

# DR. MUHAMMAD QASIM

## **Assistant Professor**

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Permanent Address House No. 78-B, Street No. 20, Sector G-6/2,

Islamabad-Pakistan September 12, 1984

Date of Birth September 1
Gender Male
Nationality Pakistani
Martial Status Un-Married

#### **EDUCATION/ACADEMIC DEGREES**

Ph.D (2011): Department of Mathematics

Quaid-i-Azam University, Islamabad, Pakistan Major Field: Mathematics (Fluid Mechanics) Thesis Title: Two and three dimensional flows in

Non-Newtonian fluids

M.Sc (2007): Department of Mathematics

International Islamic University, Pakistan

Major Field: Mathematics Applied Mathematics

**B.Sc** (2004): Government Colledge for Men, Islamabad

Major Subjects: Mathematics (A+B) & Statistics

# RESEARCH AREA(S)

- Fluid Mechanics, Newtonian and non-Newtonian fluids
- Heat and Mass Transfer Analysis
- Solutions of Non-Linear Differential Equations
- Biofluid Mechanics (Peristaltic Flows)
- Mathematical Modeling and Simulation

### AWARDS/SCHOLARSHIPS/HONORS

- Research Productivity Award (RPA) 2011-2012 by Pakistan Council for Science and Technology (PCST)
- Research Productivity Award (RPA) 2011 by COMSATS Institute of Information Technology, Islamabad-Pakistan.
- Research Grant from the Research Productivity Allowance of Dr. Tasawar Hayat by PCST for the year 2008-2009.
- Merit scholarship during M.Sc by International Islamic University Grants, Islamabad, Pakistan.
- Merit scholarship during M.Phil/Ph.D by Quaid-i-Azam University Grants, Islamabad, Pakistan.
- Annual scholarship from Social welfare organization from class six to Msc.
- Reviewer of 21 International journals.
- Editorial Board member of **01** journal.
- Having 25 publications, 102 citations, 27.104 impact factor and h-index 07 in 03 years.

### PROFESSIONAL EXPERIENCE

- Working as an Assistant Professor in Mathematics Department at COMSATS Institute of InformationTechnology, Islamabad, Pakistan from Aug. 2011 to date.
- Worked as Senior Research Assistant at Quaid-i-Azam University from Sep. 2008-March 2011
- Worked as a Visting Assistant Professor in Physics Department at International Islamic University from Sep. 2010 to May. 2011
- Worked as Visiting lecturer in Federal Urdu University of Science and Technology from March 2011-July2011
- Worked as a Visting lecturer in COMWAVE Institute of Science and Information Technology Islamabad from July. 2007 to May. 2010.

### SEMINARS DELIVERED

- 1. Steady flow of an Powell-Erying fluid with convective boundary conditions, International workshop on Mathematical Sciences and its applications, at COMSTECH 23-25, May 2011.
- 2. "Three dimensional flow of an elastico-viscous fluid with mass transfer" at Department of Mathematics, 2010

3. "Radiation and mass transfer effects on the magnetohydrodynamic unsteady flow induced by a stretching sheet" at Department of Mathematics, 2009.

### **CONFERENCES ATTENDED**

- 1. International Conference on Recent Developments in Fluid Mechanics, July 02-04, 2007, Quaid-i-Azam University, Islamabad-Pakistan.
- 2. Second international conference on "Recent Developments in Fluid Mechanics", August 11-13, 2008, Quaid-i-Azam University, Islamabad-Pakistan
- 3. Third international conference on "Recent Developments in Fluid Mechanics", July-01, August 2009, Quaid-i-Azam University, Islamabad-Pakistan.
- 4. International Scientific Spring 2010, March 1-6 2010 at National Center for Physics (NCP) Islamabad, Pakistan
- 5. All Pakistan Mathematics Conference to be held from July 22-23, 2010 at National Center for Physics (NCP) Islamabad, Pakistan
- 6. Fourth International conference on "Recent Developments in Fluid Mechanics", August, 1-3, 2010, Quaid-i-Azam University, Islamabad-Pakistan
- 7. International workshop on "Mathematical Sciences and their Applications" 23-25 May 2011, COMSTECH Islamabad, Pakistan.

### REVIEWER of INTERNATIONAL JOURNALS

- 1. Communications in Non-Linear Sciences and Numerical Simulation
- 2. Zeitschrift Fur Natuurforschung A (ZNA)
- 3. Candian Journal of Chemical Engineering
- 4. Asia Pacific Journal of Chemical Engineering
- 5. International Journal for Numerical Methods in Fluids
- 6. Journal of Mechanical Science and Technology
- 7. Scientica Iranica (Iran)
- 8. International Journal of the Physical Sciences
- 9. The Walailak Journal of Science and Technology (WJST)
- 10. Thermal Sciences (The Republic of Serbia)
- 11. Nonlinear Analysis: Modelling and Control
- 12. ASME Journal of Heat Transfer
- 13. The World Scientific and Engineering Academy and Society (WSEAS)
- 14. ASME Journal of Fluid Engineering
- 15. World Applied Sciences Journal
- 16. Chemical Engineering Communications
- 17. Journal of Porous Media
- 18. Journal of Mechanics (Tiawan)
- 19. Ain Shams Engineering Journal
- 20. International Journal of Latest Trends in Mathematics
- 21. MAEJO International Journal of Science and Technology



### EDITORIAL BOARD MEMBER

Mathematical Modelling and Applied Computing (MMAC)

# PEER-REVIEWED JOURNAL PUBLICATIONS

(From 2010 to date) Published

#### 2010

1. Radiation and mass transfer effects on the magnetohydrodynamic unsteady flow induced by a stretching sheet

Zeitschrift Fur Naturforschung A, 65, 231-239 (2010) Germany,

Authors: T. Hayat, M. Qasim and Z. Abbas

Impact Factor: 0.940, Citations: 24

2. Homotopy solutions for the unsteady three dimensional MHD flow and mass transfer in a porous media

Communications in Non-Linear Science and Numerical Simulation, 15(9), 2375-2387 (2010) **U.K** 

Authors: T. Hayat, M. Qasim and Z. Abbas

Impact Factor: 2.806, Citations: 13

3. Influence of thermal radiation and Joule heating on Magnetohydrodynamic flow of a Maxwell fluid in the presence of thermophoresis.

International Journal of Heat Mass Transfer, 53, 4780-4788 (2010), U. S. A

Authors: T. Hayat and M. Qasim Impact factor: 2.407, Citations: 05

4. Magnetohydrodynamic flow and mass transfer of a Jeffery fluid over a nonlinear stretching surface

Zeitschrift Fur Naturforschung A, 65a, 1111-1120 (2010), Germany

Authors: T. Hayat, M. Qasim, Z. Abbas and Awatif A. Hendi

Impact Factor: **0.940**, Citations: **00** 

5. Effects of Thermal Radiation on Unsteady Magnetohydrodynamic Flow of a Micropolar Fluid with Heat and Mass Transfer

Zeitschrift Fur Naturforschung A, 65 (2010) 950-960 Germany.

Author(s): T. Hayat and M. Qasim Impact Factor: 0.940, Citations: 00

#### 2011

- 6. MHD flow and heat transfer over permeable stretching sheet with slip condition International Journal for Numerical Methods in Fluids, 66 (2011) 963-975, **U.S.A** Authors: T. Hayat, **M. Qasim** and S. Mesloub Impact Factor: **1.176**, Citations: **09**
- 7. Effects of mass transfer on the stagnation point flow of an upper-convected Maxwell (UCM) fluid International Journal of Heat and Mass Transfer 54 (2011) 3777-3782, **U. S. A** Authors: T. Hayat, M. Awais, **M. Qasim** and A. A. Hendi Impact Factor: **2.407**, Citations: **04**
- 8. Mixed convection flow of a micropolar fluid with radiation and chemical reaction International Journal for Numerical Methods in Fluids, 66, (2011), 950-960, U.S.A Authors: T. Hayat, S. A. Shehzad and M. Qasim Impact Factor: 1.176, Citations: 01
- 9. Three dimensional flow of an elastico-viscous fluid with mass transfer International Journal for Numerical Methods in Fluids, 66 (2011), 194-211, **U.S.A** Authors: T. Hayat, **M. Qasim** and Z. Abbas Impact Factor: **1.176**, Citations: **08**
- Steady flow of a Maxwell fluid with convective boundary conditions Zeitschrift Fur Naturforschung A, 66 (2011), 417-422, Germany Authors: T. Hayat, S. A. Shehzad, M. Qasim and S. Obaidat Impact Factor: 0.940, Citations: 00
- 11. Radiation and magnetic field effects on the unsteady mixed convection flow of a second grade fluid over a vertical stretching sheet
  International Journal for Numerical Methods in Fluids, 66 (2011) 963-975, **U.S.A**Authors: T. Hayat and **M. Qasim**Impact Factor: **1.176**, Citations: **06**
- 12. Thermal Radiation Effects on the Mixed Convection Stagnation-Point Flow in a Jeffery Fluid Zeitschrift Fur Naturforschung A, 66, 606 614 (2011), Germany Authors: T. Hayat, S. A. Shehzad, M. Qasim and S. Obaidat Impact Factor: 0.940, Citations: 00
- 13. Heat and mass transfer flow in an electrically conducting fluid over a permeable stretching sheet with ohmic dissipation
  Journal of Porous Media, **U.S.A**Authors: T. Hayat, **M. Qasim** and Z. Abbas
  Impact Factor: **0.516**, Citations: **00**

14. Effects of slip conditions on stretching flow with ohmic dissipation and thermal radiation

Heat Transfer: Asian Research

Authors: M. Qasim, T. Hayat and A. A. Hendi

Impact Factor: 0.000, Citations: 00

15. Flow of a Second grade fluid with convective boundary conditions

Thermal Science, 15(2), 253-261 (2011), Serbia

Authors: T. Hayat, S. A. Shehzad, M. Qasim and S. Obaidat

Impact Factor: **0.779**, Citations: **00** 

#### 2012

16. Radiative flow of Jeffery fluid in a porous medium with power law heat flux and heat source

Nuclear Engineering and Design, 243 (2012) 15-19, U.K

Authors: T. Havat, S. A. Shehzad, M. Qasim and S. Obaidat

Impact Factor: **0.765**, Citations: **00** 

17. Steady flow of an Eyring Powell fluid over a moving surface with convective boundary conditions.

International Journal of Heat and Mass Transfer, 55 (2012) 1817-1822, U. S. A

Authors: T. Hayat, Z. Igbal, M. Qasim and S. Obaidat.

Impact factor: 2.407, Citations: 00

18. Steady flow of a Williamson fluid past a porous plate
Asia Pacific Journal of Chemical Engineering, 7 (2012), 302-306, **Australia**Authors: T. Hayat, Umbreen Khalid and **M. Qasim**Impact Factor: **0.758**, Citations: **00** 

19. Radiative flow with variable thermal conductivity and porous medium T. Hayat, S. A. Shehzad, **M. Qasim** and Awatif A. Hendi Zeitschrift Fur Naturforschung A, 67 (2012), 153-159, **Germany** Impact Factor: **0.940**, Citations: **00** 

20. Radiation effect on the viscoelastic flow along an inclined stretching sheet Zeitschrift Fur Naturforschung A, 67 (2012) 195-202, **Germany** Authors: **M. Qasim**, T. Hayat and S. Obaidat Impact Factor: **0.940**, Citations: **00** 

21. Heat transfer in a Couple stress fluid over a continuously moving surface with internal heat generation and convective boundary conditions Zeitschrift Fur Naturforschung A, 67 (2012) 217-224, **Germany** Authors: T. Hayat, Z. Iqbal, **M. Qasim** and S. Obaidat

Impact Factor: 0.940, Citations: 00

#### In press

22. Boundary layer flow of Maxwell fluid with power law heat flux and heat source, International Journal for Numerical methods in Heat and Fluid Flow, Authors: T. Hayat, S. A. Shehzad, **M. Qasim** and Awatif A. Hendi,

Impact Factor: **0.752**, Citations: **00** 

23. On mixed convection stagnation point flow of Maxwell fluid with thermal radiation and source/sink.

International Journal of Heat and Mass Transfer, U. S. A Authors: T. Hayat, Ansa Rafique, M. Qasim and S. Obaidat.

Impact factor: 2.407, Citations: 00

24. Flow of a Jeffrey fluid with convective boundary conditions International Journal for Numerical Methods in Fluids, **U.S.A** Authors: T. Hayat, S. Asad and **M. Qasim** 

Impact Factor: 1.176, Citations: 00

25. Effects of mass transfer on MHD flow of Casson fluid with chemical reaction and suction.

Brazilian Journal of Chemical Engineering

Authors: T. Hayat, S. A. Shehzad, M. Qasim and Awatif A. Hendi,

Impact Factor: **0.637**, Citations:

<b>Total Publications</b>	25
<b>International Publications</b>	25
ISI Publications	24
<b>National Publications</b>	00
Impact Factor	27.134

(Up to 25 papers)

Citations 106 h-index 07