, *Modern Physics Letters B*, 33(6) (2019) 1950059 (11 pages). **(IF=0.929)**
11. **Aziz Ullah Awan**, Muhammad Danial Hisham, Nauman Raza, The effect of slip on electroosmotic flow of a second grade fluid between two plates with Caputo-Fabrizio time

fractional derivatives, Canadian Journal of Physics, 97(5) (2019) 509-516.  
<https://doi.org/10.1139/cjp-2018-0406>. (IF=1.016)

12. Muhammad Danial Hisham, Abdul Rauf, Dumitru Veiru, **Aziz Ullah Awan**, Analytical and semi-analytical solutions to flows of two immiscible Maxwell fluids between moving plates, Chinese Journal of Physics, 56 (2018) 3020-3032. (IF=2.544)
13. Anwar Ali, Madeeha Tahir, Rabia Safdar, **Aziz Ullah Awan**, Muhammad Imran, Maria Javaid, Magnetohydrodynamics oscillating rotating flows of Maxwell electrically conducting fluids in a porous plane, Punjab University Journal of Mathematics, 50(4) (2018) 61-71. (**Local HEC Recognized, X Category**)
14. **Aziz Ullah Awan**, Takasar Hussain, Kazeem Oare Okosun and Muhammad Ozair, Qualitative analysis and sensitivity based optimal control of pine wilt disease, Advances in Difference Equations, (2018) 2018:27. (IF=1.510)
15. Ehsan Ul Haque, **Aziz Ullah Awan**, Nauman Raza, Muhammad Abdullah, Maqbool Ahmad Chaudhry, A computational approach for the unsteady flow of Maxwell fluid with Caputo fractional derivatives, Alexandria Engineering Journal, 57 (2018) 2601-2608. (IF=3.696)
16. Nauman Raza, M. Abdullah, Asma Rashid Butt, **Aziz Ullah Awan**, Ehsan Ul Haque, Flow of a second grade fluid with fractional derivatives due to a quadratic time dependent shear stress, Alexandria Engineering Journal, 57 (2018) 1963-1969. (IF=3.696)
17. N. Raza, E. U. Haque, M. M. Rashidi, **A. U. Awan**, M. Abdullah, Oscillating motion of an Oldroyd-B fluid with fractional derivatives in a circular cylinder, Journal of Applied Fluid Mechanics, 10(5) (2017) 1421-1426. (IF=1.090)
18. Nauman Raza, Ehsan Ul Haque, **Aziz Ullah Awan**, M. Abdullah, Maqbool Ahmad Chaudhry, A new hybrid technique for the solution of a Maxwell fluid with fractional derivatives in a circular pipe, Journal of Applied Environmental and Biological Sciences, 7(10) (2017) 195-206. (ISI)
19. Arshad Riaz, Abdul Razaq, **Aziz Ullah Awan**, Magnetic field and permeability effects on Jeffrey fluid in eccentric tubes having flexible porous boundaries, Journal of Magnetism, 22(4) (2017) 642-648. (IF=0.628)
20. **Aziz Ullah Awan**, Attia Sharif, Takasar Hussain, Muhammad Ozair, Smoking model with cravings to smoke, Advanced Studies in Biology, 9(1) (2017), 31-41. (ISI)
21. **Aziz Ullah Awan**, Takasar Hussain, Umara Iqbal, Nita H. Shah, Muhammad Ozair, Qualitative behavior of pine wilt disease model, Journal of Basic and Applied Research International, 19(3) (2016), 206-218. (**Non-IF Foreign Journal Paper**)

22. **A. U. Awan**, Rabia Safdar, M. Imran, Aneela Shaukat, Effects of chemical reaction on the unsteady flow of an incompressible fluid over a vertical oscillating plate, Punjab University Journal of Mathematics, 48(2) (2016), 167-182. **(Local HEC Recognized, X Category)**
23. **Aziz Ullah Awan**, Muhammad Ozair, Qamar Din, Takasar Hussain, Stability analysis of pine wilt disease model by periodic use of insecticides, Journal of Biological Dynamics, 10:1(2016) 506-524, DOI: 10.1080/17513758.2016.1225828. **(IF=1.279)**
24. M. Ozair, Q. Din, T. Hussain, **A. U. Awan**, Qualitative behavior of vector-borne disease model, Journal of Nonlinear Science and Applications, 9(2016), 1382-1395. **(IF=1.340)**
25. M. Imran, Madeeha Tahir, M. A. Imran, **A. U. Awan**, Taylor-Couette flow of an Oldroyd-B fluid in an annulus subject to a time-dependent rotation, American Journal of Applied Mathematics, 3 (3-1) (2015), 25-31. **(Non-IF Foreign Journal Paper)**
26. **A. U. Awan**, M. Athar, Corina Fetecau, Mehwish Rana, Unsteady flow of a Maxwell fluid with fractional derivatives in a circular cylinder moving with nonlinear velocity, Quaestiones Mathematicae, 37 (2014), 139-156. **(IF=0.542)**
27. **A. U. Awan**, M. Imran, M. Athar, M. Kamran, Exact analytical solutions for a longitudinal flow of a fractional Maxwell fluid between two coaxial cylinders, Punjab University Journal of Mathematics, 45 (2013) 9-23. **(Local HEC Recognized, X Category)**
28. M. Imran, **A. U. Awan**, Mehwish Rana, M. Athar, M. Kamran, Exact solutions for the axial Couette flow of a fractional Maxwell fluid in an annulus, ISRN Mathematical Physics, Volume 2012 (2012), Article ID 209678, 15 pages, doi: 10.5402/2012/209678. **(Non-IF Foreign Journal Paper)**
29. A. Mahmood, N. A. Khan, I. Siddique, A. Zada, **A. U. Awan**, A note on the unsteady torsional sinusoidal flow of fractional viscoelastic fluid in an annular cylinder, Journal of King Saud University-Science, Vol. 23, No. 4 (2011) 341-347. **(Non-IF Foreign Journal Paper)**
30. M. Imran, M. Athar, M. Kamran, **A. U. Awan**, Some study on the unsteady constantly accelerating rotational flow of a fractional Oldroyd-B fluid, Science International (Lahore), 23 No. 3 (2011) 175-182. **(Local HEC Recognized in 2011, X Category)**
31. M. Jamil, A. U. Awan, D. Vieru, Unsteady helical flows of Maxwell fluids via prescribed shear stresses, Bulletin of the Polytechnic Institute of Iasi, Tome LVII (LXI), Fasc. 1 (2011) 137-148. **(International Conference Paper)**
32. Corina Fetecau, **A. U. Awan**, Nazish Shahid, Axial-Couette flow of an Oldroyd-B fluid in an annulus due to a time dependent shear stress, Bulletin of the Polytechnic Institute of Iasi, Tome LVII (LXI), Fasc. 4 (2011) 13-25. **(International Conference Paper)**
33. M. Nazar, Corina Fetecau, **A. U. Awan**, A note on the unsteady flow of a generalized second-

- grade fluid through a circular cylinder subject to a time dependent shear stress, *Nonlinear Analysis: Real World Applications*, 11 (2010) 2207-2214. **(IF=2.138)**
34. A. U. **Awan**, Corina Fetecau, Qammar Rubbab, Axial Couette flow of a generalized Oldroyd-B fluid due to a longitudinal time-dependent shear stress, *Quaestiones Mathematicae*, 33 (2010), 429–441. **(IF=0.412)**
35. C. Fetecau, A. U. **Awan**, M. Athar, A note on Taylor-Couette flow of a generalized second grade fluid due to a constant couple, *Nonlinear Analysis: Modelling and Control*, 15 (2) (2010) 155-158. **(IF=0.400)**
36. W. Akhtar, Corina Fetecau, A. U. **Awan**, Exact solutions for the axial Couette flow of generalized Maxwell fluid induced by time dependent shear stress, *ANZIAM Journal*, 51 (2010), 416-429. **(IF=0.414)**
37. M. Athar, C. Fetecau, Corina Fetecau, A. U. **Awan**, Exact solutions for the flow of a generalized second grade fluid due to a longitudinal quadratic time-dependent shear stress, *International Journal of Industrial Mathematics*, 2(3) (2010) 153-165. **(Non-IF Foreign Journal Paper)**
38. C. Fetecau, A. U. **Awan**, Corina Fetecau, Taylor-Couette flow of an Oldroyd-B fluid in a circular cylinder subject to a time-dependent rotation, *Bull. Math. Soc. Sci. Math. Roumanie (Bulletin mathématiques de la Société des sciences mathématiques de Roumanie)*, 52, No 2(100) (2009), 117-128. **(IF=0.554)**
39. Corina Fetecau, Florina-Liliana Buzescu, A. U. **Awan**, C. Fetecau, Exact solutions for some oscillating motions of Oldroyd-B fluids, *International Journal of Liquid State Sciences*, 1 (1) (2009), 43-52. **(Non-IF Foreign Journal Paper)**
40. A. U. **Awan**, Corina Fetecau, M. Imran, Some exact solutions for the flow of a generalized Oldroyd-B fluid between two side walls perpendicular to a plate, *Bulletin of the Polytechnic Institute of Iasi, Tome LV (LIX), Fasc. 1* (2009) 1-9. **(International Conference Paper)**