CURRICULUM VITAE

Dr. Muhammed Anwar Solangi

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1.   Profile:

A university teacher in the field of Applied Mathematics actively engaged in teaching at under-graduate and post graduate levels, and research with special interest in Mathematical Modelling and Simulation. Author of the book, 'Statistical Methods and Estimations'.

2.   Personal details:

Title:	Dr.	Surname:	SOLANGI
Forename:	MUHAMMED ANWAR	Nationality:	Pakistani
Father's Name:	Ghulam Hyder	Marital Status:	Married
Date of Birth:	15th October 1966		

Work Address: Department of Basic Sciences and Related Studies, Mehran University of Engineering and Technology, Jamshoro, Sindh, Pakistan, Telephone No. 0221-771409, 772254-8/2201.

Home Address: C/27-28, Sindh University Housing Society Jamshoro, Sindh, Pakistan. Telephone No.: 022-2115629.

3.   Degree Qualifications:

1. BSc. (Sindh), Applied. Mathematics, University of Sindh, Pakistan, 1987.
2. MSc. (Sindh), Applied Mathematics, University of Sindh, Pakistan, 1988.
3. PhD. (Pakistan), Mathematics, Mehran University of Engineering and Technology, 2012.

Research title:

1.   Ph.D. Thesis:

"*Numerical Simulation of Blood Flow: Application to atherosclerosis*".

4.   Current Assignments/Designation:

Professor, Department of Basic Sciences and Related Studies, Mehran University of Engineering and Technology, Jamshoro, Sindh, Pakistan.

5.   Particulars of Full-Time Employment:

Professor	14/04/2014 to date	Mehran University of, Engineering and Technology, Jamshoro, Sindh.
Associate Professor	15/04/2013 to 13/04/2014	-do-
Assistant Professor	12/01/1998 to 14/04/2013	-do-

Lecturer 11/08/1990 to 11/01/1998 -do-

6. Technical Skill:

Computers: IBM compatible PC's.

Operating systems: Windows X.

Application: Microsoft Office and other types of Softwares.

Computer Languages: C/C^{++} and FORTRAN.

7. Teaching Interests:

Scientific Computation and Modelling, Differential Equations, Numerical Analysis, Finite Difference, Finite Element Methods, Computational Fluid Dynamics, Linear Algebra, Complex Variables and Transformations, Applied Calculus, Statistical Methods and Estimations, Operation Research and Computer Languages.

8. Research Interest:

Computational Fluid Dynamics, Finite Difference, Finite Element Methods, Statistics and Operation Research.

9. Congress/Conference attended:

1. 2nd International Conference on Mathematical Methods and Methods in Fluid Mechanics, Islamabad, July 04-06, 2005.

2. Conference on Curriculum Development in Higher Education, HEC, Islamabad, February 03-04, 2015.

10. Publications:

1. Ram. T, **Solangi, M. A**. and Sanghah, A. A., 'A Hybrid Numerical Method with Greater Efficiency for Solving Initial Value Problems' , International Journal of Mathematical Theory and Modeling, vol.10, No.02, 2020.

2. Memon, I.Q, Abro , K. A., **Solangi, M. A**. and Shaikh, A. A. ,'Functional Shape Effects of Nanoparticles on Nanofluid Suspended in Ethylene Glycol through Mittage- Leffer Approach', Physica Scripta, vol. 96, No. 2, 025005 (2020); **https://doi.org/10.1088/1402-4896/abd1b3**.

3. Kandhro, M.D., **Solangi, M. A**., and Sheikh A.H., 'Development of Improved Scheme for Numerical Integration of Autonomous and Non-Autonomous Initial Value Problems', Sindh University Research Journal, vol. 51, No. 1, pp. 19-24, 2019.

4. Qureshi, Z.A., **Solangi, M. A**., A.A Sheikh., and Sahito., J.G.M., 'Measuring Multidimensional Parameters of Poverty Using Alkireand Foster Methodology in Qasimabad', Journal of Poverty, Investment and Development ww.iiste.org, ISSN 2422-846X An International Peer-reviewed Journal Vol.44, 2018

5. Siyal , A., Abro , K. A. and **Solangi, M. A**., 'Thermodynamics of magnetohydrodynamic Brinkman fluid in porous medium, International Journal of Thermal Analysis and Calorimetry, https://doi.org/10.1007/s10973-018-7897-0, 2018.

6. Mugheri , D. M., Abro , K. A. and **Solangi, M. A**., 'Application of modern approach of Caputo-Fabrizio fractional derivative to MHD second grade fluid through oscillating porous plate with heat and mass transfer, International Journal of Advanced and Applied Sciences, vol. 5, No.10, pp.97-105, 2018.

7. Memon, S.A., Memon, R.A. **Solangi, M. A**. and Ahmed, F. 'Stresses and power consumption analysis of mixing flow in cylindrical shaped container', Journal of Applied Environmental and Biological Sciences , vol. 8, No.2, pp. 170-177, 2018.

8. Memon, M., **Solangi, M. A**., and Abro, S., 'Analysis of students' satisfaction with hostel facilities', Sindh University Research Journal, vol. 50, No. 1, pp. 95-100, 2018.

9. Qureshi,U.K., Shaikh, A.A. and **Solangi, M. A**., 'Modified free derivative open method for solving non-linear equations', Sindh University Research Journal, vol. 49, No. 4, pp. 821-824, 2017.

10. Metlo, M.A., **Solangi, M. A**., and Memon, S.A., 'Modified North West Corner Method for the Optimal Solution for Transportation Problem', Sindh University Research Journal, vol. 48, No. 4, pp. 793-796, 2016.

11. Abro, K.A., **Solangi, M. A**., and Laghari, M.H., 'Influence of Slippage in Heat and Mass Transfer for Fractionalized MHD Flows in Porous Medium', Int. J. Adv. Appl. Math and Mech, vol. 4, No.4, pp. 5-14, 2017.

12. Abro, K.A. and **Solangi, M. A**., 'Heat Transfer in Magnetohydro-dynamic Second Grade Fluid with Porous Impacts using Caputo-Fabrizoi Fractional Derivatives', Punjab U. J. of Mathematics, vol. 49, No. 2, pp. 113–125, 2017.

13. Metlo, M.A., **Solangi, M. A**., and Memon, S.A., 'Modified North West Corner Method for the Optimal Solution for Transportation Problem', Sindh University Research Journal, vol. 48, No. 4, pp. 793-796, 2016.

14. Tunio,A., Magsi, H. And **Solangi, M. A**., 'Analyses of growth trends and production forecast of cash crops in Pakistan', International J. Of Agronomy and Agricultural Research (IJAAR), Vol.9, No.1, pp.158-164, 2016 (Impact Factor 1.759).

15. Abro.S, **Solangi, M. A**. And Shaikh A.A, 'An investigation on the performance of students in Mathematics', Sindh University Research Journal, Vol.48, No.2, pp.377-382, 2016.

16. Mahessar.A, Baloch, Z.A.K, Qureshi, A.L, **Solangi, M. A**. And Baloch, A., 'Time-dependent flow through Asymmetric contraction and expansion channel', Sindh University Research Journal, Vol.48, No.1, pp.109-112, 2016.

17. **Solangi, M. A.**, Uqali, M. A., Memon, R. A., Qureshi, A. L. Ahmed, F and Baloch, A., 'Analysis of Recirculation Flow Rate in Plaque Deposited Capillaries by Power Law Model', Journal of Applied Environmental and Biological Sciences , vol. 5, No.5, pp. 254-259, 2015.

18. Memon, R. A., **Solangi, M. A.**, Khokhar, R. B., Baloch, A. and Sayed, K. S., 'Computational Analysis of Rotating Mixing of Bird Carreau Model Fluid', Sindh University Research Journal, vol. 47, No.1, pp. 15-18, 2015.

19. Sayed, B. S. Shaikh, H., Memon, **Solangi, M. A**. And Baloch. A., 'Computer Simulation of Fibre Suspension Flow through a Periodically Constricted Tube', Punjab U. J. Of Mathematics, vol. 46, No.2, pp.19-34, 2014.

20. Memon, R. A., Baloch, M. E., **Solangi, M. A.** and Baloch, A., 'Numerical Analysis of Rotating Mixing of Fluids in Container Induced by Contra Rotating Stirrers', International Journal of Modern Engineering Research, vol. 3, No.5, pp. 2754-2757, 2013.

21. Shaikh, H., Shah, S.B., **Solangi, M. A.** and Baloch, A., 'Effects of Local Interia in the Expansion Channel Filled with Porous Media', Sindh University Research Journal, vol. 45, No.2, pp. 207-212, 2013.

22. **Solangi, M. A.**, Khokhar, R. B. and Baloch, A., 'A FEM Study for Non-Newtonian Behaviour of Blood in Plaque Deposited Capillaries: Analysis of Blood Flow Structure', Mehran University Research Journal of Engineering and Technology, vol. 32, No.2, pp. 277-282, 2013.

23. Memon, R. A., **Solangi, M. A.** and Baloch, A., 'Stress Analysis of Mixing of Non-Newtonian Flows in Cylindrical Vessel Induced by Co-rotating Stirrer', Mehran University Research Journal of Engineering and Technology, vol. 32, No.2, pp. 283-286, 2013.

24. **Solangi, M. A.**, Shaikh, H., Khokhar, R. B. and Baloch, A., 'Numerical Study of Newtonian Blood Flow through a Plaque Deposited Artery', Sindh University Research Journal, vol. 45, No. 1, pp. 35-40, 2013.

25. Sayed, B.S, Shaikh, H., **Solangi, M. A**. and Baloch, A., 'Numerical Simulation of Flow through a Periodically Constricted Tube: Effects of Inertia and Undulation on Flow Structure', Sindh University Research Journal, vol. 45, No. 1, pp. 79-82, 2013.

26. **Solangi, M. A.**, Memon, R. A. and Baloch, A., 'Prediction of Pressure Difference and Velocity Profile in Steady Flow through Axi-symmetric Plaque Deposited Arteries', Mehran University Research Journal of Engineering and Technology, vol. 31, No.4, pp. 723-732, 2012.

27. **Solangi, M. A.**, Sayed, B. and Baloch, A., 'Prediction of Viscoelastic Behaviour of Blood in Plaque Deposited Capillaries', Mehran University Research Journal of Engineering and Technology, vol. 31, No.4, pp. 777-784, 2012.

28. **Solangi, M. A.**, Khokhar, R. B., Shaikh, A. W. and Baloch, A., 'Computational Modelling of Pressure Difference for Non-Newtonian Behaviour of Blood in Plaque Deposited Capillaries', Sindh University Research Journal, vol. 44, No. 4, pp. 723-726, 2012.

29. Shaikh, H., Shah, S.B., **Solangi, M. A.** and Baloch, A., 'A Computer Simulation of Flow of Newtonian Fluid through Backward Step Channel', Sindh University Research Journal, vol. 44, No.4, pp. 703-708, 2012.

30. Memon, G. Q., **Solangi, M. A** and Baloch, A., 'Analytical Solutions of Viscoelastic Flow through Porous Channels', Mehran University Research Journal of Engineering and Technology, vol. 31, No.3, pp. 437-450, 2012.

31. **Solangi, M. A.**, Baloch, A. and Memon, R. A, 'Influence of Blood Inertia on Vortex Enhancement in the Wake of Plaque Deposited Arteries', Mehran University Research Journal of Engineering and Technology, vol. 30, No.2, pp. 213-224, 2011.

32. Memon, R. A., **Solangi, M. A.** and Baloch, A., 'Simulation of Rotational Flows in Cylindrical Vessel with Double Rotating Stirrer: Part-A, Analysis of Flow Structure and Pressure Differential' Punjab U. J. of Mathematics, vol. 43, pp. 29–45, 2011.

33. Memon, R. A., **Solangi, M.A**. and Baloch, A., 'Analysis of Stresses and Power Consumption of Mixing Flow in Cylindrical Container', Punjab U. J. of Mathematics, vol. 43, pp. 47–67, 2011.

34. Memon, G. Q., Baloch, A. and **Solangi, M. A.**, 'Analytical and Numerical Solutions of Flow through Porous Channels', Mehran University Research Journal of Engineering and Technology, vol. 28, No.1, pp. 53-68, 2009.

35. Baloch, A., Memon, R. A and **Solangi, M. A.**, 'Prediction of Power Consumption of Rotational Flows in Cylindrical Vessels' Mehran University Research Journal of Engineering and Technology, vol. 28, No.3, pp. 329-342, 2009.

36. Baloch, A., **Solangi, M. A**. and Memon, G. Q., 'Simulation of Rotational Flows in Cylindrical Vessel with Rotating Single Stirrer', Punjab U. J. of Mathematics, vol. 40, pp. 83–96, 2008.