Hafeth M. Daraghmi, PhD

Assistant Professor- Institute of Mechanical Engineering

Palestine Technical University (PTUK)

Address: H006, Eng.building.2, Yafa street, P.O (7),

Tulkarm, Westbank, Palestine.

E-mail: h.m.daraghmeh@ptuk.edu.ps

Cell Phone: +972594360617



Career Profile

- 1. Assistant professor at the department of mechanical engineering of Palestine technical university (PTUK)),Westbank-Palestine, started on February, 2019.
- Research assistant (RA) in the "Thermal Energy Management Lab." at "National Chiao Tung University" (NCTU)- Taiwan which is supervised by Prof. Chi-Chuan Wang in the period of time (15/02/2012 - 20/01/2109). My researches concern finding new free cooling techniques applicable for datacenters. Such techniques may help to minimize the electrical energy spent on traditional data centers cooling systems.
- 3. Teaching assistant for some courses which were taught by my advisor at the department of mechanical engineering (NCTU), such as "Heat Exchanger Design", "Refrigeration and Air-conditioning".
- 4. Worked as a teacher at "Palestine Technical University" (PTUK, in the period of time (01/12/2009 05/02/2012).

Achievements

- 1. Two research papers were published in scientific citation index journals titled:
- ✓ A review of current status of free cooling in datacenters. [Published on October 14, 2016 in the journal of "Applied Thermal Engineering"].
- ✓ Investigation of Separated Two-Phase Thermosiphon Loop for Relieving the Air-Conditioning Loading in Datacenter. [Published on December 29, 2018 in the journal of "Energies"].
- 2. Conference paper was presented in "The Grand Renewable Energy 2014 International Conference and Exhibition", July 27th August 1st, 2014, Tokyo Big Sight, Tokyo, Japan. The paper was about: ": Using 'partial-bypass' to augment in-row cooler applicable for cooling data center servers". Paper's number in the conference data base: 00607.
- 3. Conference paper was presented in the "Third International Workshop on Heat Transfer Advances for Energy Conservation and Pollution Control (IWHT2015)", [October 16-19,

2015, Taipei, Taiwan]. Conference paper entitled as: "Development of Data Center Free Cooling Technology. Paper number in conference data base: IWHT2015-1226-5A. Conference was held in National Taipei University of Technology (NTUT).

Education

- ✓ PhD of Mechanical Engineering (2014- 2019), institute of mechanical engineering, National Chiao Tung University, Hsinchu, Taiwan.
- ✓ Master's Degree of Mechanical Engineering (2012-2014), institute of mechanical engineering, National Chiao Tung University, Hsinchu-Taiwan.
- ✓ Bachelor Degree of Mechanical Engineering (2004-2009), department of mechanical engineering, An-Najah National University (NNU), Nablus, Westbank, Palestine, email: info@najah.edu.

B.Sc, M.Sc and Ph.D Thesis Titles

- ✓ B.SC of Mechanical Engineering (Fluid Mechanics), thesis title: "A case study: Underfloor heating and solar energy cooling."
- ✓ M.Sc of Mechanical Engineering (Fluid Mechanics), thesis title: "Using "Bypass Concept" to augment in-row cooler applicable for cooling datacenter servers."

Ph.D of Mechanical Engineering (Fluid Mechanics), thesis title: "Investigation of free cooling in datacenters using separated two-phase thermosiphon loop."

Research Interests

 \checkmark Heat exchangers' design, refrigeration and air-conditioning, heating, ventilation, heat transfer enhancement techniques, thermal energy management, thermal energy optimization and energy savings, free cooling.

Skills

- ✓ Excellent command of spoken and written Arabic and English.
- ✓ Basic Chinese language "can communicate with simple spoken language".
- Excellent practical experience regarding designing cooling cycles, especially those related to data center rooms.
- ✓ Very good experience dealing with computational fluid dynamics softwares (CFD).
- ✓ Good communications skills.
- ✓ Excellent report writing skills.
- ✓ Strong Communication and interpersonal skills, good team player.
- ✓ Computer literacy in Microsoft word, excel, power point.
- ✓ Punctual and well-organized.

Personal Information

- ✓ Nationality: Palestinian
- ✓ Gender & Age: Male, 33
- ✓ Marital Status: Married

References

- Dr. Chi-Chuan Wang–Distinguished Professor at National Chiao Tung University, Thermo-fluids Engineering.
 Address: EE474, 1001 University Road, Hsinchu, Taiwan 300.
 Tel: +886-3-5712121 ext. 55105Fax: 886-3-5720634. e-mail: ccwang@mail.nctu.edu.tw.
- Dr. 劉耀先-Associate Professor at National Chiao Tung University, Thermo-fluids Engineering. Address: EE464, 1001 Ta Hsueh Road, Hsinchu, Taiwan 300, ROC. Tel: 886-3-5712121 Ext.55136. e-mail: yhliu@mail.nctu.edu.tw.
- Dr. Jafar Jallad- Assistant Professor at Palestine Technical Engineering, college of engineering and technology. Address: H008, Eng.building.2, Yafa Street, P.O (7), Tulkarm, Westbank, Palestine.