

**Abdullah A. Al-Rashed**

**Assistant Professor of Automotive and Marine Engineering Technology**

**Education:**

1998, Bachelor-Mechanical Engineering  
2002, M.Sc., University of Kuwait  
2010, Ph.D., University of Malaya

**Number of years of service on this faculty:**

5 Years  
2013 - Present Assistant Professor of Mechanical Engineering

**Other related experience:**

Public Authority for Applied Education and Training  
(29/05/2002 – present)

**Teaching interests:**

Fluid Mechanics, Thermodynamics, heat transfer, mass transfer, electrical machines

**Courses taught at PAAET:**

Fluid Mechanics, Thermodynamics, heat transfer, mass transfer, electrical machines

**Research interests:**

Heat Transfer , thermal systems

**Principal publications of last five years:**

1- Mahdi Abdi-khanghah, **Abdullah A. A. A. Alrashed**, Touba Hamoule, Reza Mosayebi Behbahani, and Marjan Goodarzi. *Toluene methylation to para-xylene: modeling of fixed packed bed reactor*. **Journal of Thermal Analysis and Calorimetry, J Therm Anal Calorim**, DOI **10.1007/s10973-018-7228-5**, Springer

71- Hamid Maleki, Mohammad Reza Safaei, **Abdullah A. A. A. Alrashed**, and Alibakhsh Kasaeian. *Flow and heat transfer in non-Newtonian nanofluids over porous surfaces*. **Journal of Thermal Analysis and Calorimetry, J Therm Anal Calorim**, DOI: **10.1007/s10973-018-7277-9**, Springer

2- **Abdullah A. A. A. Alrashed**, Naghmeh Mahmoodian, and Asterios Pantokratoras. *Comments on: "Toward improved heat transfer performance of annular heat exchangers with water/ethylene glycol based nanofluids containing graphene nanoplatelets, Journal of Thermal Analysis and Calorimetry 126.3 (2016): 1427–1436"*. **Journal of Thermal Analysis and Calorimetry, J Therm Anal Calorim**, DOI: **10.1007/s10973-018-7240-9**, Springer

3- Nidhal Hnaïen, Salwa Marzouk, Lioua Kolsi, **Abdullah A.A.A. Al-Rashed**, Habib Ben Aissia, and Jacques Jay. *Numerical Study and Correlations Development on Twin-Parallel Jets Flow with Non-Equal Outlet Velocities*. **Frontiers in Heat and Mass Transfer (FHMT)**, 11, 8 (2018) DOI: **10.5098/hmt.11.8**

4- **Abdullah A.A.A. Alrashed**, Maryam Soltanpour Gharibdousti, Marjan Goodarzi, Letícia Raquel de Oliveira, Mohammad Reza Safaei, and Enio Pedone Bandarra Filho. *Effects on thermophysical properties of carbon based nanofluids: Experimental data, modelling using regression, ANFIS and ANN.* **International Journal of Heat and Mass Transfer**, **125** (2018) 920-932. ELSEVIER

5- Mohamed Ammar Abbassi , Mohammad Reza Safaei , Ridha Djebali , Kamel Guedri , Belkacem Zeghmami , **Abdullah A.A.A. Alrashed**. *LBM simulation of free convection in a nanofluid filled incinerator containing a hot block.* **International Journal of Mechanical Sciences**, **144** (2018) 172-185. ELSEVIER

6- Walid Hassen , Maryem Dhrioua , Lioua Kolsi, Veerabathiran Anbumalar , **Abdullah A.A.A. Al-Rashed** , Mohamed N. Borjini. *CFD modeling of gas-particles flow in a circulating fluidized G-Volution gasification reactor.* **International Journal of Mechanical Sciences**, **144** (2018) 438-451. ELSEVIER

7- Walid Hassen , Lioua Kolsi , Hakan F. Oztop, **Abdullah A. AA Al-Rashed** , Mohamed Naceur Borjini , and Khaled Al-Salem. *Electro-thermo-capillary-convection in a square layer of dielectric liquid subjected to a strong unipolar injection.* **Applied Mathematical Modelling**, **63** (2018) 349-361. ELSEVIER

8- N. Hnaien, S. Marzouk, L. Kolsi, **A. A. A. A. Al-Rashed**, H. Ben Aissia and J. Jay. *CFD Investigation on the Steady Interaction between an Offset Jet and an Oblique Wall Jet.* **Journal of Applied Fluid Mechanics**, Vol. **11**, No. **4**, pp. 885-894, 2018

9- **Abdullah A.A.A. Al-Rashed**, Walid Hassen, Walid Aich, Lioua Kolsi Badreddine Ayadi, and Mohamed Naceur Borjini. *Oscillatory natural convection of water-glycerin mixture in a tall rectangular cavity: Transition to the chaos.* DOI: 10.1002/htj.21359, **Heat Transfer—Asian Res.** 2018;1–14. 2018 Wiley Periodicals, Inc.

10- **Abdullah A.A.A. Alrashed**, Arash Karimipour, Seyed Amin Bagherzadeh, Mohammad Reza Safaei, and Masoud Afrand. *Electro- and thermophysical properties of water-based nanofluids containing copper ferrite nanoparticles coated with silica: Experimental data, modeling through enhanced ANN and curve fitting.* **International Journal of Heat and Mass Transfer**, **127** (2018) 925-935. ELSEVIER

11- Hasnia Hajji, Lioua Kolsib, Walid Hassen, **Abdullah A.A.A. Al-Rashed**, Mohamed Naceur Borjini, Mohamed Ahmed Aichouni. *Finite element simulation of antigen-antibody transport and adsorption in a microfluidic chip*. **Physica E: Low-dimensional Systems and Nanostructures**, 104 (2018) 177-186. ELSEVIER

12- Kaouther Ghachem, Walid Hassen, Chemseddine Maatki, Lioua Kolsi, **Abdullah A.A.A. Al-Rashed**, Mohamed Naceur Borjini. *Numerical simulation of 3D natural convection and entropy generation in a cubic cavity equipped with an adiabatic baffle*. **International Journal of Heat and Technology**, Vol. 36, No. 3, September, 2018, pp. 1047-1054

13- Mohamed Issam Elkhazen, Walid Hassen, Lioua Kolsi, Hakan F. Oztop, Abdullah A.A.A. Al-Rashed, Mohamed Naceur Borjini, and Nidal Abu-Hamdeh. *Heat transfer intensification induced by electrically generated convection between two elliptical cylinders*. **International Journal of Thermal Sciences**, 135 (2019) 523-532. ELSEVIER

**Scientific and professional societies of which a member:**

N/A

**Honors and awards:**

N/A

**Institutional service in last five years:**

N/A

**Professional service in last five years:**

N/A

**activities in last five years:**

N/A