

# CURRICULUM VITAE

Dr. Khadija Maqbool  
Assistant Professor  
Department of Mathematics and Statistics  
International Islamic university Islamabad Pakistan

## PERSONAL PROFILE:

Name: Dr. Khadija Maqbool  
Fathers' Name: M. Maqbool  
Religion: Islam  
Marital Status: Married

## Address:

1. Department of Mathematics and Statistics, FBAS, Maryiam Block, Female campus, International Islamic university Islamabad, Pakistan.
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## EDUACTION:

2006-2010: Ph.D. *in Applied Mathematics*

Quaid-e-Azam University Islamabad, Pakistan.

*Thesis: Analytic solutions for flows in nonlinear fluid*

2003-2005: *M. Phil in Applied Mathematics*

Quaid-e-Azam University Islamabad, Pakistan.

*Thesis: Rotating flow of a Jeffrey fluid.*

2001-2003: *M.Sc. in Applied Mathematics*

Quaid-e-Azam University Islamabad, Pakistan.

## Achievements:

1. Merit scholarship in M. Phil at Quaid-e-Azam University Islamabad Pakistan.
2. Indigenous Scholarship in Ph. D by HEC Islamabad Pakistan.

**FIELD OF INTEREST:**

Fractional calculus, analytic and numerical techniques of nonlinear equations, modeling of the problems from fluid mechanics, Mathematical Biology, Soliton waves

**PROFESSIONAL EXPERIENCE:**

Aug 2004-Jan 2006: *Lecturer* in Department of Mathematics at Hamza Army public college Rawalpindi Pakistan

Jan. 2008- May 2012: *Junior Lecturer* in Department of Mathematics and statistics International Islamic University Islamabad Pakistan

May 2012-to date: *Assistant professor* Department of Mathematics and statistics International Islamic University Islamabad Pakistan

**SERVICE ACTIVITY**

1. Aug 2009- April 2015: Member of student advisory committee of the department of Maths and Stats.
2. Aug 2012-Jan 2014: Incharge Examination committee of the department of Maths and Stats.
3. Jan 2014-April 2015: In charge time table committee of the department of Maths and Stats.
4. April 2015-to date: Acting chairperson of the department of Maths and Stats.
5. June 2016-to date: Deputy student advisor of the International Islamic University Islamabad

**RESEARCH SUPERVISION:****MS supervised students:**

1. Miss Safia Qurban, (2012-2013) Unsteady Jeffrey fluid past a porous plate.
2. Miss Farah Rafiq, (2012-2013) Unsteady fractional third grade fluid.
3. Miss Nadia Rafique, (2013 -2014) Heat transfer analysis of MHD Casson fluid about the stagnation point.
4. Miss Naeema Manzoor, (2013-2014) Effect of Hall current on the boundary layer flow of FENE-P fluid over a stretching sheet.
5. Shafaq idrees (2014-2015) Exact Solutions of MHD Fractional Burger's Fluid with Slip Effect through Porous Medium
6. Hira Mehboob (2014-2015) Heat and mass transfer of fractional viscous flow in a pipe.
7. Sidra Shaheen (2015-2016) Study of Cilia Motion in a Tube
8. Anum Amin (2015-2016) Effect of heat and mass transfer for the flow due to non-coaxial rotation
9. Hafsa Rashid (2015-2016) Effect of Chemical Reaction and Heat Source on MHD Couette Flow of non-Newtonian fluid
10. Atiqah Hamid (2015-2016) Effect of Magnetic Field on Maxwell Fluid in a Porous Orthogonal Rheometer

### **Current Ms and Ph. D research students**

1. Maimoona (MS)
  2. Sambila (MS)
  3. Farwa (MS)
  4. Hajra (MS)
1. Farah Gul (Ph.D)
  2. Naeema Manzoor (Ph.D)

### **RESEARCH EVALUATION**

#### **M. Phil Thesis:**

1. Evaluated the M.Phil Thesis. (Mathematics) titled as “Some simple flows of Phan-Thien-Tanner”.
2. Evaluated the M.Phil Thesis. (Mathematics) titled as “Solution of Integral Equations using Wavelets”.
3. Evaluated the M.Phil Thesis. (Mathematics) titled as “Influence of Inclined magnetic field and variable viscosity on peristaltic motion of third grade fluid in an inclined asymmetric channel”.

### **Work shops and conferences**

1. Intensive English Workshop, NIPS, QAU, Islamabad, 9<sup>th</sup> March to 27<sup>th</sup> Apr 2002.
2. Int. Conference on Models and Methods in fluid Mechanics, COMSATS, Abbot abad, 23-27<sup>th</sup> June 2003.
3. 2<sup>nd</sup> International Conference on Mathematical Models and Methods in fluid Mechanics, COMSATS, Islamabad, 04-06<sup>th</sup> July 2005.
4. 3<sup>rd</sup> International Conference on Mathematical Models and Methods in fluid Mechanics, COMSATS, Islamabad, 17-19<sup>th</sup> July 2006.
5. International Conference on Mathematics, Quaid-i-Azam University, Islamabad, 12-14<sup>th</sup> Sept 2006.
6. 1<sup>st</sup> International conference on Recent Development in Fluid Mechanics, QAU, Islamabad, 02-04<sup>th</sup> July 2007.
7. 2<sup>nd</sup> International conference on Recent Development in Fluid Mechanics, QAU, Islamabad, 11-13<sup>th</sup> Aug 2008.
8. 3<sup>rd</sup> International conference on Recent Development in Fluid Mechanics, QAU, Islamabad, 30<sup>th</sup> Jul-1<sup>st</sup> Aug 2009.
9. International conference on Mathematical methods, IIUI, Islamabad, 3<sup>rd</sup> Aug 2010.
10. Isesco women in science conference, Contribution of Pakistani women in scientific and social development, March 8, 2016.

## **List of Publication**

1. Masood Khan, Khadija Maqbool , T. Hayat , Hall Effect on the Oldroyd-B fluid in a porous medium, *Acta Mechanica* 184(1):1-13 · July 2006 (1.47 IF)
2. T. Hayat, Khadija Maqbool, Masood Khan, Hall and Heat transfer effect on the generalized Burger's fluid, *Nonlinear Dyn* (2008) 51:267–276 (2.849 IF)
3. T. Hayat, Khadija Maqbool, Saleem Asghar, Steady flow of Sisko fluid under the influence of Hall current and heat transfer analysis, *Z. Naturforsch.* 64a, 769 – 782 (2009) (0.789 IF)
4. S. Abbasbandy, T. Hayat, Khadija Maqbool, On Series solution for generalized Falkner-Skan flow of a FENE-P model, *Int. J. Numer. Mech.Fluids* 2009, Vol.61 (6), pp.698-708 (1.244 IF)
5. T. Hayat, Khadija Maqbool, Saleem Asghar, Effect of Hall current and heat transfer analysis on the flow of fourth grade fluid, *Numerical Methods For Partial Differential Equations* 26(3):501 - 518 · May 2010. (0.859 IF)
6. Ayesha Sohail , Khadija Maqbool , T. Hayat: Painlevé property and approximate solutions using Adomian decomposition for a nonlinear KdV-like wave equation. *Applied Mathematics and Computation* 229 (2014) 359–366 (1.55 IF)
7. Ayesha Sohail, Khadija Maqbool, Anila Asif, Haroon Ahmad: Numerical Modeling of Effective Diffusivity in Bone Tissue Engineering, *International Journal of Medical, Health, Biomedical, Bioengineering and Pharmaceutical Engineering* Vol:9, No:1, 2015(0 IF).
8. Ayesha Sohail, Sadia Arshad and Sana Javed, Khadija Maqbool: Numerical analysis of fractional-order tumor model, *International Journal of Biomathematics*, Vol. 8, No. 5 (2015) (0.85 IF)
9. Sarmad Arshad , Ayesha Sohail , Khadija Maqbool: Nonlinear shallow water waves: A fractional order approach, *Alexandria Engineering Journal* (2016) 55, 525–532 (0.0 IF)
10. Khadija Maqbool, Anwar Beg, Ayesha sohail, Analytical solutions for wall slip effects on magnetohydrodynamic oscillatory rotating plate and channel flows in porous media using a fractional burgers viscoelastic model, *The European Physical Journal - Plus.* 2016 131-140. (1.8 IF)
11. Khadija MaqboolI, Sidra Shaheen, Ammir Mann: Exact solution of cilia induced flow of a Jeffery fluid in an inclined porous tube, *SpringerPlus* (2016) 5:1379 (0.9 IF)
12. Khadija Maqbool and Ayesha Sohail, Simultaneous effect of heat and Hall current on the Johnson-Segalmanfluid between two rotating disks, **accepted in** *Arabian Journal of Mathematics*
13. Khadija Maqbool, Naeema Manzoor and Ayesha Sohail, Hall Effect of the boundary layer flow of FENE-P fluid over a stretching sheet, **Submitted in Applied Mathematics and computer application**

14. Khadija Maqbool and Ammir Mann, Fractional nonlinear reaction diffusion system of Lotka Voltera Type, **accepted in Int. J. Bio Math**
15. Khadija Maqbool and Ammir Mann, Unsteady flow of Jeffrey fluid with ramped wall velocity and temperature , **Submitted in J mathematical computation.**
16. Khadija Maqbool, Ammir Mann , A. M. Siddiqui, Sidra Shaheen, Fractional generalized Burger fluid flow due to metachronal wave of cilia in an inclined tube **submitted in Bulletin of Mathematical Biology**
17. A. M. Siddiqui , Khadija Maqbool, A. Sohail, Ammir Mann, Radiative heat transfer in the chemically reactive unsteady MHD squeezed flow of second order fluid with heat source **submitted in Heat Transfer Research**
18. Khadija Maqbool, Sidra Shaheen, Ammir Mann , A. M. Siddiqui, Fractional Burger fluid flow through an inclined ciliated tube **submitted in Advances in Mechanical Engineering**
19. Khadija Maqbool and Ayesha Sohail, Numerical study of unsteady heat and mass transfer with ramped wall and slip effect **submitted in The European Physical Journal - Plus**
20. Khadija Maqbool and Ayesha Sohail Wall Shear Stress Effects on MHD Flow in a Porous Medium with Ramped Wall Temperature **submitted in Archives in Mechanics**

#### **REFERENCES:**

1. Dr. Tasawar Hayat

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Distinguished National professor and Chairman

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2. Dr. A. M. Siddiqui

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3. Rehmat Ellahi

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