Zafar Hayat Khan

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Khyber Pakhtunkhwa, Pakistan

Education	**University of Strathclyde**	Glasgow, U.K.

University of Strathclyde　　　　　　　　　　　　　　　　　Glasgow, U.K.
Department of Mathematics & Statistics
Ph.D. Industrial Mathematics
Dissertation: Mathematical modelling of moving evaporation fronts in porous media.
(Oct 2008 – Jan 2012)

COMSATS Institute of Information Technology　　　Abbottabad, Pakistan
Department of Mathematics
Master of Science: Applied Mathematics
Dissertation: Analytical study of heat transfer in hollow sphere.
(Mar 2006 – Sep 2007)

Institute of Education and Research　　　　　　　　Peshawar, Pakistan
Bachelor of Education: Participated in teaching Mathematics subjects program.
(Sep 2004 – Sep 2005)

University of Peshawar　　　　　　　　　　　　　　　Peshawar, Pakistan
Department of Mathematics
Master of Science: Mathematics (Jan 2002 – Aug 2004)

Islamia College　　　　　　　　　　　　　　　　　　Peshawar, Pakistan
Bachelor of Science: Mathematics & Computer Science
(Feb 2000 – Jan 2002)

Research Interests

- Liquid-vapour phase change problems in porous media
- Nanofluid Dynamics

Training　　　**Scottish Mathematical Sciences Training Centre**　　　Edinburgh, U.K.
(Nov 2008 – April 2009)

Awards

- PCST Research Productivity Award 2015
- Outstanding reviewer 2015: Canadian Journal of Physics
- Chinese Post-doctoral Fellow (2012 – 2014)
- Ph.D. Scholarship, HEC, Pakistan (2008 – 2012)

Research Experience

School of Mathematical Sciences, Peking University　　　Beijing, China
Advisor: Zhang Pingwen
Research Project: Heat and mass transfer of nanofluids
(July 2012 – July 2014)

The Mathematical Institute & St Hugh's College, Oxford　　　U.K.
Problem Presenter: C. Sean Bohun
Problem title: Modelling a cadaver decomposition island to estimate time of death

Team: M.J. Barons, A. Gideon, T. Ranner, N. Smith & Z.H. Khan
(06-09 April 2010)

UOS, Department of Mathematic & Statistics   Glasgow, U.K.
Advisors: Dr. D. Pritchard & Dr. J. Mackenzie
Research Project: Mathematical modelling of moving evaporation fronts in porous media (October 2008 – January 2012)

Teaching
Experience

University of Malakand, Department of Mathematics   Dir Lower, KPK, Pakistan
Mathematics, Assistant Professor.
Fluid Mechanics, Introduction to partial differential equations, Dimensional analysis (July 2016–present)

University of Malakand, Department of Mathematics   Dir Lower, KPK, Pakistan
Mathematics, Lecturer.
Fluid Mechanics, Introduction to partial differential equations, Dimensional analysis (July 2014–July 2016)

C.I.I.T, Department of Mathematics   Abbottabad, Pakistan
Mathematics, Lecturer.
Taught mathematics at undergraduate level. (Sep 2007 - Sep 2008)

U.E.T, Department of Basic Sciences   Peshawar, Pakistan
Numerical Analysis, Teaching Assistant.
Helped write exams papers and marking. (Nov 2005 - Mar 2006)

Presentations

"Stability of condensation front in a porous medium with heat extraction from above, British Applied Mathematics Colloquium 2011, University of Birmingham., 11th - 13th April 2011.

"Mathematical Modelling of Evaporation front in Porous Media, University of Strathclyde, Glasgow, 7th May 2010.

"Modelling a cadaver decomposition island to estimate time of death, University of Oxford, Oxford, 09th April 2010.

Selected Publications (Journal Papers)

1. "Anomaly of spontaneous transition to instability of liquidvapour front in a porous medium" ZH Khan, D Pritchard; International Journal of Heat and Mass Transfer Vol. 84, pp. 448–455 (2015).

2. "Flow and heat transfer of ferrofluids over a flat plate with uniform heat flux", Khan, W. A., Z. H. Khan, and R. U. Haq, The European Physical Journal Plus Vol. 130, pp. 1–10 (2015).

3. "Triple convective-diffusion boundary layer along a vertical flat plate in a porous medium saturated by a water-based nanofluid" ZH Khan, JR Culham, WA Khan, I Pop; International Journal of Thermal Sciences Vol. 90, pp. 53–61 (2015).

4. "Transition to instability of liquidvapour front in a porous medium cooled from above", Zafar Hayat Khan; International Journal of Heat and Mass Transfer Vol. 70, pp. 610–620 (2014).

5. "Heat transfer analysis of the peristaltic instinct of biviscosity fluid with the impact of thermal and velocity slips", Akbar, Noreen Sher, and Z. H. Khan,

International Communications in Heat and Mass Transfer Vol. 58 pp. 193–199 (2014).

6. "MHD boundary layer flow of a nanofluid containing gyrotactic microorganisms past a vertical plate with Navier slip"; WA Khan, OD Makinde, ZH Khan, International Journal of Heat and Mass Transfer Vol. 74, pp. 285–291 (2014)

7. "Triple diffusion along a horizontal plate in a porous medium with convective boundary condition", WA Khan, JR Culham, ZH Khan, I Pop, International Journal of Thermal Sciences Vol. 86, pp. 60–67 (2014).

8. "Peristaltic impulsion of MHD biviscosity fluid in a lopsided channel: Closed-form solution", Akbar, Noreen Sher, Z. H. Khan, and S. Nadeem, The European Physical Journal Plus Vol. 129.6, pp. 1–7 (2014).

9. "Triple diffusive free convection along a horizontal plate in porous media saturated by a nanofluid with convective boundary condition", ZH Khan, WA Khan, I Pop; International Journal of Heat and Mass Transfer, pp. 603–612 (2013).

10. "Liquid-vapour fronts in porous media: Multiplicity and stability of front positions", Khan Z.H., Pritchard D., International Journal of Heat and Mass Transfer Vol. 61, pp. 1–17 (2013).

11. "Buoyancy effects on MHD stagnation point flow and heat transfer of a nanofluid past a convectively heated stretching/shrinking sheet", Makinde, O. D., W. A. Khan, and Z. H. Khan, International Journal of Heat and Mass Transfer Vol. 62, pp. 526–533 (2013).

Publications (Conference Proceedings)	"Effect of variable thermal conductivity on heat transfer from a hollow sphere with heat generation using homotopy perturbation method", Zafar H. Khan, Rahim Gul, and Waqar A. Khan, Proceedings of ASME heat transfer summer conf collocated with the Fluids Engineering, Energy Sustainability and 3rd Energy Nanotechnology Conf. Vol. 1. 2008. "Heat transfer from solids with variable thermal conductivity and uniform internal heat generation using homotopy perturbation method", Zafar H. Khan, Rahim Gul & Waqar. A. Khan, Proceedings of the ASME Summer Heat Transfer Conference, HT 2008-56449, Volume 1, pp. 311-319, 2009.
Impact factor & Citations	105.049 & 1442, respectively.

Conferences

1. The 23rd Scottish Fluid Mechanics Meeting, University of Dundee, 19th May 2010

2. 3rd International Conference on 21st Century Mathematics, School of Mathematical Sciences, GC University, Lahore-Pakistan. (04-07 March 2007)

3. Symposium on Computational Complexities, CIIT, Abbottabad, Pakistan. (08-09 May 2006)

References

Dr. Pingwen Zhang
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Peking University
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Dr. David Pritchard
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Department of Mathematic & Statistics
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