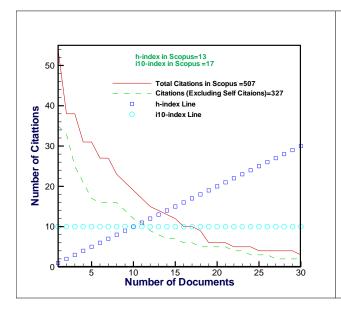
# Curriculum vitae of **Dr Mohammad Mehdi Rashidi**

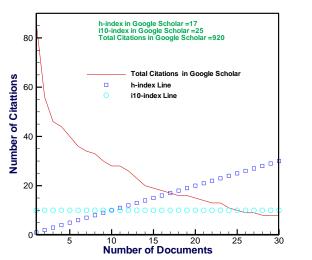
Professor of Mechanical Engineering, Bu-Ali Sina University

Post-Doctoral Researcher of Mechanical Engineering University of Michigan-Shanghai Jiao Tong University, Joint Institute

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#### 1 Interests

Teaching and conducting research in the fields of Heat and Mass Transfer, Thermodynamics, Exergy and Second Law Analysis, Computational Fluid Dynamics (CFD), Nonlinear Analysis, Engineering Mathematics, Numerical and Experimental Investigations of Nanofluids Flow for Increasing Heat Transfer, Study of Magnetohydrodynamic Viscous Flow and Study of Magnetic Beads Motion (Creeping Flow Regime).

## 2 Education

Ph.D., Tarbiat Modares University (2002) Thesis under Prof. Ghassem Heidarinejad entitled: "Numerical Simulation of Three-Dimensional Supersonic Flow Using Total Variation Diminishing Method with Multizone Approach".

M.Sc., Tarbiat Modares University (1997) Thesis under Dr. Behzad Ghadiri Dehkordi entitled: "Explosion Theory and Simulation of Jet Formation in a Shaped Charge".

B.Sc., Bu-Ali Sina University (1995) Thesis under Dr. Masoud Abbasi entitled: "Air Conditioning load Calculation for a Big Factory".

# 3 Experience

• Mar **2013**-present: Post-Doctoral Researcher at University of Michigan-Shanghai Jiao Tong University Joint Institute.

- Nove **2013**-present: Full Professor at Bu-Ali Sina University.
- Aug **2012** (for one month): Invited professor at University of the Witwatersrand, Johannesburg, South Africa.
- Oct **2011**-Mar **2013** Associate Professor, Department of Mechanical Engineering, Bu-Ali Sina University, Hamedan, Iran.
- Sep **2011** (for one month): Invited professor at Universite Paris Ouest, France.
- Aug. 2011-Feb 2012: Invited professor at Génie Mécanique, Université de Sherbrooke, Sherbrooke, QC, Canada J1K 2R, I could not accept this invitation because my university did not extend my sabbatical.
- Aug. **2010**-Aug **2011**: Invited professor at Génie Mécanique, Université de Sherbrooke, Sherbrooke, QC, Canada J1K 2R.
- Sep. **2002–2010**: Assistant Professor, then Associate Professor, Department of Mechanical Engineering, Bu-Ali Sina University, Hamedan, Iran.
- Sep. 2000–2006: Senior Research Scientist at an Iranian Research Company, and I haven't been allowed to publish my research results.

# 4 Course Taught

# 4.1. At Graduate Level (at Bu-Ali Sina University)

- 1- Advanced Thermodynamics
- 2- Advanced Heat Transfer (Conduction)
- 3- Advanced Heat Transfer (Radiation)
- 4- Computational Fluid Dynamics II (Compressible Flow)
- 5- Advanced Engineering Mathematics

# **4.2.** At UG Level (at Bu-Ali Sina University)

- 1- Thermodynamics I, II
- 2- Heat Transfer I, II
- 3- Fuel and Combustion
- 4- Turbomachinery
- 5- Engineering Mathematics
- 6- Heat Exchangers Design
- 7- Thermodynamics Laboratory

#### 5 Award

## First Winner-Applied Research:

V. Esfahanian, A. Azimi, K. Hejranfar, F. Torabi, **M.M. Rashidi**, M.H. Doulabi, M. Najafi, H. Kiani, An Aerodynamic Modeling Software for 3-D Complex Configurations Using Personal Computers, 15<sup>th</sup> Khwarizmi International Award, Ministry of Science, Research & Technology, Iranian Research Organization for Science & Technology, Feb (**2002**).

## 6 Service

## 6.1 ISI and Scopus Refereed Journals

- 1- Associate Editor of Journal of King Saud University-Engineering Sciences (Elsevier) (**Apr 2013 present**).
- 2- Editorial Board Member of Caspian Journal of Applied Sciences Research (ISI) (Oct 2013 present).
- 3- Editorial Board Member of Modern Applied Science (indexed in SCOPUS) (**Nov 2013 present**).
- 4- Editorial Board Member of Scientific Research and Essays (indexed in SCOPUS) (**Feb 2012 present**).
- 5- Editorial Board Member of Walailak Journal of Science and Technology (indexed in SCOPUS) (May 2013 present).

## 6.2 Non-ISI and Non-Scopus-Refereed Journals

- 1- Associate Editor of Journal of Engineering Research and Design (**Feb 2013 present**).
- 2- Associate Editor of Open Journal of Fluid Dynamics (Feb 2013 present).
- 3- Editorial Board Member of American Journal of Energy Research (**Jan 2014 present**).
- 4- Editorial Board Member of American Journal of Industrial Engineering (**Jan 2014 present**).
- 5- Editorial Board Member of American Journal of Mechanical Engineering (**Jan 2014 present**).
- 6- Editorial Board Member of Applications and Applied Mathematics: An International Journal (AAM) (**Dec 2013 present**).
- 7- Editorial Board Member of Applied Mathematics and Computational Intelligence (May 2012 present).
- 8- Editorial Board Member of British Journal of Mathematics & Computer Science (Feb 2013 present).

9- Editorial Board Member of Communications in Numerical Analysis (**Jan 2014** – **present**).

- 10- Editorial Board Member of Elixir International Journal (**Apr 2013 present**).
- 11-Editorial Board Member of Engineering, Technology & Applied Science Research" International Journal (Mar 2013 present).
- 12-Editorial Board Member of International Journal of Applied Mathematical Research (Mar 2012 present).
- 13-Editorial Board Member of International Journal of Engineering and Applied Sciences (2012 present).
- 14-Editorial Board Member of International Journal of Mechatronics, Electrical and Computer Technology (ISC) (2013 present).
- 15-Editorial Board Member of Journal of Advanced Computer Science & Technology (Mar 2012 present).
- 16-Editorial Board Member of Journal of Advances in Chemistry (Oct 2013 present).
- 17-Editorial Board Member of Journal of Advances in Mathematics (2013 present).
- 18-Editorial Board Member of Journal of Mechanical Engineering (Nov 2012 present).
- 19-Editorial Board Member of Journal of Mechanics Engineering and Automation (Apr 2013 present).
- 20-Editorial Board Member of Universal Journal of Mechanical Engineering (2012 present).

## **6.3** Technical Committee or Invited Speaker in Conferences

- 1- Resource Person in International Workshop on "Nonlinear Problems in Mathematics", 9-11 Oct (2012) at COMSTECH, Islamabad.
- 2- Scientific Committee of 18th International Mathematics Conference, 20-22 Dec (2013), IUB Campus, Bashundhara, Dhaka, Bangladesh.
- 3- Guest Editor for the Special Issue No. 2 of the Applications and Applied Mathematics: An International Journal (AAM), Entitled: The Eighteenth Bangladesh Mathematics (2013): Mathematics as a Tool for Development.
- 4- Member of Technical Program Committee for Computational Mathematics and Applications Conference (CMA **2014**), Jan 14-16, Shenzhen, China.
- 5- Invited Speaker in Conference on Computational Mechanics (CCM **2014**), May 16-18, Suzhou, China.
- 6- Organizing Committee Member in Conference on Computational Mechanics (CCM **2014**), May 16-18, Suzhou, China.
- 7- Member of Technical Program Committee for Spring World Congress on Engineering and Technology (SCET **2014**), April 16-18, Shanghai, China.
- 8- Member of Technical Program Committee for International Conference on Energy Science and Application (ICESA **2014**).

## **7** Research Projects

1- **M.M. Rashidi**, M.S. Aghighi, Numerical Simulation of Internal Flow by Roe Method, Bu-Ali Sina University (**2004**).

- 2- M.S. Aghighi, **M.M. Rashidi**, Investigation of Unstable Free Convection Flow in the Adjacent Stagnation Points, Bu-Ali Sina University (**2005**).
- 3- **M.M. Rashidi**, Numerical Simulation of Three-Dimensional Supersonic Viscous Flow, Bu-Ali Sina University (**2006**).
- 4- **M.M. Rashidi**, Analytical Solution of Nonlinear Heat Transfer Problems by Homotopy Perturbation Method, Bu-Ali Sina University (**2007**).
- 5- **M.M. Rashidi**, Analytical Solution of Fluid Dynamic Problems by Homotopy Analysis Method, Bu-Ali Sina University (**2010**).

#### **8** Publications

#### 8.1 Books

- ➤ M.M. Rashidi, Advanced Engineering Mathematics with Applied Examples of MATHEMATICA Software (2007) (320 pages) (in Persian).
- O. Anwar Bég, R. Bhargava M.M. Rashidi, Numerical Simulation in Micropolar Fluid Dynamics (Mathematical Modelling of Nonlinear Flows of Micropolar Fluids) Lambert Academic Press, Germany, (2011) (296 pages), http://www.bod.de/index.php?id=296&objk\_id=538131.

# 8.2 Publications in ISI and Scopus Refereed Journals

- 1- **M.M. Rashidi**, H. Shahmohamadi\*, S. Dinarvand\*, Analytic Approximate Solutions for Unsteady Two-Dimensional and Axisymmetric Squeezing Flows between Parallel Plates, <u>Mathematical Problems in Engineering</u>, Volume **2008** (2008), Article ID 935095, 13 pages (**IF= 1.383**).
- 2- M.M. Rashidi, D.D. Ganji, S. Dinarvand\*, Approximate Traveling Wave Solutions of Coupled Whitham-Broer-Kaup Shallow Water Equations by Homotopy Analysis Method, <u>Differential Equations and Nonlinear Mechanics</u>, Volume **2008** (2008), Article ID 243459, 8 pages (**Scopus**).
- 3- S. Dinarvand\*, **M.M. Rashidi**, A. Doosthoseini\*, Analytical Approximate Solutions for Two-Dimensional Viscous Flow through Expanding or Contracting Gaps with Permeable Walls, Central European Journal of Physics 7 (4) (2009) 791-799 (IF=0.905).

<sup>\*</sup> MS student

4- **M.M. Rashidi**, H. Shahmohamadi\*, Analytical Solution of Three-Dimensional Navier–Stokes Equations for the Flow Near an Infinite Rotating Disk, <u>Communications in Nonlinear Science and Numerical Simulation</u> 14 (7) (**2009**) 2999–3006 (**IF=2.773**).

- 5- **M.M. Rashidi**, G. Domairry, S. Dinarvand\*, Approximate Solutions for the Burger and Regularized Long Wave Equations by Means of the Homotopy Analysis Method, <u>Communications in Nonlinear Science and Numerical Simulation</u> 14 (3) (**2009**) 708–717 (**IF=2.773**).
- 6- **M.M. Rashidi**, D.D. Ganji, S. Dinarvand\*, Explicit Analytical Solutions of the Generalized Burger and Burger–Fisher Equations by Homotopy Perturbation Method, Numerical Methods for Partial Differential Equations 25 (2) (2009) 409-417 (**IF=1.212**).
- 7- **M.M. Rashidi**, G. Domairry, S. Dinarvand\*, The Homotopy Analysis Method for Explicit Analytical Solutions of Jaulent–Miodek Equations, <u>Numerical Methods for Partial Differential Equations</u> 25 (2) (2009) 430-439 (**IF=1.212**).
- 8- **M.M. Rashidi**, S. Dinarvand\*, Purely Analytic Approximate Solutions for Steady Three-Dimensional Problem of Condensation Film on Inclined Rotating Disk by Homotopy Analysis Method, <u>Nonlinear Analysis: Real World Applications</u> 10 (4) (**2009**) 2346–2356 (**IF=2.201**).
- 9- **M.M. Rashidi**, G. Domairry, New Analytical Solution of the Three-Dimensional Navier-Stokes Equations, <u>Modern Physics Letters B</u> 23 (26) (**2009**) 3147-3155 (**IF=0.479**).
- 10-**M.M. Rashidi**, The Modified Differential Transform Method for Solving MHD Boundary-Layer Equations, <u>Computer Physics Communications</u> 180 (11) (**2009**) 2210–2217 (**IF=3.078**).
- 11-**M.M. Rashidi**, E. Erfani\*, New Analytical Method for Solving Burgers' and Nonlinear Heat Transfer Equations and Comparison with HAM, <u>Computer Physics Communications</u> 180 (9) (2009) 1539–1544 (**IF=3.078**).
- 12-S. Dinarvand\*, **M.M. Rashidi**, A Reliable Treatment of Homotopy Analysis Method for Two-Dimensional Viscous Flow in a Rectangular Domain Bounded by Two Moving Porous Walls, <u>Nonlinear Analysis: Real World Applications</u> 11 (3) (**2010**) 1502-1512 (**IF=2.201**).
- 13-S. Dinarvand\*, A. DoostHoseini\*, E. DoostHoseini, **M.M. Rashidi**, Series Solutions for Unsteady Laminar MHD Flow Near Forward Stagnation Point of an Impulsively Rotating and Translating Sphere in Presence of Buoyancy Forces, <u>Nonlinear Analysis:</u> Real World Applications 11 (2) (2010) 1159-1169 (IF=2.201).
- 14-S. Dinarvand\*, **M.M. Rashidi**, H. Shahmohamadi\*, Analytic Approximate Solution of Three-Dimensional Navier–Stokes Equations of Flow between Two Stretchable Disks, <u>Numerical Methods for Partial Differential Equations</u> 26 (6) (**2010**) 1594–1607 (**IF=1.212**).
- 15-**M.M. Rashidi**, S.A. Mohimanian Pour\* Analytic Approximate Solutions for Unsteady Boundary-Layer Flow and Heat Transfer due to a Stretching Sheet by Homotopy Analysis Method, Nonlinear Analysis: Modelling and Control 15 (1) (**2010**) 83–95 (**ISI**).

16-**M.M. Rashidi**, M. Keimanesh\*, Using Differential Transform Method and Padé Approximant for Solving MHD Flow in a Laminar Liquid Film from a Horizontal Stretching Surface, <u>Mathematical Problems in Engineering</u>, Volume 2010 (**2010**), Article ID 491319, 14 pages (**IF= 1.383**).

- 17-H. Shahmohamadi\*, **M.M. Rashidi**, A Novel Solution for the Glauert-Jet Problem by Variational Iteration Method-Padé Approximant, <u>Mathematical Problems in Engineering</u> Volume **2010** (2010), Article ID 501476, 7 pages (**IF= 1.383**).
- 18-M.M. Rashidi, N. Laraqi, S.M. Sadri\*, A Novel Analytical Solution of Mixed Convection about an Inclined Flat Plate Embedded in a Porous Medium Using the DTM-Padé, International Journal of Thermal Sciences 49 (12) (2010) 2405-2412 (IF= 2.470).
- 19-**M.M. Rashidi**, S.A. Mohimanian Pour\*, A Novel Analytical Solution of Heat Transfer of a Micropolar Fluid through a Porous Medium with Radiation by DTM-Padé, <u>Heat Transfer-Asian Research</u> 39 (8) (2010) 575-589 (Scopus).
- 20-**M.M. Rashidi**, S.A. Mohimanian Pour\*, N. Laraqi, A Semi-Analytical Solution of Micro Polar Flow in a Porous Channel with Mass Injection by Using Differential Transform Method, Nonlinear Analysis: Modelling and Control 15 (3) (**2010**) 341–350 (**ISI**).
- 21-**M.M. Rashidi**, S.A. Mohimanian Pour\*, Analytic Solution of Steady Three-Dimensional Problem of Condensation Film on Inclined Rotating Disk by Differential Transform Method, <u>Mathematical Problems in Engineering</u>, Volume **2010** (2010), Article ID 613230, 15 pages (**IF= 1.383**).
- 22-E. Erfani\*, **M.M. Rashidi**, A. Basiri parsa\*, The Modified Differential Transform Method for Solving Off-Centered Stagnation Flow towards a Rotating Disc, <u>International Journal of Computational Methods</u> 7 (4) (2010) 655-670 (Scopus).
- 23-**M.M. Rashidi**, A.M. Siddiqui, M. Asadi\*, Application of Homotopy Analysis Method to the Unsteady Squeezing Flow of a Second Grade Fluid between Circular Plates, <u>Mathematical Problems in Engineering</u>, Volume **2010**, Article ID 706840, 18 pages (**IF**= **1.383**).
- 24-**M.M. Rashidi**, H. Shahmohamadi\*, G. Domairry, Variational Iteration Method for Solving Three-Dimensional Navier–Stokes Equations of Flow Between Two Stretchable Disks, <u>Numerical Methods for Partial Differential Equations</u> 27 (2) (**2011**) 292–301 (**IF=1.212**).
- 25-**M.M. Rashidi**, D.D. Ganji, S.M. Sadri\*, New Analytical Solution of Stagnation Point Flow in a Porous Medium, <u>Journal of Porous Media</u> 14 (12) (**2011**) 1125–1135 (**IF=0.707**).
- 26-M.M. Rashidi, E. Erfani\*, The Modified Differential Transform Method for Investigating Nano Boundary-Layers over Stretching Surfaces, <u>International Journal of Numerical Methods for Heat and Fluid Flow</u> 21 (7) (2011) 864-883 (IF=1.093).
- 27-**M.M. Rashidi**, S.A. Mohimanian pour\* S. Abbasbandy, Analytic Approximate Solutions for Heat Transfer of a Micropolar Fluid through a Porous Medium with Radiation, Communications in Nonlinear Science and Numerical Simulations 16 (4) (**2011**) 1874–1889 (**IF=2.773**).

28-**M.M. Rashidi**, E. Erfani\*, A New Analytical Study of MHD Stagnation—Point Flow in Porous Media with Heat Transfer, <u>Computers & Fluids</u> 40 (1) (**2011**) 172–178 (**IF=1.467**).

- 29-**M.M. Rashidi**, M. Keimanesh\*, O. Anwar Bég, T.K. Hung, Magnetohydrodynamic BioRheological Transport Phenomena in a Porous Medium: a Simulation of Magnetic Blood Flow Control and Filtration, <u>International Journal for Numerical Methods in Biomedical Engineering 27 (6) (2011) 805–821 (**IF=1.31**).</u>
- 30-**M.M. Rashidi**, N. Laraqi, A. Basiri Parsa\*, Analytical Modeling of Heat Convection in Magnetized Micropolar Fluid by Using Modified Differential Transform Method, <u>Heat</u> Transfer-Asian Research 40 (3) (2011) 187-204 (ISI).
- 31-**M.M. Rashidi**, D.D. Ganji, H. Shahmohamadi\*, Variational Iteration Method for Two-Dimensional Steady Slip Flow in Micro-Channels, <u>Archive of Applied Mechanics</u> 81 (11) (**2011**) 1597-1605 (**IF=1.035**).
- 32-M. Hamraoui, T. Osman, A. Boucheffa, **M.M. Rashidi**, Analytical Modelling of the Three Dimensional Steady-State Temperature in a Bearing Ring, <u>Mechanics & Industry</u> 12 (**2011**) 1-4 (**IF=0.127**).
- 33-**M.M. Rashidi**, N. Rahimzadeh\*, N. Laraqi, Evaluation of Equations of State by Using Exergy for Air, Nitrogen and Oxygen on Throttle Reduction Efficiency, <u>International</u> Journal of Exergy 9 (3) (2011) 297-318 (**IF= 0.921**).
- 34-**M.M. Rashidi**, T. Hayat, E. Erfani\*, S.A. Mohimanian Pour, Awatif A-Hendi, Simultaneous Effects of Partial Slip and Thermal-Diffusion and Diffusion-Thermo on Steady MHD Convective Flow due to a Rotating Disk, <u>Communications in Nonlinear Science and Numerical Simulations</u> 16 (11) (**2011**) 4303–4317 (**IF=2.773**).
- 35-**M.M. Rashidi**, O. Anwar Bég, A. Basiriparsa\*, F. Nazari, Analysis and Optimization of a Transcritical Power Cycle with Regenerator Using Artificial Neural Networks and Genetic Algorithms, <u>Proceedings of the Institution of Mechanical Engineers</u>, Part A: Journal of Power and Energy 225 (6) (**2011**) 701-717 (**IF= 0.635**).
- 36-N. Laraqi, **M.M. Rashidi**, J.M. Garcia de Maria, A. Baïri, Analytical Model for the Thermo-Hydrodynamic Behavior of a Thin Lubricant Film, <u>Tribology International</u> 44 (9) (**2011**) 1083-1086 (**IF= 1.536**).
- 37-**M.M. Rashidi**, T. Hayat, A. Basiriparsa\*, Solving of Boundary-Layer Equations with Transpiration Effects, Governance on a Vertical Permeable Cylinder Using Modified Differential Transform Method, <u>Heat Transfer-Asian Research</u> 40 (8) (2011) 677–692 (ISI).
- 38-**M.M. Rashidi**, N. Galanis, F. Nazari, A. Basiri Parsa\*, L. Shamekhi, Parametric Analysis and Optimization of Regenerative Clausius and Organic Rankine Cycles with Two Feedwater Heaters Using Artificial Bees Colony and Artificial Neural Network, Energy 36 (9) (2011) 5728-5740 (IF= 3.651).
- 39-M. Keimanesh\*, **M.M. Rashidi**, Ali J. Chamkha, R. Jafari, Study of a Third Grade Non-Newtonian Fluid Flow between Two Parallel Plates Using the Multi-Step Differential

- Transform Method, <u>Computers and Mathematics with Applications</u> 62 (8) (**2011**) 2871–2891 (**IF= 2.069**).
- 40-H. Shahmohamadi\*, **M.M. Rashidi**, Explicit Solutions for Steady Three-Dimensional Problem of Condensation Film on Inclined Rotating Disk, <u>International Journal of Fluid Mechanics Research</u> 38 (5) (**2011**) 424-436 (**Scopus**).
- 41-O. Anwar Bég, **M.M. Rashidi**, T.A. Bég, M. Asadi\*, Homotopy Analysis of Transient Magneto-Bio-Fluid Dynamics of Micropolar Squeeze Film in a Porous Medium: a Model for Magneto-Bio-Rheological Lubrication, <u>Journal of Mechanics in Medicine and Biology</u> 12 (03) (**2012**) (**IF= 0.758**).
- 42-**M.M. Rashidi**, O. Anwar Bég, A. Habibzadeh, First and Second Law Analysis of an Ejector Expansion Joule-Thomson Cryogenic Refrigeration Cycle, <u>International Journal of Energy Research</u> 36 (2) (2012) 231–240 (**IF= 1.987**).
- 43-**M.M.** Rashidi, M.M. Bastani\*, O. Anwar Bég, Numerical Simulation of Axisymmetric Supersonic Viscous Flow over a Blunt Cone with a Diagonal Fourth Order Finite Difference Method, <u>Proceedings of the Institution of Mechanical Engineers</u>, <u>Part G</u>, Journal of Aerospace Engineering 226 (3) (2012) 310-326 (IF= 0.400).
- 44-**M.M. Rashidi**, E. Erfani\*, Analytical Method for Solving Steady MHD Convective and Slip Flow due to a Rotating Disk with Viscous Dissipation and Ohmic Heating, Engineering Computations 29 (6) (2012) 562–579 (IF= 1.214).
- 45-**M.M. Rashidi**, M. Keimanesh\*, S.C. Rajvanshi, Study of Pulsatile Flow in a Porous Annulus with the Homotopy Analysis Method, <u>International Journal of Numerical Methods for Heat and Fluid Flow</u> 22 (8) (2012) 971-989 (**IF=1.093**).
- 46-**M.M. Rashidi**, O. Anwar Bég, N. Rahimzadeh\*, A Generalized Differential Transform Method for Combined Free and Forced Convection Flow about Inclined Surfaces in Porous Media, <u>Chemical Engineering Communications</u> 199 (2) (**2012**) 257-282 (**IF**= **1.052**).
- 47-**M.M. Rashidi**, O. Anwar Bég, M.T. Rastegari\*, A Study of Non-Newtonian Flow and Heat Transfer over a Non-Isothermal Wedge Using the Homotopy Analysis Method, <u>Chemical Engineering Communications</u> 199 (2) (**2012**) 231-256 (**IF= 1.052**).
- 48-**M.M. Rashidi**, S.A. Mohimanian Pour\*, T. Hayat, S. Obaidat, Analytic Approximate Solutions for Steady Flow over a Rotating Disk in Porous Medium with Heat Transfer by Homotopy Analysis Method, <u>Computers & Fluids</u> 54 (**2012**) 1–9 (**IF=1.467**).
- 49-**M.M. Rashidi**, E. Momoniat, B. Rostami\*, Analytic Approximate Solutions for MHD Boundary-Layer Visco-Elastic Fluid Flow over Continuously Moving Stretching Surface by Homotopy Analysis Method with Two Auxiliary Parameters, <u>Journal of Applied Mathematics</u>, Volume **2012**, Article ID 780415, 19 pages, doi:10.1155/2012/780415 (**IF= 0.834**).
- 50-**M.M. Rashidi**, M. Ferdows, J. Uddin, O. Beg, N. Rahimzadeh\*, Group Theory and Differential Transform Analysis of Mixed Convective Heat and Mass Transfer from a Horizontal Surface with Chemical Reaction Effects, Chemical Engineering Communications 199 (8) (2012) 1012–1043 (**IF= 1.052**).

51-N. Galanis, **M.M. Rashidi**, Entropy Generation in Non-Newtonian Fluids due to Heat and Mass Transfer in the Entrance Region of Ducts, <u>Heat and Mass Transfer</u> 48 (9) (2012) 1647-1662 (**IF= 0.840**).

- 52-**M.M. Rashidi**, A. Shooshtari, O. Anwar Bég, Homotopy Perturbation Study of Nonlinear Vibration of Von Karman Rectangular Plates, <u>Computers and Structures</u> 106–107 (**2012**) 46–55 (**IF= 1.509**).
- 53-**M.M. Rashidi**, N. Laraqi, S.M. Sadri\*, Semi Analytical Solution of Boundary-Layer Flow of a Micropolar Fluid through a Porous Channel, <u>Walailak Journal of Science and</u> Technology 9 (4) (**2012**) 381-393.
- 54- M. Goodarzi, **M.M. Rashidi**, A. Basiri Parsa\*, Analytical and Numerical Solutions of the Vapor Flow in a Flat Plate Heat Pipe, <u>Walailak Journal of Science and Technology</u> 9 (1) (2012) 65-81.
- 55- A. Habibzadeh, **M.M. Rashidi**, N. Galanis, Analysis of a Combined Power and Ejector-Refrigeration Cycle Using Low Temperature Heat, <u>Energy Conversion and Management</u> 65 (**2013**) 381–391 (**IF= 2.775**).
- 56-M. Ferdows, Md. Jashim Uddin, **M.M. Rashidi**, N. Rahimzadeh\*, Numerical Analysis of Mixed Convection over Horizontal Moving Porous Flat Plate by the Method of One Parameter Continuous Group Theory, <u>International Journal of Numerical Methods for Heat and Fluid Flow</u> 23 (5) (**2013**) 729-749 (**IF=1.093**).
- 57- M.M. Rashidi, T. Hayat, M. Keimanesh\*, A.A. Hendi, New Analytical Method for the Study of Natural Convection Flow of a Non-Newtonian, <u>International Journal of Numerical Methods for Heat and Fluid Flow</u> 23 (3) (2013) 436-450 (IF=1.093).
- 58-**M.M. Rashidi**, M. Ali, N. Freidoonimehr\*, F. Nazari, Parametric Analysis and Optimization of Entropy Generation in Unsteady MHD Flow over a Stretching Rotating Disk Using Artificial Neural Network and Particle Swarm Optimization Algorithm, Energy 55 (**2013**) 497–510 (**IF= 3.651**).
- 59-**M.M. Rashidi**, T. Hayat, M. Keimanesh\*, H. Yousefian, A Study on Heat Transfer in a Second Grade Fluid through a Porous Medium with the Modified Differential Transform Method, Heat Transfer—Asian Research 42 (1) (**2013**) 31-45.
- 60-**M.M. Rashidi**, S. Abelman, N. Freidoonimehr\*, Entropy Generation in Steady MHD Flow Due to a Rotating Porous Disk in a Nanofluid, <u>International Journal of Heat and Mass Transfer</u> 62 (**2013**) 515–525 (**IF= 2.315**).
- 61-E. Momoniat, **M.M. Rashidi**, R.S. Herbst, Numerical Investigation of Thin Film Spreading Driven by Surfactant Using Upwind Schemes, <u>Mathematical Problems in Engineering</u>, Volume **2013** (2013), Article ID 325132, 8 pages (**IF= 1.383**).
- 62- A. Basiri Parsa\*, **M.M. Rashidi**, O. Anwar Bég, S.M. Sadri\*, Semi-Computational Simulation of Magneto-Hemodynamic Flow in a Semi-Porous Channel Using Optimal Homotopy and Differential Transform Methods, <u>Computers in Biology and Medicine</u> 43 (9) (**2013**) 1142–1153 (**IF= 1.162**).

63-R. Jafari, D. Ziou, **M.M. Rashidi**, Increasing Image Compression Rate Using Steganography, Expert Systems With Applications 40 (17) (**2013**) 6918–6927 (**IF**= **1.854**).

- 64-H.N. Hassan, **M.M. Rashidi**, Analytical Solution for Three-Dimensional Steady Flow of Condensation Film on Inclined Rotating Disk by Optimal Homotopy Analysis Method, Walailak Journal of Science and Technology 10 (5) (**2013**) 479-498.
- 65-O.A. Bég, **M.M. Rashidi**, N. Rahimzadeh\*, T.A. Bég, T.-K. Hung, Homotopy Simulation of Two-Phase Thermo-Hemodynamic Filtration in a High Permeability Blood Purification Device, <u>Journal of Mechanics in Medicine and Biology</u> 13 (04) (August **2013**) (**IF= 0.758**).
- 66-T.A. Bég, **M.M. Rashidi**, O. Anwar Bég, N. Rahimzadeh\*, Differential Transform Semi-Numerical Analysis of Biofluid-Particle Suspension Flow and Heat Transfer in Non-Darcian Porous Media, Computer Methods in Biomechanics and Biomedical Engineering 16 (8) (**2013**) 896-907 (IF= 1.393).
- 67-A. Basiri Parsa\*, **M.M. Rashidi**, T. Hayat, MHD Boundary-Layer Flow over a Stretching Surface with Internal Heat Generation or Absorption, Heat Transfer-Asian Research 42 (6) (**2013**) 500–514 (ISI).
- 68-T. Hayat, R. Naz, A. Alsaedi, **M.M. Rashidi**, Hydromagnetic Rotating Flow of Third Grade Fluid, <u>Applied Mathematics and Mechanics</u> (English Edition) 34 (12) (**2013**) 1481-1494 (**IF= 2.043**).
- 69-**M.M. Rashidi**, N. Kaviani\*, S. Abelman, Investigation of Entropy Generation in MHD and Slip Flow over a Rotating Porous Disk with Variable Properties, <u>International Journal of Heat and Mass Transfer</u> 70 (**2014**) 892–917 (**IF= 2.315**).
- 70-**M.M. Rashidi**, O. Anwar Bég, Homotopy Semi-Numerical Simulation of Two-Phase Thermal Haemodynamics in a High Permeability Blood Purification Device, <u>Journal of Mechanics in Medicine and Biology</u>, In press (**IF**= **0.435**).
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## **8.4** Conference Papers

- 1- G. Heidarinejad, **M.M. Rashidi**, V. Esfahanian, A. Azimi, Numerical Simulation of Internal Flows Using Modified Roe's Method, <u>The Ninth Asian Congress of Fluid Mechanics</u> (ACFM9), May 27-31 (**2002**), IUT, Isfahan. Iran.
- 2- **M.M. Rashidi**, G.H. Liaghat, B. Ghadiri, M. Karimi, Experimental Studies and Numerical Consideration of Explosive Drilling Process, <u>ISME</u>, May 25-27 (**2002**) 164-171.
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- 4- **M.M. Rashidi**, Homotopy Perturbation Method for Solving Two Dimensional Viscous Flow, Fourth International Conference on Energy Research & Development (2008) Kuwait.
- 5- M.M. Rashidi, Differential Transform Method for Solving Two Dimensional Viscous Flow, <u>International Conference on Applied Physics and Mathematics</u> (ICAPM **2009**) Singapore.
- 6- **M.M. Rashidi**, Analytical Solution of Three-Dimensional Navier-Stokes Equations, International Conference on Applied Physics and Mathematics (ICAPM **2009**) Singapore.
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- 8- M.M. Rashidi, E. Erfani, A Novel Analytical Solution of the Thermal Boundary-Layer over a Flat Plate with a Convective Surface Boundary Condition Using DTM-Padé, International Conference on Applied Physics and Mathematics (ICAPM 2009) Singapore.
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13-A. Basiriparsa, **M.M. Rashidi**, L. Shamekhi, M. Norouzian, Application of Homotopy Analysis Method to Determine the Fin Efficiency with Variable Cross-Section with Temperature-Dependent Thermal Conductivity, <u>International Conference on Thermal Energy and Environment</u> (INCOTEE **2011**) Kalasalingam Uuniversity.

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- 18. **M.M. Rashidi**, P. Lashkari, S.M.J. Nori, Exergy Analysis and Performance Comparison of Vapor Compression Refrigeration Cycle for Different Dydrocarbons Refrigerants, First Iranian Thermal Science Conference (ITSC) (2011) Mashhad, Iran.
- 19. **M.M. Rashidi**, P. Lashkari, A. Moradi, Exergy Analysis of Gas Turbine Power Plant, First Iranian Thermal Science Conference (ITSC) (**2011**) Mashhad, Iran.

20. **M.M. Rashidi**, N. Galanis, A. Habibzadeh, Combined Power and Refrigeration Cycle for Geothermal Heat Sources, <u>ORC2011 Conference</u>, 22-23 Sep (**2011**) The Netherlands.

- 21. A. Habibzadeh, **M.M. Rashidi**, N. Galanis, Optimization of a Combined Power and Ejector Refrigeration Cycle Using Low Temperature Waste Heat, <u>ORC2011</u> Conference, 22-23 Sep (**2011**) The Netherlands.
- 22. **M.M. Rashidi**, A. Habibzadeh, Investigation of Different Working Fluids Operations in Combined Power and Refrigeration Cycle, <u>Third Specific Thermodynamic Conference</u> (2011) Rasht, Iran.
- 23. A. Habibzadeh, **M.M. Rashidi**, Study of Combined Power and Cooling Ejector Refrigeration Cycle with Low Grade Heat Source, <u>Third Specific Thermodynamic Conference</u> (2011) Rasht, Iran.
- 24. **M.M. Rashidi**, A. Aghagoli, Optimal Design of Ejector Refrigeration Cycle, <u>Third Specific Thermodynamic Conference</u> (2011) Rasht, Iran.
- 25. P. Lashgari, **M.M. Rashidi**, Exergy Analysis of Combined Rankine Power and Ejector Refrigeration Cycle, <u>Third specific thermodynamic conference</u> (2011) Rasht, Iran.
- 26. **M.M. Rashidi**, N. Freidooni Mehr, B. Rostami, Analysis of Entropy Generation of MHD Fluid Flow Due to a Stretching Rotating Disk, <u>International Conference on Mechanical Engineering</u>, Islamic Azad University, Majlesi Branch, 10-12 Oct (**2012**) Isfahan, Iran.
- 27. **M.M. Rashidi**, B. Rostami, N. Freidooni Mehr, Analysis of MHD Visco-Elastic Fluid Flow over a Porous Stretching Sheet via HAM, <u>International Conference on Mechanical Engineering</u>, Islamic Azad University, Majlesi Branch, 10-12 Oct (**2012**) Isfahan, Iran.

#### 9 Professional Service

- Reviewer for Abstract and Applied Analysis (Hindawi-ISI)
- Reviewer for Advances in Mathematical Physics (**Hindawi-ISI**)
- Reviewer for Aerospace Science and Technology (Elsevier)
- Reviewer for African Journal of Mathematics and Computer Science Research
- Reviewer for Ain Shams Engineering Journal (Elsevier)
- Reviewer for Analele Universității din Oradea. Fascicola Matematică
- Reviewer for Applied Mathematics (AM)
- Reviewer for Applied Mathematics & Information Sciences
- Reviewer for International Journal of Mechanic Systems Engineering (IJMSE)
- Reviewer for Journal of Aerospace Engineering
- Reviewer for Alexandria Engineering Journal (Elsevier)
- Reviewer for American Journal of Computational Mathematics
- Reviewer for Applications and Applied Mathematics: an International Journal (AAM)
- Reviewer for Applied Mathematical Modelling (Elsevier)
- Reviewer for Applied Mathematics and Information Sciences
- Reviewer for Applied Mathematics Letters (Elsevier)
- Reviewer for Archives of Mechanics (ISI)

- Reviewer for Advanced Research in Scientific Computing
- Reviewer for British Journal of Applied Science & Technology
- Reviewer for British Journal of Mathematics & Computer Science
- Reviewer for Bulgarian Chemical Communications (**ISI**)
- Reviewer for Bulletin of the Belgian Mathematical Society (ISI)
- Reviewer for Canadian Journal of Physics (**Scopus**)
- Reviewer for Caspian Journal of Applied Sciences Research (ISI)
- Reviewer for Chemical Engineering Communications (Taylor & Francis)
- Reviewer for Chemical Industry & Chemical Engineering Quarterly (ISI)
- Reviewer for Computational and Applied Mathematics (Springer)
- Reviewer for Computers and Fluids (Elsevier)
- Reviewer for Computer Physics Communications (Elsevier)
- Reviewer for Computers and Mathematics with Applications (Elsevier)
- Reviewer for Current Nanoscience (Bentham Science Publishers-ISI)
- Reviewer for Energy (Elsevier)
- Reviewer for Energy Conversion and Management (Elsevier)
- Reviewer for Energy Management Journal (University of Kashan-in Persian)
- Reviewer for Engineering Applications of Computational Fluid Mechanics
- Reviewer for European Physical Journal-Applied Physics (ISI)
- Reviewer for Heat Transfer-Asian Research (**Scopus**)
- Reviewer for Heat Transfer Research (Begell House)
- Reviewer for HVAC&R Research (Taylor & Francis)
- Reviewer for Iranian Journal of Engineering Education
- Reviewer for International Journal of Energy & Technology
- Reviewer for International Journal of Engineering, Science and Technology (IJEST)
- Reviewer for International Journal of Heat and Mass Transfer (Elsevier)
- Reviewer for International Journal of Nonlinear Sciences and Numerical Simulation (ISI)
- Reviewer for International Journal of Numerical Methods for Heat and Fluid Flow (ISI)
- Reviewer for International Journal of Physical Sciences (ISI)
- Reviewer for International Journal of Thermal Science (**Elsevier**)
- Reviewer for International Journal for Numerical Methods in Fluids (Wiley)
- Reviewer for International Research Journal of Engineering Science, Technology and Innovation
- Reviewer for Iranian Journal of Science and Technology Transactions of Mechanical Engineering
- Reviewer for Journal of Advanced Research in Scientific Computing
- Reviewer for Journal of Applied Analysis and Computation
- Reviewer for Journal of Applied Fluid Mechanics (ISI)
- Reviewer for Journal of Computational Methods in Sciences and Engineering (JCMSE)
- Reviewer for Journal of Energy and Power Engineering
- Reviewer for Journal of Engineering Research and Design (JERD)
- Reviewer for Journal of Hydrodynamics, Ser. B (Elsevier)
- Reviewer for Journal of Hydrology and Hydrodynamics (ISI)
- Reviewer for Journal of King Saud University (Science) (Elsevier)
- Reviewer for Journal of King Saud University: Engineering Sciences (Elsevier)

- Reviewer for Journal of Mechanics (Cambridge Journals- **ISI**)
- Reviewer for Journal of Modern Physics
- Reviewer for Journal of Molecular Liquids (Elsevier)
- Reviewer for Journal of Nature Science and Sustainable Technology
- Reviewer for Journal of Petroleum and Gas Exploration Research (JPGER)
- Reviewer for Journal of Porous Media (Begell House- ISI)
- Reviewer for Journal of the Franklin Institute (**Elsevier**)
- Reviewer for Journal of Thermophysics and Heat Transfer (AIAA)
- Journal of the Taiwan Institute of Chemical Engineers (Elsevier)
- Reviewer for Maejo International Journal of Science and Technology (ISI)
- Reviewer for Mathematical and Computer Modelling (Elsevier)
- Reviewer for Mathematical Modelling and Analysis (Taylor & Francis)
- Reviewer for Mathematical Methods in the Applied Sciences (Wiley)
- Reviewer for Mathematical Problems in Engineering (ISI)
- Reviewer for Meccanica (Springer)
- Reviewer for Modern Mechanical Engineering
- Reviewer for National Research Foundation (NRF-South Africa)
- Reviewer for Neural Computing and Applications (**Springer**)
- Reviewer for Numerical Methods for Partial Differential Equations (Wiley)
- Reviewer for Nonlinear Analysis Modelling and Control (Scopus)
- Reviewer for Nuclear Engineering and Design (Elsevier)
- Reviewer for Physical Review & Research International
- Reviewer for Plos One (**ISI**)
- Reviewer for Powder Technology (Elsevier)
- Reviewer for Progress in Computational Fluid Dynamics (Inderscience)
- Reviewer for Physica Scripta (IOPscience-ISI)
- Reviewer for Quaestiones Mathematicae (Taylor & Francis)
- Reviewer for Scientia Iranica (**Elsevier**)
- Reviewer for Special Topics and Reviews in Porous Media
- Reviewer for Scientific Research and Essays (**Scopus**)
- Reviewer for Steel and Composite Structures (ISI)
- Reviewer for Structural Engineering and Mechanics, an International Journal (ISI)
- Reviewer for Walailak Journal of Science and Technology (Scopus)
- Reviewer for World Applied Sciences Journal
- Reviewer for World Journal of Mechanics

#### **Graduate Advisees (Current)**

Asad Mortezaee (Ph.D-2012-present), Amir Basiriparsa (Ph.D-2012-present), Leila Shamekhi (Ph.D-2012-present), Saeed Bagheri (MS), Ali Hashemi (MS), Freshteh Mohammadi (MS).

#### **Graduate Advisees (Past)**

Mohesen Mirsafi (MS 2006), Majid Moradi Bastani (MS 2007), Jalal Razaghi (MS 2007), Mehdi Hedaiatpoor Jelodar (MS 2007), Saeed Dinarvad (MS 2008), Ahmad Dosthosini (MS 2008), Hamed shahmohamadi (MS 2009), Seied Amin Mohimanian Pour (MS 2009), Esmaeel Erfani (MS 2010), Seyed Majid Sadri (MS 2010), Amir Basiriparsa (MS 2011), Mohammad Keimanesh

(MS **2011**), Mostafa Asadi (MS **2012**), Nima Rahimzade (MS **2012**), Mohammad Taher Rastegari (MS **2012**), Navid Freidooni Mehr (MS **2012**), Ali Reza Hajipour (MS **2013**), Amin Hosini (MS **2013**), Neda Kaviani (MS **2013**), Abas Aghagoli (MS **2013**), Behnam Rostami (MS **2013**).