

# CURRICULUM VITAE



**NAME** : HUSSAIN MOHAMMED NOOR AL MADANI  
**ACADEMIC TITLE** : Associate Professor, Mechanical Engineering.  
**NATIONALITY** : Bahraini  
**QUALIFICATIONS** : *B.Sc.* Mechanical Engineering,  
King Saud University, Riyadh, Saudi Arabia,  
January 1980.

*Msc.* Tribology,  
University of Leeds U.K.  
September 1983.

*Ph.D.* Mechanical Engineering,  
University of Leeds,  
November 1987.

## GENERAL EXPERIENCE:

- From July to September 1977 Worked as summer trainee, Public Transport Directorate, Bahrain.
- From April 1980 to January 1981, worked as Mechanical Engineer Water Supply Directorate, Bahrain.

## TEACHING EXPERIENCE:

- February 1981 - September 1982, Lecturer in Gulf Polytechnic, Bahrain.
- From January 1988 - September 1994, Assistant Professor in Mechanical Engineering Department, University of Bahrain.
- From September 1994 - Present, Associate Professor in Mechanical Engineering Department, University of Bahrain.
- From February 1996 - March 1998, Chairman of Mechanical Engineering Department, University of Bahrain.

- From April 2002 - Present, Dean of College of Engineering, University of Bahrain

### **COURSES TAUGHT:**

1. Fluid Mechanics
2. Power Plants Engineering
3. Thermodynamics
4. Gas Turbines
5. Steam Power Plants
6. Engineering Drawing
7. Energy Conversion
8. Senior Projects

### **ACADEMIC ACTIVITIES:**

- Coordinator for Training Programme for 10,000 Bahrainis, 1981 and 1982.
- Coordinator for Engineering orientation Programmes from March 1988 to 1991.
- Coordinator of the academic committee in Mechanical Engineering Department 1989/1990.
- Coordinator of the Examination Committee in Mechanical Engineering Department 1990/1991.
- Coordinator of the evaluation committee in Mechanical Engineering Department 1991-1996.
- Coordinator of the timetable committee in the College of Engineering 1993-1996.
- Member of National Working Party for Coordination between Education, Training and Labour market for Technical Sector (Ministry of Education) 1994 - 1996.
- Member of Gulf Standards sub-committee for Aluminum doors and windows.
- Member of Conservation of expenditure committee, University of Bahrain April 1996.
- Member of Central evaluation committee Dec. 1996 - Sept. 1996.
- Member of University Budget Committee Feb. 1997.
- Member of sub-committee for evaluation of Technical and Engineering qualification Ministry of Education, Bahrain May 1996.
- Member of Gulf standards committee Jan 1997, Ministry of commerce.

- Member of Scientific Research Council, University of Bahrain October 1996.
- Member of College of Engineering Council Feb. 1996.
- Member of board of Directors of Bahrain Training Institute April 2002 – April 2004.
- Member of Specific Council for Vocational Training in the industrial sector April 2002 – till date.
- Member of the Executive Committee of the Society of Engineering Colleges in Arab Universities. April 2002 – till date.

### **RESEARCH PROJECTS SUPERVISED IN THE UNIVERSITY OF BAHRAIN:**

- Effect of Dust on reducing the efficiency of Solar collectors.
- Assessment of Tidal Energy in Bahrain.
- Estimation of Solar Radiation in Saudi Arabia.
- Estimation of Solar Radiation in G.C.C. Countries.
- Atmospheric Corrosion of metals in Bahrain.
- Environmental effects on the degradation of Glass Reinforced Plastics.
- Modification of solar water heaters.
- Study of the Mechanical properties of Date - Palm Tree Fibers.
- Solar Street Lighting.
- Solar Air Conditioning.
- Energy Conservation in Water Desalination.

### **PUBLICATIONS:**

1. EL-SHOBOKSHI, A. E. NASSER, H. M. N. AL MADANI. “An Experimental Investigation on the effect internal air cooling on the surface heat transfer of turbine blades”, 5th Notional heat and mass transfer conference, February 1980, Hyderabad, India.
2. F. R. MOBBS, H. M. N. AL MADANI, et al “The effect of Aspect Ratio, cell size and Taylor Number on the properties of Taylor Couette flow’ Taylor vortex working party meeting Belgium, May 1988.
3. YOUSIF A. G. ABDULLA, HUSSAIN M. N. AL MADANI, AND A.M.H. ISA. “Meteorological and Solar Radiation Data for Abu Dhabi”, 1<sup>st</sup> Regional Conference in Civil Engineering, March 1989, Bahrain.
4. DR. Y. A. GHAFAR, DR. H. AL MADANI “A new Method for Estimating Daily Global Solar Radiation” International Journal of Ambient Energy, Volume 13, No. 2 April 1992, PP.93 - 98.

5. E. A. TAQI, H. AL MADANI, E. SHAJI “ Atmospheric corrosion of ordinary mild steel in the Arabian Gulf Environment. “Werkstoffe and Korrosion, 44, 1993, 300 -303.
6. E. A. TAQI, and H. AL MADANI, “Atmospheric corrosion of Aluminum and Galvanised Steel in the Arabian Gulf Environment” Accepted for publication in the Journal of Corrosion prevention and Control.
7. E. A. TAQI, H. AL MADANI and N. HUSSAIN, “Performance of Aluminum and Galvanised Steel in an Urban Environment”, The First U.A.E. Symposium on Material Science, Al-Ain 12-15 Dec. 1993, PP 158-172.
8. H. AL MADANI, Y. ABDULGHAFAR and I. A. OLWI, “An Empirical Correlation for Monthly Global Solar Radiation with Bright Sunshine how for Saudi Arabia”, International Journal of Ambient Energy, Vol. 14, N°. 2, April 1994.
9. N. AL BASTAKI and H. AL MADANI, “Effects of Local Atmospheric Conditions in Bahrain on Mechanical Properties of GRP”, accepted for publication in “Polymer Testing, an International Journal”.
10. Effect of Six Months Exposure to Atmospheric Conditions on the Mechanical Properties of GRP”, AMSE, Modelling, Measurement and Control, C, Vol. 49, No. 3, 1995, PP 21 -27.
11. H. M. N. AL MADANI and Y. A. G. ABDULLA. “An Estimation of Global Solar Radiation for the Gulf Cooperative Council Countries”, International Journal of ‘Ambient Energy, Vol. 15, No. 3, July 1994.
12. H. M. N. AL MADANI and Z. USMAN, “Estimation of Global Solar Radiation”, Jordanian Mechanical Engineering Conference, June, 24 - 28, Amman, Jordan.
13. Al-Bastaki N. and Al-Madani. H., “Engineering Education and Assessment Methods in the Arab World”, ASEE/AAEE Global Colloquium on Engineering Education”, 26-29 Sept. 2005, Sydney.
14. Al-Madani H. and Al-Bastaki N., “A Comparison of Coupled B.Sc. and Associated Diploma Programs in the College of Engineering, University of Bahrain”, S. M. Suliaman and H. Al-Madani “A need for Restructuring of Engineering Education” Workshop on Methods of

Implementing the Views Document of Prince Abdullah Bin Abdul-Aziz on Higher Education, organized by King Abdul-Aziz University, Jeddah, Jan. 30 – Feb. 1, 2005.

15. Suliman, S. and Al-Madani, H. "A Need for restructuring of Engineering Education". Workshop on Methods of Implementing the Views Document of Prince Abdullah Bin Abdul-Aziz on Higher Education, organized by King Abdul-Aziz University, Jeddah, Jan. 30 – Feb. 1, 2005.
16. Al-Madani H. and Al-Bastaki N., "Assessment Methods for Distributing Students to B.Sc. and Associate Diploma Program in the College of Engineering, University of Bahrain", Regional Conference on Engineering Education, Dec. 12-13, Johor, Malaysia.
17. H. Al-Madani, "Water Desalination by Solar Powered Electro Dilyeis Process". Renewable energy, An Int. Journal. Vol. 28 No. 12 Oct. 2003. pp 1915 – 1924.
18. Nader Al-Bastaki and Hussain Al-Madani, "Engineering Education and Assessment Methods in the Arab World". Invited paper, 4<sup>th</sup> ASEE/AaeE Global Colloquium on Engineering Education, Sydney, Australia 26-29 Sept. 2005.
19. H. Al-Madani "The Performance of a Cylindrical Solar Water Heater". 31 (2006) 1751-1763 Renewable Energy, an International Journal.
20. H. Al-Madani "Gas Turbine Performance Enhancement by Intake Air Cooling". Int. Journal of exergy 2006- vol. 3, No. 2. pp 164-173.
21. Ayhan, T. and Al-Madani, H. "Feasibility study of Renewable Energy Powered Sea Water Desalination using Natural Vacuum Technique". Accepted for publication in Renewable Energy, An International Journal.
22. Al-Madani, H., Al-Abbasi, O. and Ayhan, T. "Effects of Intake Air cooling performance improvement on a Two, shaft Laboratory Scale Gas Turbine unit" ASME.
23. Al-Madani, H., Al-Abbasi, O. and Ayhan, T., Taj O. Mohielden "A complementary experiment and numerical study of the flow in a rectangular duct with an array of plates aligned at angles to the flow". to be published.

24. Al-Madani, H., "Effect of Thermodynamics and Mechanical Irreversibilities on Gas Turbine Per for manse enhancement by Intake Air Cooling. "Accepted for publication in the International Journal of Exergy.