

## CURRICULUM VITAE

**HANA A. H. ZAKARIA**  
**P.O. Box 13524**  
**AMMAN ----11942**  
**JORDAN**



**Telephone: Work Phone: 0096265355000, Ext.22514.**  
**Home Phone: 0096265523395**  
**Mobile: 00962777424061**  
**00962798515389**  
**Fax: 0096265300806**

**E-mail [zakariah@ju.edu.jo](mailto:zakariah@ju.edu.jo)**  
**[hanazakaria5@gmail.com](mailto:hanazakaria5@gmail.com)**

### PERSONAL:

**Marital Status: Single**

**Nationality: Jordanian.**

**Job Title: Associate professor/The University of Jordan/School of Agriculture/Animal Production Department.**

### EDUCATION:

**\*High school, National Orthodox School 1974-1977**  
**Amman- Jordan.**

**\*Bachelors of Science BS in Animal Production: 1977-1981**  
**The University of Jordan, Faculty of Agriculture**  
**Amman-Jordan**

**\*Masters of Science in Animal Nutrition: 1994-1996**  
**Colorado State University, Fort Collins, Colorado.**  
**Sponsored by the Fullbright Program.**

**MS research focused on the interaction of using different particle size of alfalfa and Soyhulls in sheep nutrition.**

**Doctor of Philosophy:**

**\*Ph.D degree in Poultry Nutrition and Management 1999-2002**

**University of Padova, Padova, Italy.**

**Sponsored by the Italian Government.**

**Research focused on the addition of sodium bicarbonate to different species of poultry rations and its effect on growth parameters,(Sodium Bicarbonate in Poultry Nutrition).**

**EMPLOYMENT:**

**1981-1998: Research and teaching assistant at the University of Jordan-School of Agriculture-Animal production Department, Amman-Jordan.**

**2002-2010: Assistant professor at the University of Jordan–School of Agriculture, Animal Production Department, Amman-Jordan.**

**Dec, 2010-till now: Associate professor at the University of Jordan–School of Agriculture, Animal Production Department, Amman-Jordan.**

**Job Description and Work experience**

**Previous:**

**Analyzing feed and food in the laboratories of animal production at school of Agriculture.**

**Teaching the course “Feed Analysis” (602383).**

**Assist in most of the researches in the department.**

**Help and supervise students preparing for the master degree in the department.**

**Assist in writing and translating books and articles.**

**Present: Associate Professor at the University of Jordan**

**-Teaching the following courses:**

**Principles of Animal Science (602201)**

**Principles of Poultry Production (602212)**

**Poultry Farm Management (602418).**

**Field Training in Animal Production (0652499).**

**Principles of Poultry Nutrition (602486).**

**Advanced Poultry Nutrition (632786).**

**Seminar in Animal Production ((602491).**

**- Technical supervisor of the University Poultry station in the arid lands (Mowaqar).**

- Member of different committees in the Faculty.
- Member of Animal Feed Committees at the Ministry of Agriculture.
- Deanship assistant of Scientific Research for Community Outreach (2006-2010).
- Supervisor for graduate Students and participant in many different committees

## Conferences

### Before obtaining the Ph.D

- (1) Attended the 14<sup>th</sup> European Symposium on the quality of poultry meat and the 8<sup>th</sup> European Symposium on the quality of Eggs and Egg Products. 19-23, September 1999, Bologna-Italy.
- (2) Participation in the 12<sup>th</sup> European Symposium on Water fowl.18-20 October, 1999/ University of Cukurova, Adana-Turkey, presenting two papers:
  - (1) Influence of feeding plans on the productive performance of male Muscovy duck (*Cairina Moschata* L.).
  - (2) Effect of feeding plans on the metabolic profile of female Muscovy duck (*Cairina Moschata* L.).
- (3) Attended the IX European Symposium on the quality of eggs and egg products and the XV European Symposium on the quality of poultry meat held in Kusadasi, Turkey, September 9-12, 2001, to present two papers:
  - (1) Zootechnical performance and physiological response of guinea fowl fed tannin sorghum based diet.
  - (2) Effect of tannin diet on productive response and meat quality of guinea fowl.

### After the Ph.D degree:

- (1) Attended the XXII World's Poultry Congress, 8-13 June 2004, Istanbul-Turkey to present a paper entitled "Effect of the dietary balance on the productive performance of laying hens and the quality of the eggs".
- (2) Attending: The 6<sup>th</sup> Jordanian Scientific Agriculture Conference held at the Faculty of Agriculture/The University of Jordan from the 9<sup>th</sup>-12 April, 2007, presenting a paper entitled Effect of Sodium bicarbonate addition on growth performance of different commercial broiler strains.
- (3) The 17<sup>th</sup> European Symposium on Poultry Nutrition, 23-27 August, 2009. Edinburgh-Scotland. Presenting a paper *entitled* "The influence of supplemental multi-enzyme feed additive on the performance, carcass characteristics and meat quality traits of broiler chickens
- (4) The 3<sup>rd</sup> Mediterranean Poultry Summit and the 6<sup>th</sup> International Poultry conference, 16-29 March, 2012. Porto Marina, Alexandria-Egypt. Presenting a paper entitled " Effect of using different levels of dry protected plant fat and two forms of feed in the finisher phase on performance and blood parameters of broilers.

المشاركه في ا المؤتمر العلمي الزراعي السابع (الزراعه في خدمة الأمن العذائي) كلية الزراعه/جامعة العلوم والتكنولوجيا  
الأردنيه (5)

2012/ 10-8 تشرين اول/

(6) ICBEE 2013 International Conference on Biomedical Engineering and Environmental Engineering, December 1-2, 2013, Singapore. Presenting a paper from a Project funded by Shoman Foundation for supporting scientific Research

Paper entitled: (Wild water lentils plant (Duckweed, *Lemna Sp.*) in nutrients removal of Jordan's irrigation ponds).

(7) XIV European Conference in Stavanger, Norway, 23-27 June, 2014. Effect of adding lactose in drinking water on the performance, meat quality and blood parameters of broiler chicken.

(8) المؤتمر العربي الخامس للدواجن والأعلاف- فندق لاند مارك عمان الأردن 8-9 ديسمبر (كانون الأول) 2014  
لجنه تحضيريه للمؤتمر

(9) The seventh Conference on Scientific Research in Jordan. MEU University, 14/11/2015.

(10) International Conference on Environment Engineering and computer application. Hong Kong, December 25-26, 2014. (Water quality and growth trend of aquatic plant duckweed: management and benefits).

(11) 2016 International Conference on mathematical, computational and statistical sciences and engineering (MCSSE2016), October30-31, 2016 Shenzhen, China. (Functions of duckweed as a natural water purifying agent and as a feed source for laying hens).

#### Workshops and Seminars:

(1) A scientific day about (Biotechnology and bioengineering ideas for life). 26 Nov, 1999. Padova Fiera, Padova, Italy

(2) A workshop on "Latest aspects on the Nutrition and the Pathology of Rabbits." Held at the University of Padova on the 2<sup>nd</sup> of March 2001.

(3) Advanced Marketing Management Training for Agribusiness Managers Four Season Hotel/ Amman-Jordan, 8-10July, 2003.

4) Training course under the title "Poultry Disease, Nutrition, Feed production and Feed Formulation. By the American Soybean Meal Association at Sheraton Hotel Amman-Jordan. 25-27/11/2005.

(5) A Scientific lecture about the ideal use of antibiotics against bacterial infection in farm animals.

Gabri Hall, Amman/29/12/2006

- (6) Training course (Poultry Diseases and Nutrition Seminar) 13-15 Jan, (2007). By the American Soybean Meal Association at Sheraton Hotel Amman-Jordan.**
- (7) Using (EPSCO) data base/Consultancy center/University of Jordan,12-13/2007.**
- (8) The seventh Framework Program (FP7), joint seminar from 8-10 Jan, 2008. The University of Jordan, by the Higher Council for Science and Technology.**
- (9) Bologna Awareness Seminar on 20<sup>th</sup> of April, 2008. UJ, EC Delegation to Jordan and EMECW project. The University of Jordan.**
- (10) Leadership Course ( Leadership in Higher Education Managing Stimulating and Quality Assuring Research in Jordanian Universities. United Nations University. International Leadership Institute. 28-29 October, 2008.**
- (11) EU-Med Event 2. E-Infrastructure in the Mediterranean. 4 November, 2008. Amman-Intercontinental Hotel. Jordan**
- (12) ASA-IM Poultry Integration Seminar, Grand Hayat Hotel/Amman-Jordan, December 19-22, 2008.**
- (13) BestMix Training for feed formulation, held in Amman-Jordan from Feb 1<sup>st</sup> to 2<sup>nd</sup>,2010, from Provimi Company.**
- (14) American Soybean Meal Association and International Market Poultry Nutrition Seminar, held at Sheraton Hotel, Amman from March 31<sup>st</sup> to April 1<sup>st</sup> 2010.**
- (15) Jordan Science, Technology and Innovation Observatory (JOSTIO) workshop, The Higher Council for Science and Technology, 22-23/4/2010.**
- (16) Inception meeting, Developing policy-relevant capacity for implementation of the Global Environmental Conventions in Jordan. The Ministry of Environment, UNDP and GEF. Sheraton Hotel-Amman, 13<sup>th</sup> April, 2010.**
- (17) Participating in a local seminar held in 21/12/2010 for poultry producers in Jordan, presenting a lecture under the title (Using Enzymes in Poultry Nutrition).**
- (18) Participating in a training course under the title (How to write for a funded scientific proposal) which was held at the University of Jordan on 29/12/2010.**
- (19) Training course (Poultry Diseases Seminar) 26-27 March, (2011) by the American Soybean Meal Association at Sheraton Hotel Amman-Jordan.**
- (20) Training course (Poultry Feed Seminar), 15-16 May, 2011, by the American Soybean meal Association at Four Seasons Hotel, Amman-Jordan.**
- (21) Training course (Poultry Nutrition and Feed formulation Techniques and Purchasing Planning Methods), 22-23 April, 2012, by the American Soybean Meal Association, Four Seasons Hotel, Amman-Jordan.**

(22) The American soybean Association International Marketing Seminar (ASA-IM Regional Full Fat Soybean Meal Seminar. June 17-18<sup>th</sup>, 2012. Sheraton Hotel, Amman-Jordan

( 23) IPR and Technology Transfer training and 1-1s sessions. The University of Jordan/ Hamdi Mango Center for scientific Research, June, 17<sup>th</sup>-18<sup>th</sup> 2013 Amman-Jordan.

(24) Scientific Seminar on (Improving the feed conversion ratio in poultry production), Landmark Hotel, 25/6/2013, Amman-Jordan.

(25) Scientific seminar on (New form of vitamin D3 in Animal Nutrition (Panbonis) By: Dr Heini Bachmann –Switzerland. Organized by Herbonis Animal Health, Robert Aebi Feed Additive Technologies and Omariah Agriculture and Veterinary Company. Brestol Hotel, Amman-Jordan 18/11/2013.

(26) Info Day for Peer Grants Program (Partnerships for enhanced Engagement in Research), Royal Scientific Society, 28<sup>th</sup> October, 2014.

(27) A scientific seminar about the release of the new poultry breed (Indian River) in Jordan. Land Mark Hotel, 15/1/2014 by ACOLID.

(28) Seminar on Hemicell HT: The Energy Sparing Enzyme, 25/11/2014, Sheraton Hotel, Amman-Jordan.

(29) Scientific seminar under the title (Layers) organized by Al-Daoud Company for poultry production in Jordan with the cooperation of (ISA HENDRIX GENETICS-HISEX) company. Crown Plaza Hotel-Amman, 12/3/2015.

(30) Scientific seminar on (Lenerzyme:the first feed lipase in the world) By Al-Ghad Technology Company, Holiday Inn –Amman, 13/12/2016.

(31) Scientific Seminar on (Addcon Form NDF; unique Acidifier) by Takamul National Agri & Trading Est. Marriot Hotel, 25<sup>th</sup> February/2017.

32) Workshop on the web of science& Endnote by Thomson Reuters/The University of Jordan-Main library, February, 2017.

33) الدورة التدريبية (تطوير وتحليل الإختبارات باستخدام SPSS) / 2017/3/26/ الجامعة الأردنية/ مركز الإعتماد وضمان الجودة

الورشه التدريبية بعنوان ( اتجاهات حديثه في التدريس الجامعي) / 2017/5/24/ الجامعة الأردنية/ مركز الإعتماد وضمان الجودة

35) Horizon2020 Information Session/European Commission/Amman, Fairmont Hotel, 18/4/2018.

### International Training Course:

1- Training course in U.K. (London) from Jan-May, 1983. In “Feed Analysis and the different methods used to estimate its composition.” Sponsored by the British council.

2- Training course in Austria (Vienna) from Sep-Oct 1991 in “Immunoassay and related techniques in the study of livestock production in the tropics”. Seibersdorf. International Atomic Energy Agency. (IAEA).

### **Publications:**

1. Chiericato G.M., Rizzi C., Zakaria H. (1999). A study on the effect of feeding plans on the productive performance and carcass traits of male muscovy duck (*Carina Moschata*). 12<sup>th</sup> European Symposium on waterfowl. pp. 63-68. Adana/Turkey.
2. Chiericato G.M., Rizzi C., Zakaria H. (1999). Influence of feeding plans on the metabolic, enzymatic and mineral profile of female muscovy duck (*Cairina Moschata L.*). 12<sup>th</sup> European symposium on waterfowl. pp. 69-72. Adana/Turkey.
3. Chiericato G.M., Rizzi C., Ravarotto L. Zakaria H. (2000). Circulating levels of metabolites, enzymes and minerals of Grimaud female rabbits from weaning to 120 days of age. 7<sup>th</sup> world Rabbit Congress. pp. 11-116. Valencia-Spain.
4. Chiericato G.M., Rizzi C., Zakaria H. (2001). Effect of Tannin sorghum diet on productive response and meat quality of Guinea fowl. XV European Symposium on the quality of poultry meat. pp.193-198. Kusadasi/Turkey.
5. Chiericato G.M., Rizzi C., Zakaria H. (2001). Zoo-technical performance and physiological response of guinea fowl fed a tannin sorghum based diet. XV European Symposium on the quality of poultry meat. pp.157-162. Kusadasi/Turkey.
6. Dalle Zotte A., Chiericato G.M., Rizzi C., Zakaria H. (2001). Effet de la restriction de la lapine nullipare sur le profile en acides gras des lipids des muscles lapins issus de la premiere mise bas. Journees de la recherché cunicole. pp. 23-26. Paris.
7. Al-Matar A., Al-Shawabkeh K., Zakaria H. (2005). Prevalence of Salmonella in broiler chicken carcasses in Jordan. *Dirasat/Agricultural Sciences*. Vol. 32, No. 2. 267-276.
8. Zakaria H. A., Jalal M., A. R. and Jabarin A. (2008). Effect of Exogenous Enzymes on the growing Performance of Broiler Chickens Fed regular Corn/soybean based diets and the economics of enzyme supplementation. *Pakistan Journal of Nutrition*, 7(4): 543-539.
9. Zakaria H.A., Tabbaa M.j., Al-Shawabkeh K., (2009). The effect of dietary sodium bicarbonate on performance and blood parameters of broiler chickens inoculated with *Salmonella gallinarum*. *Journal of Animal and Feed Sciences*, 18: 335-347.
10. Al-Shawabkeh K, Herzallah S., Al-Fataftah A., Zakaria H. (2009). Effect of aflatoxin B1 contaminated feed on broiler chickens performance and meat content of conjugated linoleic acid. *Jordan Journal of Agricultural Sciences*, Vol. (5), No.(3): 314-323.
11. H.A. Zakaria, M.Jalal and M.Abushmeis. (2010). The Influence of Supplemental feed additive on the performance, carcass characteristics and meat quality of broiler chicken. *International Journal of Poultry Science*, 9, 2:126-133.

- 12. Kamel Z. Mahmoud, Saad M. Gharaibeh, Hana A. Zakaria and Amer M. Qatramiz. (2010). Garlic (*Allium Sativum*) Supplementation: Influence on Egg Production, Quality and Yolk Cholesterol level in layer hens. Asian-Australian Journal of Animal Science, Vol 23, No.11: 1503-1509.**
- 13. H.H. Titi, Y.L. Hasan, K. Al-Ismail, H. Zakaria, M.J. Tabbaa, A.Y. Abdullah and B.S. Obeidat. (2011). Response of Shami goats and kids to variable levels of soyabean or sunflower oils in diets. Journal of Animal and Feed Sciences, 20, 493–508.**
- 14. M.A.Jalal, and H.A.Zakaria. (2012).The effect of quantitative feed restriction during the starter period on compensatory growth and carcass characteristics of broiler chickens. Pakistan Journal of Nutrition. 11(9):719-724.**
- 15. H.A.Zakaria, A.Hammad, A.AlFataftah, H.Titi. ( 2013). Replacing Soybean Oil in the Finisher Phase with different levels of Dry Protected Plant Fat and two forms of feed and their effect on performance, carcass quality and blood parameters of broilers. International Journal of Poultry Science. 12 (1): 37-44, 2013.**
- 16. Maisa'a W. Shammout, Hana Zakaria. (2014). Wild water lentils plant (Duckweed, *Lemna Sp.*) in nutrients removal of Jordan's irrigation ponds. Biomedical Engineering and Environmental Engineering, The Built Environment, Vol, 145, pp 525-529. Wit Press Transaction.**
- 17. M.W.Shammout, H. Zakaria. (2014). Water quality and growth trend of aquatic plant duckweed: management and benefits. Proceedings of ICEECA ,p. 16, International Conference on Environment Engineering and Computer Application, December,25-26, (2014), Hong Kong.**
- 18. Alaeldein M. Abudabos, Fuad Saleh, Andreas Lemma, Hana A.H. Zakaria. (2014).The relationship between guanidine acetic acid and metabolizable energy level of diets on performance of broiler chickens. Italian Journal of Animal Science: Vol.13: 3269,**
- 19. Alaeldein M. Abudabos, Hana A.H. Zakaria and Ahmed A. Al-Sagan.(2014). Effects of Organic acids on serum biochemical and hematological indices in salmonella-challenged broiler chicks. MITEILUNGEN KLOSTERNEUBURG, 64 (2014) 9.**
- 20. T.M.A. Taha, H.Zakaria, M. Jalal and S. Bauwens. (2014). Effect of the commercial product Lumance, a combination of partly esterified organic acids and plant extracts on the performance of broiler chickens. Journal of Applied Animal Nutrition, Vol 2; e14; 1-8.**
- 21. Dirgam A. Rousan, Hana Zakaria, Ghassan Khawaldeh, Ibrahim Shaheen.(2014) Differentiation of Avian Pathogenic Escherichia Coli strains from Broiler chickens by multiplex polymerase chain reaction (PCR) and random amplified polymorphic (RAPD) DNA. Open Journal of veterinary Medicine,4, 211-219.**
- 22. Maisa'a W. Shammout, Hana Zakaria. (2015). Water lentils (duckweed) in Jordan irrigation ponds as a natural water bioremediation agent and protein source for broilers. Ecological Engineering, 83(2015) 71-77.**



23. Maisa'a W. Shammout and Hana Zakaria. Functions of duckweed as a natural water purifying agent and as a feed source for laying hens. (2016). International conference on mathematical, computational and statistical sciences and engineering (MCSSE)
24. Abudabos AM, Alyemni AH, Zakaria HA. (2016). Effect of two strains of probiotics on the antioxidant capacity, oxidative stress and immune responses of salmonella-challenged broilers. *Brazilian Journal of poultry Science*, V. 18, n.1, 175-180.
25. Zakaria HA, Jalal M, Al-Titi H, Souad A. Effect of sources and levels of dietary Zinc on the performance, carcass traits and blood parameters of broilers.(2017). *Brazilian Journal of Poultry Science*, Sept, 2017, Vol. 19 no. 3, 519-526.
26. F. M.F. Hayajneh, M. Jalal, H. Zakaria, A. Abdelqader, M. Abuajameh. Anticoccidial Effect of Apple Cider Vinegar on Broiler Chicken: An Organic Treatment to Measure Antioxidant Effect. (2018). *Polish Journal of Veterinary Sciences*. Vol. 21 no.(2) 361-369.DOI: 10.5601/jelem. 2018.23.2.1043.
27. Zakaria HA, Shammout MW. Duckweed in irrigation water as a replacement of soybean meal in the laying hens' diet. *Brazilian Journal of poultry Science*. Oct-Dec. 2018, Vol.20, No.3.pp519-525.
28. Razaiepour V., F. Aghayar, A. Bozorgnia, M. Norozi and H. Zakaria. Effects of feeding strategies and supplemental lipotropic factors on growth performance, ascites-related indices, serum metabolites and meat quality in broiler chickens reared at high altitude. *The Journal of Animal and Plant Sciences*, 29(1):2019, page: 25-32.
29. Hana A.H. Zakaria and Murad R. Atta. Efficacy of Soyprotein concentrates on the performance and immunity of broiler chickens. *Frontiers in veterinary science*, 7: 539, Nov, 2020.
30. F.M. Hayajneh, H. Zakaria, J. Al-Khazaleh. Histological and Elisa investigations to uncover subclinical and clinical Marek's disease in broiler chickens in Jordan. 55(11), 2021, *Agrociencia Journal*.
31. Shadi Al-hantoli, Mouhammad Jalal, Hana Zakaria. Effect of prebiotic and probiotic supplementation on broiler chicken performance. Accepted, October, 2021. *Agrociencia Journal*.

#### **Additional Information's:**

**Member of World Poultry Science Association.**

**Member of the Association of Agricultural Engineers-Jordan.**

**Member of different Committees for master degree students.**

**Member of Project Selection Committee (PSC) of the (ENPICBCMED) which is a programme of the EU that gives funds for the Mediterranean countries. Two meetings were held in Sardinia (Italy) in June and November /2010, where I was a representative for Jordan.**

**Languages:**

**Arabic: Mother tongue.**

**English: Excellent.**

**French: Good**

**Italian: Good.**

