Faculty Resume

Name	Dr. Palwasha Zaman
Personal	
Experience	26th Feb'2024, Lecturer, Women University Mardan
Honors and Awards	
Memberships	*Scholarship committee member*
Graduate Students Postdocs Undergraduate Students Honors Students	
Service Activity	*5 years' experience at AWKUM*
Brief Statement of Research Interest	*Fluid Mechanics* Fluid mechanics research focuses on understanding the behavior of fluids and the forces acting upon them, spanning scales from microscopic to planetary and encompassing applications in engineering, medicine, environmental science, and more. Key areas include solving the Navier-Stokes equations, studying turbulence, multiphase flows, and biofluid mechanics, and developing computational fluid dynamics (CFD) methods. Recent advancements feature machine learning integration with CFD, microfluidics for medical diagnostics, and enhanced experimental techniques like Particle Image Velocimetry (PIV). Applications are wide-ranging, impacting the design of efficient renewable energy systems, medical devices, and environmentally sustainable technologies, while bio-inspired fluid mechanics drives innovations in robotics and vehicle aerodynamics.
Publications	• Study of two-dimensional boundary layer thin film fluid flow with variable thermo-physical properties in three dimensions space • Non-Newtonian nanoliquids thin-film flow through a porous medium with magnetotactic microorganisms
Research Grants and Contracts.	
Other Research or Creative Accomplishments	
Selected Professional Presentations.	