



WOMEN UNIVERSITY MARDAN

DEPARTMENT OF MATHEMATICS

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Faculty Resume

Name:	Dr. Mehnaz
Personal:	Department: Mathematics Designation: Assistant Professor Email: mehnaz.shakeel@wumardan.edu.pk , Maths.fwu@gmail.com
Experience	1. Lecturer, SBBWUP (14 th April 2008-17 th April 2023). 2. Assistant Professor (18 th April 2023 till date)
Qualification	Ph. D
Honor and Awards	Gold Medalist, SBBWU, Peshawar
Memberships	BoS,
Graduate Students Postdocs Undergraduate Students Honor Students	<ul style="list-style-type: none"> • Six M. Sc students • Three BS students • Two M. Phil students
Service Activity	Teaching, Research
Brief Statement of Research Interest	<ul style="list-style-type: none"> • Numerical solution of PDEs and fractional PDEs • Modeling and simulation • Meshless methods • Fractional Inverse Problems
Publications	<ol style="list-style-type: none"> 1. Mehnaz Shakeel, Iltaf Hussain, Hijaz Ahmad, Imtiaz Ahmad, Phatiphat Thounthong, Ying-Fang Zhang, Meshless technique for the solution of time-fractional partial differential equations having real-world applications, <i>Journal of Function Spaces</i>, 2020. 2. Imtiaz Ahmad, Siraj-ul-Islam, null Mehnaz, Sakhi Zaman, Local meshless differential quadrature collocation method for time-fractional PDEs, <i>Discrete and Continuous Dynamical Systems –S</i>, 13, 2020. 3. Mehnaz Shakeel, Shahida Parveen, Siraj-ul Islam and Iltaf Hussain, Numerical solution and characteristic study of time-fractional shocks collision, <i>Physica Scripta</i>, 96, 2021. 4. Mehnaz Shakeel, Muhammad Nawaz Khan, Imtiaz Ahmad, Sayed Abdel-Khalek , Alghamdi Ahmed Mohammed, Mustafa Inc, The generalized time

	<p>fractional Gardner equation via numerical meshless collocation method, Thermal Science, 26,2022.</p> <p>5. Hajira Irshad, Mehnaz Shakeel, Imtiaz Ahmad, Hijaz Ahmad, Chutarat Tearnbucha, Weerawat Sudsutad , Simulation of generalized time fractional Gardner equation utilizing in plasma physics for non-linear propagation of ion-acoustic waves, Thermal Science, 27,2023.</p> <p>6. Mehnaz Shakeel, Muhammad Nawaz Khan, Imtiaz Ahmad, Hijaz Ahmad, Nantapat Jarasthitikulchai, Weerawat Sudsutad, Local meshless collocation scheme for numerical simulation of space fractional PDE, Thermal Science, 27, 2023.</p> <p>7. Muhammad Asif, Faisal Bilal, Mehnaz, Rubi Bilal, Nadeem Haider, Shaimaa A.M. Abdelmohsenc, Sayed M. Eldind, An efficient algorithm for the numerical solution of telegraph interface model with discontinuous coefficients via Haar wavelets, Alexandria Engineering Journal, 72, 2023.</p> <p>8. Hina Zahir, Javaria Akram, Mehnaz, Reem K. Alhefthi, Rabbia Fatima, Mustafa Inc, Effect of nonlinear thermal radiation and homogeneous-heterogeneous reactions on peristaltic propulsion of Johnson-Segalman fluid, Ain Shams Engineering Journal, 2023.</p>
Research Grants and Contracts	<ul style="list-style-type: none"> ▪ Nil
Other Research or Creative Accomplishments	<ol style="list-style-type: none"> 1. Organized 3 days workshop on “Latex” for Masters students in July 2012 (13th-15th July). 2. Organized 3 days workshop on “Latex” for M. Phil scholars in November 2012 (13th-15th Nov.). 3. Organized International Workshop on Computational Mathematics with Applications on 10th March 2014, sponsored by HEC Pakistan 4. Attended “3rd conference on sustainability in process industry, organized by UET Peshawar.” 5. Attended “one day symposium on numerical computing and its application, organized by UET Peshawar.” 6. Attended “National Conference on Mathematical Sciences in Engineering Applications, organized by UET Peshawar.” 7. Attended “National Conference on Emerging trends in Computing, Statistics and Mathematical Sciences, organized by SBBWU Peshawar.” 8. International conference on Food and Applied Sciences. Kumrat, 03-05 August 2023.

	<p>9. Online Course organized by Coursera, Introduction to Programming with Matlab, Vanderbilt University.</p>
<p>Selected Professional Presentations</p>	<ol style="list-style-type: none"> 1. Given lecture as a resource person in 3 days workshop on “Latex” for Masters students in July 2012 (13th-15th July). 2. Given lecture as a resource person in 3 days workshop on “Latex” for M. Phil scholars in November 2012 (13th-15th Nov.). 3. Given lecture as a resource person in 3 days workshop on “Latex” for Masters students in Dec. 2013 (25th, 26th Dec.). 4. Paper presentation in “International conference on Modeling and Simulation 2013” in Nov. 2013 (25th-27th Nov.) organized by AIR university, Islamabad. 5. Paper presentation at “National Conference on Mathematical Sciences in Engineering Applications, organized by UET Peshawar.”