# DR. HUSSAIN AHMAD AMIN ABABNEH

# Assistant Professor of Mechanical Engineering Zarqa University

# **PERSONAL**

Birth: 1965 in Irbid JORDAN

Cellular:00962-776861150

E-mail:gearbox26@yahoo.com

And: hababneh@zu.edy.jo

Permanent Residence: Irbid- Jordan



### **EDUCATION**

- Ph. D. Mechanical Engineering /Power and machinery from Michigan State University, East Lansing, Michigan USA 2002.GPA = 3.5
  - M.Sc. Mechanical Engineering, Jordan University of Science and Technology, Irbid-Jordan 1994, thermal power with first rank of GPA=88.2%, excellent average.
  - B.Sc. Mechanical Engineering, Jordan University of Science and Technology, Irbid-Jordan 1989, thermal power with first rank of GPA=85.5%, excellent average.

## TESTS

Fundamentals of Engineering Examination with converted score of 84%, 2001.

#### ACADEMIC RECORD

- Faculty at Electromechanical Engineering Department- Abu Dhabi Institute of Applied Technology November 2014-2016
- Assistant professor- Mechanical Engineering Department- JUST 2002-August 2012.
- Research associate Biosystems Engineering Department- Michigan State University 1997-2002.
- Lab. Engineer Biosystems Engineering Department- JUST 1994-1996.

# TEACHING EXPERIENCE (12 YEARS)

# INDUSTRIAL EXPERIENCE (2 YEARS)

## 1. 'ZAQA UNIVERSITY

Teaching mechanical engineering courses in the department of eomechanical engineering such as:

- A. Engineering fluid mechanics
- B. Power plants engineering
- C. Applied engineering mathematics
- D. Materials Science and engineering

# 2. ABU DHABI INSTITUTE OF APPLIED TECHNOLOGY (2014-2016)

Teaching mechanical engineering courses in the department of electromechanical engineering and technology such as:

- 1. thermodynamics
- 2. engineering mechanics-dynamics
- 3. engineering mechanics

- 4. mechanical design
- 5. machine elements
- 6. personal development planning
- 7. mechanical vibration and noise control
- 8. advanced engineering mathematics
- 9. heating ventilation and air conditioning
- 10. power plant systems
- 11. internal combustion engines

## 3. TECHNICAL TRAINING IN SAUDI ARABIA

Senior Learning and Development Manager Maarefah Training Company KSA (2012-2014)

Trainer at training centers in the eastern area in KSA, mainly training courses for Sabic and Aramco employee in the following of the courses:

- 1. pumps types and operation
- 2. machine vibration analysis
- 3. advanced on valves technology
- 4. preventive maintenance
- 5. Basic heat transfer and exchangers
- 6. Mechanical fault analysis and troubleshooting
- 7. preventive and predictive maintenance
- 8. Basics of Instrumentation and Control System
- 9. confined space entry
- 10. Systematic Preventive and Predictive Maintenance
- 11. Pumps and compressors
- 12. AutoCAD level 1
- 13. AutoCAD level 2
- 14. Microscopy of carbon steel
- 15. Practical Energy Efficiency, Design, Engineering and Auditing
- 16. Falling Protection
- 17. Motors Testing

- 18. Lockout tagout
- 19. ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories
- 20. Root Cause Analysis
- 21. Safe work permit systems
- 22. Risk Assessment
- 23. Rotating Equipment Preventive Maintenance & Troubleshooting
- 24. Behavior Base Performance
- 25. Motivation towards Teamwork
- 26. Instrumentation
- 27. Chemical materials handling and hazards
- 28. Pumps & Compressors Operations, Trouble Shooting & Maintenance
- 29. master task list
- 30. chemical material balance
- 31. Safe Loading & Unloading
- 32. root cause analysis
- 33. crisis management
- 34. transformers
- 35. fans filters steam traps
- 36. project management
- 37. Technical report writing
- 38. pipes and auxiliaries
- 39. Operating Plant Work Process
- 40. Valves technology
- 41. Fire fighting
- 42. safety relief valve
- 43. process fired heater
- 44. integrated program in operation and maintenance TPM
- 45. Process Safety Management of Highly Hazardous & Explosive Chemicals
- 46. Skills of storekeepers and warehouse inventory Management .
- 47. Laser, Machinery Alignment & Dynamic Balancing Techniques.
- 48. Building Operational Excellence in the Processing Industry.

- 49. Advanced Operation Skills
- 50. Process Expert knowledge of all the principles and Techniques of Process Troubleshooting.
- 51. Plant Process Maintenance and troubleshooting
- 52. Effective Maintenance planning and scheduling.
- 53. Boiler operation
- 54. Distillation troubleshooting advanced
- 55. Mechanical troubleshooting .pumps, compressors and steam turbines.
- 56. Plant Maintenance & Troubleshooting Techniques.
- 57. effective maintenance planning and scheduling.
- 58. Industrial Safety Engineering.
- 59. Principles and Practice of Risk Assessment.
- 60. Forklift operation and safety.
- 61. Coupling and shaft misalignment.
- 62. Technical report writing and communication skills.
- 63. Problem Solving & Decision Making.
- 64. Technical Report Writing.
- 65. Creative Problem Solving and Decision Making.
- 66. Plant maintenance and troubleshooting.
- 67. Electrical Load Forecasting, Characteristics & System Upgrade.
- 68. Heat transfer and heat exchanger operation and maintenance.
- 69. Decision Making in Crisis & Emergency Situations

## 4. JORDAN UNIVERSITY OF SCIENCE AND TECHNOLOGY (2002-2012)

Dynamics, Statics, Theory of machines, Fluid mechanics, Strength of Materials,
 Thermodynamics, Heat Transfer, Air conditioning systems HVAC, and Internal
 Combustion Engines / Mechanical Engineering Department at JUST Department 2002-2012.

 Participation in Faculty for Factory consultation program to resolve technical problems on the industry.

# 5. LABORATORY EXPERIENCE AT JUST

- 1. Power and agricultural machinery
- 2. Physical properties of biomaterial
- 3. Thermal Power and fuel properties Lab.
- 4. Internal combustion engines
- 5. Instrumentation and dynamic systems Lab,
- 6. Strength of material Lab
- 7. Thermo-heat lab
- 8. Fluid mechanics and hydraulic machines lab/

### RESEARCH EXPERIENCE

Rheological study of white cheese.

Development of Lab for Testing Physical Properties of Biomaterials.

Viscosity analysis if non-Newtonian materials

Development of a Mechanical Probe for Nondestructive Apple Firmness Evaluation MSU.

### PRINCIPLE PUBLICATIONS

- Ababneh, Hussain Agricultural Engineering 2000 ASAE Annual International Meeting Milwaukee: Development of Mechanical Probe for Nondestructive Apple Firmness Evaluation
- Mohamad Al-Widyan, Majdi Al-Mahasneh, Hussain Ababneh, 2008. HEAT RECOVERY
   OPPORTUNITIES FROM A GRAIN DUST COMPOSTING PILE J. solid waste technology and management, vol. 34, pp140-148.
- Majdi Al-Mahasneh, Mohamad Al-Widyan, Hussein Ababneh, Taha Rababah and Khalil
   Ereifej 2008. Grain Dust as an Energy and Food Resource vol. 17(1), pp. 13-20.
- Mahasneh, Majdi A.; Ababneh, Hussein A.; Rababah, Taha, 2008 Some engineering and thermal properties of black cumin (Nigella sativa L.) seedsInternational Journal of Food Science & Technology, Vol.: 43 (6), pp 1047 1052.
- Hussain A. A. Ababneh, Renfu Lu, Ajit K. Srivastava, 2006. Finite element analysis and experimental evaluation of bioyield probes for measuring apple fruit firmness.
   Transactions of the ASABE. Vol. 49(1): 123-131
- Shaker, R. R., Attlee A, Kasi H,. Osaili T. M, Al Nabulsi A. and. Ababneh H. A. Comparison of the quality of low moisture mozzarella cheese made from bovine, ovine and caprine milks *Journal of Food, Agriculture & Environment Vol.10* (2): 89-93. 2012

## HONORS AND AWARDS

• Graduate school fellowship 2001, Michigan State University

University and college honor list for many semesters in Jordan University of Science and

Technology

#### REFERENCES

- 1. Mohamad Al-Widyan Mechanical Engineering-Faculty memberJordan University of Science and TechnologyPhone: (+962)2-7201000 Ext: 22561 Email: widyan@just.edu.jo
- 2. Nidal H. Abu-Hamdeh Mechanical Engineering-Faculty member Jordan University of Science and Technology Phone: (+962)2-7201000 Ext: 22330 Email: nidal@just.edu.jo
- 3. Dr. Shaaban Ali Faculty Ph.D, 2008, Aerospace Engineering Abu Dhabi Instutute of applied TechnologyElectromechanical Engineering TechnologyPhone:00971528591349 Email: shaaban.ali@adpoly.ac.ae