

DR MUHAMMAD ASHRAF

Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM),
Bahauddin Zakariya University, Multan, Pakistan.

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PERSONAL INFORMATIONS

Date of Birth: March 1, 1971
Marital Status: Married
Nationality: Pakistani
CNIC: 36302-1878783-7
Address (Res): H. No. 161. St. No. 5, Adel Town, P/O Timber Market, Multan,
Pakistan

SUMMARY OF CV

Present Position: Professor, Centre for Advanced Studies in Pure and Applied
Mathematics (CASPAM), Bahauddin Zakariya University, Multan,
Pakistan
Experience: 29 years, 02 months, 23 days
Field of Interest: Fluid Mechanics
Research Students Supervised:
MS/M. Phil: 58(completed), 04(theses submitted), 03(in progress)
Ph. D: 10(completed), 2(theses submitted), 03(in progress)
No. of Publications: 72(published)

PROFESSIONAL & ACADEMIC QUALIFICATIONS

Ph. D (Mathematics): Centre for Advanced Studies in Pure and Applied Mathematics
(CASPAM), Bahauddin Zakariya University, Multan, Pakistan
2006
Ph. D Thesis Title: Numerical Solutions of the Problems Related to Micropolar
Fluids Flow
M. Sc (Applied Mathematics): Centre for Advanced Studies in Pure and Applied
Mathematics (CASPAM), Bahauddin Zakariya
University, Multan, Pakistan (1994), 1st Division (Gold
Medalist)
B. Sc (Maths A&B, Physics): Govt. Emerson College, Multan, Pakistan (1991),
5th position, 1st Division
F. Sc (Pre Engineering): Govt. Emerson College, Multan, Pakistan (1989),
1st Division
SSC (Science): Govt. Millat High School, Rangil Pur, Multan, Pakistan
(1987), 1st Division

DISTINCTIONS

- 5th position in B. Sc, Bahauddin Zakariya University, Multan, Pakistan
- 1st position in M. Sc Mathematics, Bahauddin Zakariya University, Multan, Pakistan
- Research Productivity Award 2012
- Best Author Award 2011, Journal of Mechanics

WORK EXPERIENCE

Director:	Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University, Multan, Pakistan (27-07-2016 to 26-07-2019)
Professor:	Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University, Multan, Pakistan (28-12-2014 to date)
Associate Professor:	Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University, Multan, Pakistan (27-03-2015 to 31-03-2016)
Assistant Professor:	Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University, Multan, Pakistan (12-08-2007 to 26-03-2015)
Lecturer:	Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University, Multan, Pakistan (11-07-1995 to 11-08-2007)

COURSES TAUGHT

Ph. D (Mathematics):	Independent Study I & II
MS/M. Phil (Mathematics):	Advanced Fluid Dynamics, Research Methodology, Mathematics Teaching Techniques
BS (4-year)/M. Sc:	Calculus, Classical Mechanics, Fluid Mechanics, Vector and Tensor Analysis, Mathematical Methods, Numerical Analysis, Differential Equations, Linear Algebra

RESEARCH AREAS

Field of Research:

- CFD
- Newtonian/ Non-Newtonian Fluids
- Hybrid Nanofluids
- Biofluids
- Heat and Mass Transfer

ADMINISTRATIVE ASSIGNMENTS

- Member, Academic Council, Bahauddin Zakariya University, Multan
- Member, Board of Faculty (Science), Bahauddin Zakariya University, Multan
- Member, Board of Study, CASPAM, Bahauddin Zakariya University, Multan
- Member, Board of Study, Department of Mathematics, The Islamia University of Bahawalpur (20-01-2017 to 19-01-2020)
- Member, Scholarship Award Committee under the Program “British Council Scholarships”, Bahauddin Zakariya University, Multan

- Director, CASPAM, Bahauddin Zakariya University, Multan
 - (27-7-2016 to 26-7-2019)
- Convener, Board of Study, CASPAM, Bahauddin Zakariya University, Multan
 - (27-07-2016 to 26-07-2019)
- Chairman, Departmental M. Sc, MS/ M. Phil and Ph. D admission committees,
 - CASPAM (27-07-2016 to 26-07-2019)
- Chairman, Departmental examination committee, CASPAM (27-07-2016 to 26-7-2019)
- Chairman, Departmental synopsis review committee for Ph. D (27-07-2016 to 26-7-2019)
- Member, Departmental synopsis review committee for Ph. D
- Course Coordinator, MS/M Phil Program, CASPAM, Bahauddin Zakariya University, Multan (8-9-2014 to 27-7-2019)
- Conference Chair, CASPAM International Conference on Mathematics and Applications (November 6-7, 2017) Bahauddin Zakariya University, Multan
- Member, DTRC, Department of Mathematics, The University of Poonch, Rawalakot, AJ & K.
- Member, DTRC, Department of Mathematics, The Women University, Multan
- Member (till 2019), DTRC, CASPAM, Bahauddin Zakariya University, Multan.
- Chair, Organizing Committee, Workshop on teaching undergraduate mathematics (August, 28, 2017), Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University, Multan, Pakistan
- Chair, Organizing Committee, A two-day workshop on turbulent modeling and simulation (December, 19-20, 2018), Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University, Multan, Pakistan
- Chair, Organizing Committee, One day workshop on combinatorial graph theory and its applications (March 13, 2018), Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University, Multan, Pakistan
- Chair, Organizing Committee, CASPAM Regional Student Olympiad of Mathematics (2017, 2018, 2019), Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University, Multan, Pakistan
- Acted as Advisor for Interview for the post of Assistant Professor (Mathematics) (Male) on 30-08-2017 through Punjab Public Service Commission, Lahore
- Member, Departmental committee to conduct Admission Test for M. Phil & Ph. D Programs in Mathematics, CASPAM
- Member, Departmental examination committee, CASPAM
- Member, Departmental committee for Appointment of Part Time Teachers at CASPAM
- Member, Departmental MS/ M. Phil and Ph. D admission committees, CASPAM

LIST OF STUDENTS OF M.PHIL MATHEMATICS SUPERVISED BY PROF. DR. MUHAMMAD ASHRAF

S #	Name of students	Name of supervisor	Title of thesis	Session
1.	Muhammad Ashraf	Dr. Muhammad Ashraf	Numerical Simulation of Hydromagnetic Stagnation Point	2005-07

			Flow of Micropolar Fluid with Heat Transfer over a Permeable Surface.	
2.	Jawad Raza	Dr. Muhammad Ashraf	Numerical study of three dimensional flow of micropolar fluids in a porous channel	2006-08
3.	Sumra Bashir	Dr. Muhammad Ashraf	MHD stagnation flow of micropolar fluids towards a shrinking sheet	2006-08
4.	Amar Rauf	Dr. Muhammad Ashraf	Numerical simulation of MHD flow of micropolar fluids between two porous disks	2006-08
5.	Kiran Batool	Dr. Muhammad Ashraf	Numerical investigations of MHD flow of micropolar fluids over a stretching disk.	2007-09
6.	Qamar Sultan	Dr. Muhammad Ashraf	Numerical study for mixed convection in MHD stagnation point flow of micropolar fluids towards a shrinking surface.	2007-09
7.	Muhammad Kamran Siddiq	Dr. Muhammad Ashraf	Numerical Study of Micropolar Fluid Flow between Two Stretchable Disks	2008-10
8.	Muhammad Abu Bakar	Dr. Muhammad Ashraf	Flow of a Micropolar Fluid in a Channel with Shrinking Porous Walls	2008-10
9.	Muhammad Rashid	Dr. Muhammad Ashraf	MHD Stagnation Point Flow of Micropolar Fluids over a Shrinking Sheet with Heat Generation and Radiation Effects	2008-10
10.	Muhammad Sohail Aslam	Dr. Muhammad Ashraf	Effects of thermal radiation on MHD stagnation point flow of a micropolar fluid towards a heated surface.	2009-11
11.	Shazia Altaf	Dr. Muhammad Ashraf	Heat and mass transfer in stagnation point flow of a micropolar fluid towards a heated surface with chemical reaction.	2009-11
12.	Nimra Jameel	Dr. Muhammad Ashraf	MHD micropolar fluid flow and heat transfer in a channel with stretching/shrinking walls	2010-12
13.	Rafia Bashir	Dr. Muhammad Ashraf	MHD convective heat transfer in nanofluid flows over some stretchable surfaces	2010-12
14.	Asia Yasmin	Dr. Muhammad Ashraf	Heat transfer aspect of magneto-micropolar fluid flow in a porous channel with expanding/ contracting walls	2011-13

15.	Maera Ghaffar	Dr. Muhammad Ashraf	Thermal characteristics of hydromagnetic flow of micropolar fluid between two orthogonally moving porous disks	2011-13
16.	Ashiq Ali	Dr. Muhammad Ashraf	Mixed convection in MHD axisymmetric stagnation point flow of micropolar fluid over a surface with radiation and viscous dissipation effects	2011-13
17.	Shaheen Akhtar	Dr. Muhammad Ashraf	MHD flow and thermal characteristics of micropolar fluid in a porous medium between two stretchable disks	2012-14
18.	Altaf Hussain	Dr. Muhammad Ashraf	Analytical study of revolving FHD flow due to a stretchable rotating porous disk.	2012-14
19.	Maria Batool	Dr. Muhammad Ashraf	On the interaction of external magnetic field with Casson fluid in a channel with shrinking walls	2013-15
20.	Abid Ali	Dr. Muhammad Ashraf	Influence of variable properties on convective flow due to a stretchable rotating disk in a porous medium.	2013-15
21.	Huma Gull	Dr. Muhammad Ashraf	MHD flow and heat transfer characteristics of a Casson fluid between two stretchable disks	2013-15
22.	Muhammad Asif Nawaz	Dr. Muhammad Ashraf	Micropolar fluid flow and heat transfer in a channel with slip condition at the lower stretching wall	2013-15 (Spring)
23.	Amanullah	Dr. Muhammad Ashraf	Combined effect of thermal radiation and viscous dissipation in hydromagnetic micropolar fluid flow between two shrinking disks.	2013-15 (Spring)
24.	Fariha Ismail	Dr. Muhammad Ashraf	Application digfractional transform method for suction driven unsteady flow between moving disks.	2013-15 (Spring)
25.	Imrana Zia	Prof. Dr. Muhammad Ashraf	Characteristics of micropolar fluid in a porous medium over a horizontal surface.	2014-16
26.	Haseeba Ghaffar	Prof. Dr. Muhammad Ashraf	A numerical study of the chemical reaction and melting heat transfer of a nanofluid over a stretching sheet	2014-16
27.	Sonia Kanwal	Prof. Dr. Muhammad Ashraf	Analysis of heat and mass transfer of Williamson nanofluid in the stagnation point flow.	2014-16

28.	Attia Anjum	Prof. Dr. Muhammad Ashraf	Effects of magnetic field and homogeneous-heterogeneous reactions in stagnation point flow of Casson fluid over a heated surface	2015-17
29.	Aftab Ahmad	Prof. Dr. Muhammad Ashraf	Chemical reaction effects on stagnation point flow of Casson fluid	2015-17
30.	Shazia Riaz	Prof. Dr. Muhammad Ashraf	Homogeneous-heterogeneous reactions in stagnation point flow of Casson fluid due to a shrinking sheet with thermal radiation	2015-17
31.	Muhammad Imran	Prof. Dr. Muhammad Ashraf	Mass and heat transfer in MHD Eyring-Powell nanofluid flow over a sheet embedded in a porous medium	2015-17
32.	Komal Khaleeq	Prof. Dr. Muhammad Ashraf	Numerical study of homogeneous-heterogeneous reactions in MHD flow and heat transfer of Newtonian fluid in a channel	2015-17
33.	Iqra Jamshaid	Prof. Dr. Muhammad Ashraf	MHD flow and thermal radiation of Tangent hyperbolic nanofluid over a sheet.	2016-18
34.	Rabia Kanwal	Prof. Dr. Muhammad Ashraf	MHD boundary layer flow of dusty fluid over a shrinking surface	2016-18
35.	Arfa Ahmed Gillani	Prof. Dr. Muhammad Ashraf	Flow and heat transfer of Tangent hyperbolic fluid over a sheet	2016-18
36.	Wasif Mumtaz	Prof. Dr. Muhammad Ashraf	Heat and mass transfer in stagnation point flow of hyperbolic Tangent fluid over a sheet	2016-18
37.	Kinza Arshad	Prof. Dr. Muhammad Ashraf	MHD stagnation point flow of Tangent hyperbolic fluid with chemical reaction.	2016-18
38.	Ameena Fatima	Prof. Dr. Muhammad Ashraf	Study of chemical reaction in mass transfer of hyperbolic Tangent fluid over a sheet.	2016-18
39.	Sidra Abbas	Prof. Dr. Muhammad Ashraf	Flow and heat transfer of dusty fluid over a sheet.	2016-18
40.	Muhammad Aamir	Prof. Dr. Muhammad Ashraf	Flow and heat transfer of dusty fluid over a sheet embedded in a porous medium	2017-19
41.	Aimin Fatima	Prof. Dr. Muhammad Ashraf	Radiation effects in the flow of nanofluid containing gyrotactic microorganism over a sheet	2017-19
42.	Aqsa Irshad	Prof. Dr. Muhammad Ashraf	Viscous dissipation effects in stagnation point flow with melting heat transfer over a sheet	2017-19
43.	Khadija Ejaz	Prof. Dr. Muhammad Ashraf	Study of melting heat transfer in MHD flow over a sheet	2017-19
44.	Mariam Fareed	Prof. Dr. Muhammad Ashraf	Effects of radiation and melting heat transfer in flow over a shrinking sheet	2017-19
45.	Iram Irshad	Prof. Dr. Muhammad Ashraf	Flow and heat transfer of nanofluid containing gyrotactic microorganism over a sheet in a porous medium.	2017-19

46.	Zahra Batool	Prof. Dr. Muhammad Ashraf		2018-20
47.	Asma Mukhtar	Prof. Dr. Muhammad Ashraf	Thermal radiations in flow and heat transfer between two rotating disks	2018-20
48.	Tahir Haider	Prof. Dr. Muhammad Ashraf	Effects of viscous dissipation on Bodewadt flow and heat transfer over a stretching disk	2018-20
49.	Muhammad Rizwan	Prof. Dr. Muhammad Ashraf	Study of Bioconvection in channel flow of a nanofluid containing gyrotactic microorganisms	2018-20
50.	Muhammad Abdullah	Prof. Dr. Muhammad Ashraf	Effects of inclined magnetic field and radiation on the flow and heat transfer of nanofluid over a surface	2020-22
51.	Ifra Arshad	Prof. Dr. Muhammad Ashraf	Flow and heat transfer analysis of hybrid nanofluid through a Forchheimer porous medium	2020-22
52.	Anas Norani	Prof. Dr. Muhammad Ashraf	Heat and mass transfer analysis of hybrid nanofluid through a Darcy porous medium with chemical reaction	2020-22
53.	Ahmad Raza	Prof. Dr. Muhammad Ashraf	Influence of inclined magnetic field on the flow of hybrid nanofluid over a sheet embedded in a porous medium	2020-22
54.	Sohail Aslam	Prof. Dr. Muhammad Ashraf	Analysis of flow and heat transfer of hybrid nanofluid over a disk embedded in a Darcy porous medium	2021-23
55.	Sana Ghazanfar	Prof. Dr. Muhammad Ashraf	Inclined Lorentz force effects on the flow and heat transfer of nanofluid over a disk	2021-23
56.	Bushra Aziz	Prof. Dr. Muhammad Ashraf	Numerical study of micropolar fluid flow over a disk embedded in a porous medium	2021-23

LIST OF STUDENTS OF M.PHIL MATHEMATICS SUPERVISED BY PROF. DR. MUHAMMAD ASHRAF (DIRECTORATE OF DISTANCE EDUCATION, BZU)

S #	Name of students	Name of supervisor	Title of thesis	Session
1.	Sohail Mumtaz	Prof. Dr. Muhammad Ashraf	Study of thermal radiations in fluid flow over a static wedge	2014-16
2.	Wasim Ahmad	Prof. Dr. Muhammad Ashraf	Chemical reaction effects in heat and mass transfer flow over a moving wedge	2014-16

LIST OF STUDENTS OF PH.D. MATHEMATICS SUPERVISED BY PROF. DR. MUHAMMAD ASHRAF

S #	Name of students	Name of supervisor	Title of thesis	Date of completion
1.	Kashif Ali	Prof. Dr. Muhammad Ashraf	Numerical simulation of some boundary layer flow problems	01-09-16
2.	Shahzad Ahmad	Prof. Dr. Muhammad Ashraf	Numerical simulation of some MHD flow problems	07-12-16
3.	Muhammad Zubair Akbar	Prof. Dr. Muhammad Ashraf	Numerical investigation of some flow and heat transfer problem related to nano fluids.	08-01-19
4.	Muhammad Ashraf	Prof. Dr. Muhammad Ashraf	Numerical study of some MHD flow problems of micropolar fluids.	08-01-19
5.	Muhammad Farooq Iqbal	Prof. Dr. Muhammad Ashraf	Numerical study of heat and mass transfer in some internal / external flows	08-01-19
6.	Kiran Batool	Prof. Dr. Muhammad Ashraf	Numerical solution of some convective heat transfer problems in Magnetohydrodynamics	08-01-19
7.	Asia Yasmin	Prof. Dr. Muhammad Ashraf	Numerical study of heat and mass transfer in MHD flows of some non-Newtonian fluids	29-06-2021
8.	Muhammad Kamran Siddique	Prof. Dr. Muhammad Ashraf	Analysis of heat transfer in some non-Newtonian flow problems under different working conditions	22-03-2022
9.	Sohail Ahmad	Prof. Dr. Muhammad Ashraf	Numerical study of some flows through porous media	02-02-2022
10.	Shaheen Akhter	Prof. Dr. Muhammad Ashraf	Numerical solution of some Darcy Forchheimer flow problems	02-11-2022

LIST OF REGISTERED STUDENTS OF PH.D. MATHEMATICS WITH PROF. DR. MUHAMMAD ASHRAF

S #	Name of students	Name of supervisor	Title of thesis	SESSION
1.	Muhammad Abdullah	Prof. Dr. Muhammad Ashraf	Study of some nano-structured flows under magnetic field environment: Drug delivery Application	
2.	Muhammad Aamir	Prof. Dr. Muhammad Ashraf	Artificial Neural network based investigation of some non Newton self similar flow problems	
3.	Rizwan Ahmad	Prof. Dr. Muhammad Ashraf	In progress	