CURRICULUM VITAE
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EDUCATION:

- Ph.D. Chemical Engineering;
  May 1988 - Illinois Institute of Technology, Chicago, Illinois, U.S.A.
  Dissertation Title: Effect of Red Blood Cells on Platelet Adhesion and Aggregation in Low Stress Shear Fields.

- M.S. Chemical Engineering;
  December 1982 - Illinois Institute of Technology, Chicago, Illinois, U.S.A.

- B.S. Chemical Engineering;
- August 1981 (Graduated with Honors) - Illinois Institute of Technology, Chicago, Illinois, U.S.A.

- B.S. Chemistry/Biology;
  June 1978 - University of Jordan, Amman, Jordan.

ACADEMIC EXPERIENCE:

- Professor: Mu'tah University, Mu'tah – Karak – Jordan (September 1999 – present).
- Professor: Al-Hussein Bin Talal University, Maan – Jordan
  (February 2003 – February 2006 and June 2011 – September 2015)
- Associate Professor: Mu'tah University, Mu'tah-Karak-Jordan,
  (July 1993 – September 1999).
- Associate Professor: Al-Balqa Applied University - Amman College for Engineering Technology (Sabbatical Year 1998-1999).
- Assistant Professor: Mutah University, Mutah-Karak-Jordan (July 1988 - July, 1993).
- Scientific Research Committee Coordinator: Mu'tah University
  (September 2001- February 2003).
- Editor-in-Chief: Mu'tah Research Journal – Scientific Series
  (September 2001- February 2003).
- Editor-in-Chief: Mu'tah Research Journal – Humanities
  (September 2001- February 2003).

- Referee for several local, regional, and international Journals.
- Editor-in-Chief: AHU Research Journal (2003 – 2006).
- Research Associate: Illinois Institute of Technology, Chicago, Illinois, (February 1989 – February 1990).
- Research Assistant: with Dr. R.L. Beissinger, Illinois Institute of Technology, Chicago, Illinois (August 1984 - May 1988).

ADMINSTRATIVE EXPERIENCE:

- President of Al-Hussein Bin Talal University (June 2011 – June 2015)
- President assistant of Higher Education Accreditation Commission for accreditation affairs, (September 1, 2010 – June 15, 2011).
- Chairman of Prince Faisal Bin Al-Hussein Center's Council for Dead Sea, Water, Environment, and Energy Studies, Mu'tah University, (September 2006 – September 2008).
- Vice President, Al-Hussein Bin Talal University (AHU), (February 2003 – February 2006).
- Dean: Scientific Research, Mutah University, (September 2001 – February 2003).
- Dean: Engineering Faculty, Mutah University, (September 1999 – September 2001).
- Dean: Engineering Faculty, Mutah University, (August 1996 - July 1997).
- Vice Dean: Engineering Faculty, Mu'tah University, (August 1995 – December 1995).
- Chairman: Chemical Engineering Department, Mu'tah University, (August 1993 - July 1997).
- Director: Department of consultations, technical services, and continuing education, Mu'tah University (August 1992 - August 1993).
- Chemist: Directorate of Standards and Measurements Ministry of Industry and Commerce, Amman - Jordan (1978 - 1979).

RESEARCH AREAS:

- Application of chemical engineering principles to biological systems.
- Interactions between blood and artificial surfaces under the influence of physical forces.
- Biogas synthesis.
- Renewable energy.
- Waste heat recovery.
- Artificial blood synthesis and applications.
- Engineering education

MAJOR NATIONAL BOARDS AND COMMITTEES:

- Member of the board of trustees of Tafila Technical University – Jordan (July 2018 – Now)
- Committee of experts for National Universities Presidents Annual Evaluation (Ministry of Higher Education) July (2017)
- Full time Member of Higher Education Accreditation Commission Council, (September 1, 2010 – June 2011).
- Member of the board of trustees of Jordan University of Science and Technology (November 2009 – August 2010).
- National Competitiveness Council (2012)
- Committee of engineering sciences and information technology sector (Scientific Research fund – Ministry of Higher Education, November 2010 – 2011).
- Steering committee for Scientific Research Priorities and Needs in Jordan (The Higher Council for Science and Technology) – funded by the Ministry of Higher Education – Jordan – (July 2009 – October 2010).
- Institutional Accreditation Committee for Al-Blqa' Applied University, Higher Education Accreditation Commission – Jordan (2009).
- Member of higher committee of foreign certificates equivalency, Ministry of Higher Education- Jordan (November 2007 – November 2009)
- Specialized committee coordinator of foreign certificates equivalency for engineering, pure sciences, and agricultural sciences, Ministry of Higher Education – Jordan (1997 – November 2007).
- Institutional Accreditation committee for Al-Hussein Bin Talal University, Accreditation council, Ministry of Higher Education – Jordan (2002)
- Coordinator of the higher committee of the electrical engineering conference, Mu'tah University, (1996).
- Higher committee of the chemical engineering conference – Jordanian Engineering Association, (1999).
- Advisory committee for chemical engineering conference – Jordanian Engineering Association, (2005).
- Referee for distinguished researcher – Engineering Sciences, Ministry of Higher Education, (2006).
- Referee for distinguished research paper – Environmental sciences, Ministry of Higher Education, (2006).
- Referee for student distinguished research paper, Ministry of Higher Education, (2005).
- Referee for distinguished research paper – Engineering Sciences, Ministry of Higher Education, (2004).
- Higher committee for scientific research, Ministry of Higher Education, (2001 – 2003).
- Committee of specialized accreditation standards preparation for chemical engineering, Ministry of Higher Education (1994).
- Committee of the comprehensive exam for community colleges – chemical engineering specialization, Ministry of Higher Education, two terms.

SPECIAL ACADEMIC AND ADMINSTRATIVE ACHIEVMENTS:

- Contribution to the establishment of Al-Hussein Bin Talal University through the position of Vice President (2003 -2006). During this period the major contribution was through:
    1. Establishment of Computer Engineering and Information Technology College.
    2. Establishment of Business Administration and Economics College.
    3. Establishment of Mining and Environmental Engineering College.
    4. Establishment of Archeology and Tourism College.
    5. Establishment of Main Campus first phase buildings of a 64,000 square meters total.

- Contribution to the Establishment of the Center of Nabatian Studies Project (AHU) through Higher Education Development Project ($250,000).

- Restructuring of scientific research deanship after separation from the deanship of higher studies – Mu'tah University, (2001).

- Restructuring of the faculty of engineering – Mu'tah University, trough establishment of new specializations compatible with the requirement of National and Regional needs, (1999 – 2001). The new specializations include:
    1. Communications Engineering
    2. Electronic Engineering
    3. Power and Control Engineering
    4. Computer Engineering
    5. Chemical Engineering/ Processes
    6. Chemical Engineering/ Environment
    7. Civil Engineering/ Water and Environment
    8. Mechanical engineering/ Materials and Manufacturing.

- Establishment of Dead Sea Studies Center (Mu'tah University) through Higher Education Development Project ($500,000) – (2001-2003).

- Establishment of Water and Environmental Studies Center (Mu'tah University) through Higher Education Development Project ($500,000) – (2001-2003).

- Establishment of Energy Studies Center (Mu'tah University) – (2001-2003).

- Establishment of the Chemical Engineering Department (Mu'tah University) – (1993).

- Restructuring of Continuing Education Department (Mu'tah University) to become Consultations, Technical Services, and Continuing Education Department.

SCHOLARSHIPS:

- Recipient of Arab Student Aid International scholarship for outstanding Arab Students (1980-1982).
- Doctoral Scholarship from Mu'tah University (1983-1987).
- Research Grant from The Higher Council for Science and Technology, Amman-Jordan for research in the area of energy from biowastes.
- Elected as first alternate for Fulbright Scholarship program (1992).
- Fulbright scholarship recipient (3 months, summer 1993).

PUBLICATIONS:

1. Alkhamis, T.M., Beissinger, R.L. and J.R. Chediak, Effect of Red Blood Cells on Platelet Adhesion and Aggregation in Low Stress Shear Flow, Trans. Am. Soc. Artif. Intern. Organs, 33 (3), 636, 1987.

2. Gossage, J.L., Alkhamis, T.M. and R.L. Beissinger, Liposome Encapsulated Hemoglobin as a Red Blood Cell Substitute: Effects of Storage on Rheology and Hemolysis in Low Stress Shear Flow (abstract), Biomaterial, Artificial Cells, and Artificial Organs, 5 (4), 358, 1988.

3. Alkhamis, T.M., Beissinger, R.L. and J.R. Chediak, Red Blood Cell Effect on Platelet Adhesion and Aggregation in Low Stress Shear Flow: Myth or Fact, Trans. Am. Soc. Artif. Intern. Organs, 34 (3), 868, 1988.

4. Gossage, J.L., Alkhamis, T.M. and R.L. Beissinger, Liposome Encapsulated Hemoglobin as a Red Blood Cell Substitute: Effects of Storage on Rheology and Hemolysis in Low Stress Shear Flow, in Blood Substitutes, Chang, T.M.S. and R.P. Geyers Editors, Marcel Dekker, New York, 627, 1989.

5. Alkhamis, T.M., Beissinger, R.L. and J.R. Chediak, Artificial Surface Effect on Red Blood Cells and Platelets in Laminar Shear Flow, Blood, 75 (7), 1568, 1990.

6. Greisler, H.P., Johnson, S., Joyce, K., Henderson, S., Alkhamis, T.M, Beissinger, R., and D. Kim, The Effects of Shear Stress on Endothelial Cell Retention and Function in EPTFE Grafts, in Archives of Surgery, 125, 1622, 1990.

7. Alkhamis, T.M., "Red Blood Substitutes", J. of Engineering India, 2 (1), 19, 1992.

8. Alkhamis, T.M., and R.L. Beissinger, "Evidence of red blood cell contribution to thromboxane A2 formation in laminar shear flow", Mu'tah Journal for Research and Studies, 7 (2), 177, 1992.

9. Alkhamis, T.M., and R.L. Beissinger, "Liposome encapsulated hemoglobin as a red blood cell substitute by Reverse Micelle Processing I: formulation and

optimization", Mu'tah Journal for Research and Studies, 8 (6), 1993.

10. Alkhamis, T.M., and R.L. Beissinger, "Liposome encapsulated hemoglobin as a red blood cell substitute by Reverse Micelle Processing, II: Characterization and Efficacy", Mu'tah Journal for Research and Studies, 8 (6), 1993.

11. Mohammed, Z., Alhusein, M., and T.M. Alkhamis, "Experimental and Theoretical Evaluation of a Basin Type Solar Still", J. of Engineering India, 2, 1992.

12. Alkhamis, T.M., Beissinger, R.L., and J.R. Chediak, "Effect of Hirudin on Platelet Deposition to an Artificial Surface during Low Stress Shear Flow of Whole Blood", Biomaterials, 14 (11), 1993.

13. Alkhamis, T.M., and R.L. Beissinger, "Surface and Bulk Effects on Platelet Adhesion and Aggregation during Simple (Laminar) Shear Flow of Whole Blood", J. of Biomaterial Science, Polymer Edn, 6(4), 1994.

14. Alkhamis, T.M., Alhusein, M.A., and M.M. Kablan, "Utilization of Waste Heat from Kitchen Furnace of an Enclosed Campus", Energy Conversion and Management, 39 (2), 1998.

15. Alkhamis, T.M., Alhusein, M.A., and M.M. Kablan, "Performance Evaluation of Coil Heat Exchanger as Waste Heat Recovery Equipment", Renewable Energy, WREC, 1998

16. Alkhamis, T.M., Contribution of Red Blood Cells and Platelets to Shear-Induced Thromboxane A2 Generation in Laminar Flow", Alexandria Engineering Journal, 38 (2), 1999.

17. Alkhamis, T.M., "ADP Release and Thromboxane A2 Generation from Whole Blood Under Low-Shear, Alexandria Engineering Journal, 38 (5), 1999.

18. Alkhamis, T.M., Gossage, J.L., and R.L. Beissinger, "Effect of Storage on Rheology and Hemolysis of Liposome-Encapsulated Hemoglobin in Laminar Shear Flow", Scientific Research Journal - Mansoura University - Egypt, 23 (4), 1998.

19. Alkhamis, T.M., and M.A. Alhusein, "Cooked Waste Food as A Source of Biogas Production in an Enclosed Campus", Journal of Engineering - India, 9 (1), 1999.

20. Kablan, M.M., and T.M., Alkhamis, An Experimental Study for A Combined System of Tar Sand, Oil Shale, and Olive Cake as A Potential Energy Source in Jordan", Biomass and Bioenergy, 17, 1999.

21. Kablan, M.M., Alhusein, M.A., and T.M. Alkhamis, "Electricity Audit for Household Sector of the Capital City of Jordan, Amman", Energy Conversion and Management, 40, 1999.

22. Alkhamis, T.M., and M.M. Kablan, "Olive Cake as an Energy Source and Catalyst for Oil Shale Production of Energy and its Impact on the Environment", Energy Conversion and Management, 40, 1999.

23. Alkhamis, T.M., and M.M. Kablan, "A Process for Carbonaceous Matter Production from Tar Sand, Oil Shale, and Olive Cake, Energy, 24, 1999.

24. Alkhamis, T.M., El-Khazali, R., Kablan, M.M., and M.A. Alhusein, "Heating of a Biogas Reactor Using A Solar Energy System with Temperature Control Unit", Solar Energy, 69 (3), 2000.

25. Alkhamis, T.M., "In-Vitro Interaction of Liposome Encapsulated Hemoglobin with Blood Components" Chemical Engineering Communications, 178, 2000.

26. Shawaqfah, A.T, and T.M. Alkhamis, T.M., and, "Effect of Artificial Surface Electric Charge on Laminar Flow Shear-Induced Single Platelet Loss", Alexandria Engineering Journal, 43(6), 2004.

27. Khlaifat, A., and T. Alkhamis, "Dead Sea Mud Slurry Flow in a Horizontal Pipe", Jordan Journal of Mechanical and Industrial Engineering (JJMIE), 3(3), 2009.

28. Alkhamis, T.M. and Ali I. Al-Zoubi, "**Effect of solar heating on the production of biogas from manure using anaerobic bioreactor as a model of underground burial process"** submitted for publication (2015).

29. Alkhamis, T.M, and A.L. Khlaifat, **"Mathematical Consideration of ADP Leakage from Activated Platelet or RBC"**, in preparation (2016).

PRESENTATIONS AT PROFESSIONAL MEETINGS:

1. Liposome Encapsulated Hemoglobin as a Red Blood Cell Substitute (with J.L. Gossage and R.L. Beissinger), Slide Presentation, given at the Annual Meeting of the American Institute of Chemical Engineers (Miami Beach, Florida, November 1986).

2. Effect of Shear Induced Red Blood Cell Damage on Thrombosis (with R.L. Beissinger), Graphics Forum Presentation, given at 33rd Annual Meeting of the American Society for Artificial Internal Organs. (New York, New York, May 1987).

3. Effect of Red Blood Cells on Platelet Adhesion and Aggregation in Low Stress

Shear Flow (with R.L. Beissinger), Graphics Forum Presentation, given at the University Industry Poster Session (Amoco Research Center, Naperville, Illinois, October 1987).

4. Liposome Encapsulated Hemoglobin as a Red Blood Cell Substitute: (with J.L. Gossage and R.L. Beissinger), Graphics Forum Presentation, given at the 3rd International Symposium on Blood Substitutes (Montreal, Canada, June 1987).

5. Effect of Red Blood Cells in Low Stress Shear Fields on Platelet Aggregation and Adhesion (with R.L. Beissinger), Slide Presentation, given at the Annual Meeting of the American Institute of Chemical Engineers (New York, New York, November 1987).

6. Red Blood Cell Effect on Platelet Adhesion and Aggregation in Low Stress Shear Flow: Myth or Fact (with R.L. Beissinger and J.R. Chediak), Slide Presentation, given at the 34th Annual Meeting of the American Society of Artificial Internal Organs (Reno, Nevada, May 1988).

7. Red Blood Cell and Platelet Damage in Low Stress Simple Shear Flow (with R.L. Beissinger and J.R. Chediak), Slide Presentation, given at the Annual Meeting of the American Institute of Chemical Engineers (Washington, D.C., 1988).

8. Liposome Encapsulated Hemoglobin as An Artificial Red Blood Cell (with R.L. Beissinger and D. McCormick), Graphics Forum Presentation, given at the International Symposium on Red Blood Cell Substitutes: Design and Clinical Applications (San Francisco, California, May 1989).

9. Shear Flow and Red Blood Cell Concentration Effects on Platelets (with R.L. Beissinger and Juan Chediak), Graphics Forum Presentation, given at the Annual Meeting of the American Heart Association Chicago Chapter (Chicago, Illinois, May 1989).

10. Hemoglobin Multiple Emulsion and Liposome Encapsulated Hemoglobin as Red Blood Cell Substitute (with S. Zheng, R. Beissinger, D. Wasan, and D. McCormick), Slide Presentation, given at the Annual Meeting of the American Institute of Chemical Engineers (San Francisco, California, November 1989).

11. The Effects of Shear Stress on Endothelial Cell Retention and Function in EPTFE Grafts (with H.P. Greisler, S. Johnson, K. Joyce, S. Henderson, N. Patel, R.L. Beissinger, and W.H. Baker), Slide Presentation, given at the Association of Veterans Administration Surgeons with 14th Surgical Symposium (Charleston, SC, May 1990).

12. Performance Evaluation of Coil Heat Exchanger as a Waste Heat Recovery Equipment (with M.A. Alhusein and M.M. Kablan), Slide Presentation, given at

World Renewable Energy Congress (Florence, Italy, September 1998).

13. EFFECTIVE INDUSTRY- ACADEMIA COOPERATION (with others), slide presentation, given at 4th international forum on engineering education, (Sharjah, UAE, 25-27 April 2006).

14. Chairing the session of Partners for Change – Accreditation, Partnership, and quality Standards in Hospitality and Tourism Education, in the National Conference: "Innovation and Reform of Hospitality and Tourism Education in Jordan", Amman – Jordan, February 28, 2011.

15. Role of Higher Education Accreditation Commission (HEAC) In Quality Assurance of Engineering Education in Jordan, presented at the Workshop on "Compatibility between Engineering Education and the Requirements of Labor Market", University of Jordan, Amman – Jordan, May 3, 2011.

PROFESSIONAL AFFILIATIONS:

- Member of the American Institute of the Chemical Engineers.
- Member of Sigma Xi, the Scientific Research Society.
- Registered Engineer, Jordan Engineers Association, Jordan.

PERSONAL:

- Birth Date: February 21, 1955.
- Marital Status: Married, (five children).
- Nationality: Jordanian.

LANGUAGES and COMPUTER SKILLS:

- Arabic and English
- Fortran, ICDL

REFERENCES:

Furnished upon request