

## Curriculum Vitae

1. Name : **Talal Kassem Mahmoud Kassem**
2. Academic rank: Associate professor of Mechanical engineering
3. Degrees with field, institutions and dates:
  - B.S. Mechanical Engineering, Damascus University, Syria - 1979
  - M.S. Mechanical Engineering, Technical Compiègne University, France - 1986
  - Ph.D Mechanical Engineering, Technical Compiègne University, France - 1989
4. Number of years service on:
  - I - The faculty of Mechanical and Electrical Engineering – Damascus University- Syria:
    - Date of original appointment: April 1990
    - Date of advancement in rank: 2003 to associate professor
  - II - The College of Engineering – Taif University – K.S.A.:
    - Date of original appointment: November 2009
5. Other related experiences:
  - a. Technical supervisor in the General Mechanics Department, Production Branch, in the Syrian Airlines Company, 1980 - 1982.
  - b. Manager of TEMPUS project in the field of renewable energy between five Technical European Universities (Kassel, Labzieg, Berlin and Ilmenau in Germany, and Graz in Austria) and Damascus University, Syria, 2004 -2009.
  - c. Head of the Renewable Energy Branch in F.M.E.E. (Faculty of Mechanical and Electrical Engineering) - Damascus University, 2006- November 2009.
  - d. Head of the Mechanical Department in F.M.E.E. - Damascus University, 2009.
  - e. Coordinator of the working group for renewable energy and its role in the plans of energy supply until the year 2030 in Syria – the Council of Ministers, 2009.
  - f. Member of the National Network of renewable energy in the Council of Ministers in Syria, 2009.
  - j. Head Lab committee, Mechanical Department, College of Engineering, Taif University, K. S. A., 2010 - 2012.
  - h. Member of the ABET committee, Mechanical Engineering Department, College of Engineering, Taif University, 2010- present.
  - K. Member of Mechanical Engineering Department Council, Taif University, K. S. A., 2009-present.
  - I. Member of the scientific research committee, Mechanical Engineering Department, College of Engineering, Taif University, 2012.

### Published papers:

- 1- **Kassem, Talal K.**, "Improving the efficiency of Thermal Insulation by studying the Natural Convection in a saturated porous Media Bounded by two Eccentric Cylinders " Journal of Environment Researches and Sustainable Development, 2001, Baghdad - Iraq.
- 2- **Kassem, Talal K.**; Ibrahim, H., "A New Procedure for calculating pressure Drop in the Hydraulic Systems" published in the 39<sup>th</sup> Scientific week, 1999, Damascus, Syria.
- 3- **Kassem, Talal K.**; Shamieh, S., "Studying and Testing a Mechanical device for Sun Tracking" published in the 38<sup>th</sup> scientific week, 1998, Homs, Syria.
- 4- **Kassem, Talal**; "Thermal Insulation", Arabic Encyclopedia – Damascus, Vol. 13, pp. 168, 2004.
- 5- **Kassem, Talal K.**; "Solar Heating System by using F-Chart Method" Damascus Engineers Journal, 2006.
- 6- **Kassem, Talal K.**; "Numerical Study of Natural Convection Process in Parabolic Cylindrical Solar Collector". Journal of Desalination, EL SERVIER, 209 (144-150), 2007.
- 7- Scientific reference academic: "Reference in the Principles of Solar Thermal Energy and its Applications". Ministry of Higher Education- Syria, 2009.
- 8- **Kassem, Talal K.**; Puschnig, P.; Wolfgang, S., "Thermal Building Simulation of Research Building of Damascus University". Journal of Environmental science, TRADE SCIENCE INC, Vol. 5, No. 4, 2010.
- 9- **Kassem, Talal K.**, "Investigation of Integrated Collector Storage Solar Hot Water (ICSSHW)". Australian Journal of Basic and Applied Sciences, Vol. 5, No. 6, 2011.

- 10- **Kassem, Talal K.**; Youssef, M. S. "SOLAR COOKERS AND ITS APPLICATIONS FOR FOOD COOKING IN REMOTE AREAS: REVIEW". Journal of Engineering Sciences, Assiut University, Egypt, Vol. 39, No. 4, 2011.
- 11- Youssef, M. S., **Kassem, Talal K.**, Al-Osaimy, A. S., and Hamed, A. M. "Development of solar system for saline water desalination in KSA: Review", Global Journal of Pure and Applied Science and Technology, Vol. 1, No. 3, 2011.
- 12- **Kassem, Talal K.** "Parametric study of an Active Solar Space Water Heating System (ASSWHS) ", International Journal of Engineering & Technology IJET / IJENS, Vol. 12, No. 5, 2012.
- 13- Ahmed M. Hamed, **T. M. Kassem**, A. S. Alosaimy, E. B. Zeidan. "Experimental performance of a liquid desiccant rotating wick regenerator under climatic conditions of Taif city", Wulfenia Journal, Vol. 19, No. 9, 2012.
- 14- Ahmed M. Hamed, E. B. Zeidan, A. S. Alosaimy, **T. Kassem**, "Application of Solar Energy for Regeneration of liquid Desiccant Using Rotating Tilted Wick", International Journal of Mechanical & Mechatronics Engineering IJMME-IJENS, Vol. 12, No. 5, 2012.
- 15- **Kassem, Talal K.** "Investigation of Solar Cooker with PCM Heat Storage for High Altitude Places (Taif City)", International Journal of Mechanical Engineering & Technology (IJMET), Vol. 3, No. 3, 2012.
- 16- **Kassem, Talal K.**, A. S. Alosaimy, M. Fazian, A. Hamed, "Development of the solar kilns used in drying the palm trees waste in Saudi Arabia" International Journal of Mechanical Engineering (IJME), Vol. 2, No. 2, 2013.

#### **Research projects - Taif University:**

**Project 1:** APPLICATION OF SOLAR COOKERS FOR FOOD COOKING IN REMOT AREAS IN KSA.

**Project 2:** DEVELOPMENT OF SOLAR SYSTEM FOR SALINE WATER DESALINATION IN KSA.

**Project 3:** DEVELOPMENT OF USING THE SOLAR KLINS IN DRYING THE WASTES OF PALM TREES IN KSA.

**Project4:** Application of Solar Energy for Regeneration of liquid desiccant using rotating wick in the climatic conditions of Taif City, KSA.

**Project 5:** Solar Powered Dehumidification System using Desert Evaporative coolers.

#### **Conference and Symposiums:**

- 1- Third International Congress "Generating Electrical energy from Solar Energy in Sharika, UAE, "A Parametric Study of Thermosyphon Built in Storage Solar Water Heater for Damascus Climate", 1998.
- 2- A Scientific research course in Nuclear Studies Center, Thermal Studies Department- Grenoble-France 1986.
- 3- Participation in the International Symposium concerning the study of dryness in steam generators in nuclear reactor, Grenoble -France 1986.
- 4- Training course concerning activities to use new and renewable energy in the Arab World, UN program for development, Damascus, Syria- 2000.
- 5- The scientific Syrian - Lebanese Meeting, Beirut, "Etude de l'influence de la conduction dans une paroi sur les échanges thermiques en convection naturelle dans une Cavite femee", 2003.
- 6- Scientific Conference about (The reality and the horizons of future development of energy in Syria. - Nuclear Energy Committee - Damascus, Syria, 2003.
- 7- The 8<sup>th</sup> International Conference of Solar Energy and Regional Congress of Renewable Energy in Bahrain. "Numerical Study of the Natural Convection Process in the Parabolic – Cylindrical Solar Collector", 2004.
- 8- Intensive Training Course in the field of renewable energy and notification of the advanced solar collector industry , PV and the manufacturing of wind turbines of huge capacity (2.5 - 6.5 MW) in Germany and Austria - ( 04 -25)/ September -2005.
- 9- Intensive Training course in the field of renewable energy and TRNSYS program and to conduct experiments in the laboratory of Thermal Solar Energy in Germany and Austria (10 – 5)/ September/2006.
- 10- Second International Conference of Energy and Environment in Tripoli, Libya. " Study of an Active Wall Solar Heating System", 2006.
- 11- Special symposium about the method of connecting Industry with High Education under the patronage of British Council and Damascus University, 2006.
- 12- Special symposium to develop solar Energy application in Syria, Scientific Research Committee, Damascus, 2006.
- 13- The forth Regional Symposium for Solar Energy in Damascus, 2007.
- 13- The symposium "Promoting Renewable Energy Use in Syria through Science & Art" – Syrian Environment Protection Society –Damascus, 2008.

**Additional Information:**

- Head of the Engineering studies Unite of thermal solar energy in Damascus University.
- Consultant engineer in the Syrian Engineers Syndicate in the field of solar energy.
- Giving many lectures in Engineers Syndicate of Damascus in the field of solar water heating and by using the method of (F-Chart) and the maintenance, and fixing of solar water heating system.
- Study and design the mechanical section in the Hybrid Solar Electricity Generating Systems (SEGS) by using concentrating parabolic solar collectors for a research project, F.M.E.E., Damascus University.
- A member in the International Solar Energy Society (2004-2009).
- A member in the International Energy Foundation.