

Curriculum vitae					
	Name:Nesrein Mohamed Hashem.Nationality:Egyptian.Date of Birth:26 December 1978.Social status:Married and have three children.Current position:Professor of Animal Physiology, Animal and Fish ProductionDepartment, Alexandria University, EgyptInvited Professor (2024/2025) Departamento de Producción y Sanidad Animal, Salud Pública Veterinaria y Ciencia y Tecnología de los Alimentos, La Universidad CEU Cardenal Herrera, Valencia, Spain				
Contact information and websites:	Tel: 0335922780 (Egypt) / +34695222283 (Spain) Mobil: 01220799965 E-mail:animalprodreprod@gmail.com nesreen.hashem@alexu.edu.eg ORCID: https://orcid.org/0000-0003-0058-9671 Scopus ID: 43761104300 (https://www.scopus.com/authid/detail.uri?authorId=43761104300)				
<u>Education:</u>	 1999, Bachelor in Agricultural Sciences, Animal and Fish Production Dept., Faculty of Agriculture, Alexandria University, Egypt. 2003, M.Sc., Graduate of Alexandria University, Animal and Fish Production Dept., Egypt. Thesis title: Ovulation induction and embryonic development in rabbits. 2009, Ph.D., Graduate of Alexandria University, Animal and Fish Production Dept., Egypt. Thesis title:Ultrasonic evaluation of ovarian activity after estrus synchronization during breeding and non-breeding seasons in Barki×Rahmani crossbred ewes. 				
<u>Scientific career:</u>	 Demonstrator (2000 - 2004) Animal and Fish Production Department, Faculty of Agriculture, Alexandria University, Egypt. Assistant Lecturer (2004 - 2010) Animal and Fish Production Department, Faculty of Agriculture, Alexandria University, Egypt. Lecturer (2010 - 2015) Animal and Fish Production Department, Faculty of Agriculture, Alexandria University, Egypt. Associate Professor (2015- now) Animal and Fish Production Department, Faculty of Agriculture, Alexandria University, Egypt. Professor (2020 - now) Animal and Fish Production Department, Faculty of Agriculture, Alexandria University, Egypt. Horonary Adjunct Professor (2023-2028) School of Bioengineering and 				
<u>Language:</u> <u>Awards</u>	 Horonary Adjunct Professor (2023-2028) School of Bioengineering and Biosciences, Lovely Professional University, India Visiting Professor (2024/2025) Departamento de Producción y Sanidad Animal, Salud Pública Veterinaria y Ciencia y Tecnología de los Alimentos, La Universidad CEU Cardenal Herrera, Valencia, Spain Arabic- mother language English- second language The shield of Alexandria University for Excellent Scientific Publication and the title of Distinguished Researcher of Alexandria University in the field for the year 2022, Alexandria University, Egypt. The State Encouragement Award for Women (2019), Academy of Scientific Research& Technology (ASRT), the Ministry of Scientific Research, Egypt. Alexandria University Award for Scientific Encouragement (2017). 				



Author metrics:

-Recognized ТОР 2% scientist by Stanford Elsevier as and https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/6 ; https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/6/files/d2537947-3d38-42e5-9c34-15c3dfe04f59; Published: 4 October 2023 Version 6 DOI:10.17632/btchxktzyw.6) -Scopus (https://www.scopus.com/authid/detail.uri?authorld=43761104300) -*h*-*index* = <u>21</u>; *citation*:1120; *total publication* = 72 *articles*. Google scholar (https://scholar.google.com/citations?user=n4cw5V0AAAAJ&hl=en) *h-index* = <u>27;</u> *citation:*2100 Publication details are shown and listed at the end of the CV.

Travel abroad:

Country	Mission	<u>Details</u>	
Spain	Scientific	Faculty of Veterinary Medicine, Cardenal Herrera University, CEU,	
	mission	Valencia, Spain, February 2024 to February 2025	
India	Training course	Solid Waste Management, Indian Technical and Economic Cooperation (ITEC), Ministry of External Affairs, Environment Protection Training and Research Institute, Hyderabad, India, 6-25 November 2023	
Italy	Conference	19 th Congress on Animal Reproduction, Bolonga, Italy, 25-30 June 2022	
China	Seminars	Agriculture Technology Innovation and management for BRI Country. China, 5-26 November, 2019.	

Teaching activities:

Course name	Course code		
Graduate courses:			
Basics of Animal Poultry and Fish Production	32203		
Basics of Farm Animal Physiology	08301		
Field training	32320		
Physiology of Reproducion	08408		
 Physiology of Growth and Milk Secretion 	08410		
 Physiology of Endocrinology and Neurology 	08419		
 Bio-techniques and its Applications in Animal Production Field 	32405		
Post-graduate courses:			
Environmental Physiology	08622		
Advanced Reproductive Physiology	08625		
Advanced Animal Physiology	08627		
Rabbit Production Fundamentals	08519		

Research activities:

Experimental& laboratory and farm skills:

Microbiology



- Application of nano-technology approaches in livestock sector.
- Fabrication of some nano-materials (hormones and plant extracts).

• Evaluation of the plant secondary metabolites effects on animal performance (production and reproduction)

• Application and designing of different estrus synchronization protocols for different farm animals.

- Determination of milk composition and evaluation of milk quality.
- Preparation of plant materials extracts.
- GC/MS and HPLC analysis
- Using of the ultrasound device with different farm animals.
- Preparation of the media for embryos culture and embryo collection, evaluation and *in vitro* culture.
- Collection of embryos using flushing technique.
- Semen collection and evaluation.
- Artificial insemination in rabbits.
- Blood samples collection& hematological and biochemical assays.
- Determination of hormones using ELISA technique.
- Preparation of plant materials extracts.
- GC/MS and HPLC analysis.

Interesting research points:

- Climate changes and its impacts on livestock reproduction and production and farming systems
- Applications of nano-technology in livestock field
- Probiotics, prebiotics, synbiotics, and postbiotics and related applications on livestock production
- Applying hormonal treatments to improve farm animals reproduction
- Studying the effects of some plant secondary metabolites such as isoflavones on reproduction of males and females
- Studying effects of plants growth promoters (natural growth promoters) on physiological responses and growth performance
- Improve milk production and milk quality in dairy/lactating animals.
- Biological evaluation to phytogenic extracts to act as antibacterial and antimicrobial candidates
- Studying the seasonality of reproduction in small ruminants.
- Studying the effect of some feed supplementations on ovarian activity, semen quality and growth performance.
- Studying the interaction between reproduction and nutrition.

Advisors/ Examiners committees:

• An advisor for post-graduate students:

Master thesis (completed):

1- Thesis title: Effect of energy sources on productive and reproductive efficiency in dairy cows. Student Name: Asmaa Ahmed Agamy, Advisors' committee: Prof. Dr. Khaled A. El-Shazly; Dr. Sobhy M.A. Sallam; Dr. Nesrein Hashem.



- 2- Thesis title: Effect of ethanol extract for *Moringa oleifera* leaves on reproductive performance of rabbit bucks. Student Name: Nagwa El-Desoky, Advisors' committee: Prof. Dr.Zahraa Abo El-Ezz; Dr. Ahmed M. G. Al-komy; Dr. Nesrein Hashem
- 3- Thesis title: Effect of supplementing Rahmani ewes with vitamins A and C on their reproductive performance and productivity during summer season. Student Name: Dalia Abd-ELrazek, Advisors⁷ committee: Prof. Dr.Zahraa Abo El-Ezz; Prof. Dr. Gamal Abd El-latif; Dr. Nesrein Hashem.
- 4- Thesis title: Preparation, charactarization and evaluation of the effect of chitosan-LHRH nanoparticles on reproductive functions of rabbits, Student Name: Eman Moustafa Abdel-Moneim, Advisors[,] committee: Prof. Dr. Mohammed Helmy Salem; Prof. Dr. Gamal El-Din Abdel-Rheem; Dr. Nesrein Mohammed Hashem; Dr. Kheir El-Din Mostafa El-Azrek.
- 5- Thesis title: Effect of supplementing organic selenium during the summer on reproductive performance of male and female rabbits, Student Name: Nourhan Saad, Advisor committee: Prof. Dr. Zahra Abo El Ezz; Dr. Nesrein Hashem; Dr. Amr Salah.
- 6- Thesis title:Effect of the addition of probiotics fabricated by nanotechnology as antibiotic alternative on quality of cooled stored semen in rabbits.Student Name: Sanaa Elalfy , Advisor committee: Prof. Dr. Nesrein Hashem; Dr. Mohamed Mohsen.

Master thesis (running):

1- Thesis title: Application of nano-encapsulated probiotic for alleviating heat stress effects on fertility of goats. Student Name: Samaa Tarek, Advisors, committee: Prof. Dr. Ibrahim Abaza; Dr. Ibrahim Khattab; Prof. Dr. Nesrin Hashem.(July 2022).

PhD thesis (completed):

- 1-**Thesis title**: Effect of nano-encapsulated *Moringa* leaves ethanolic extract on reproductive performance of rabbits **Student Name**: Nagwa El-Desoky, **Advisors**, **committee**: Prof. Dr.Zahraa Abo El-Ezz; Dr. Ahmed M. G. Al-komy; Dr. Nesrin Hashem.(July 2022).
- 2-Thesis title: Effect of phytoestrogens on heamat-biochemical parameters and semen characteristics of male rabbits, Student Name: Marwa Abo Elsaod, Advisors, committee: Prof. Dr. Gamal A. Hassan; Pro. Dr. Kamel I. Kamel; Dr. Adel Nour El-Din ;Dr. Nesrein M. Hashem. (October 2018).

Ph D thesis (Running):

1- Thesis title: Prospective effects of applying a specific postbiotic using nanotechnology approach for improving the reproductive performance of female rabbits. Student Name: Nourhan Saad, Advisor committee: Prof. Dr. Zahra Abo El Ezz; Dr. Nesrein Hashem; Dr. Amr Salah.

Participation in examiners' committees for postgraduate students:

 MS thesis: Effect of the addition of probiotics fabricated by nanotechnology as antibiotic alternative on quality of cooled stored semen in rabbits .Alexandria University, February 2024.



- 2. MS thesis: Studies on some assisted reproductive techniques in rabbits. Suez Canal University, September 2022.
- 3. **PhD thesis**: Effect of nano-encapsulated *Moringa* leaves ethanolic extract on reproductive performance of rabbits. **Alexandria University**, **July 2022**.
- 4. **PhD thesis**: Effect of oxidative stress on growth and development of in vitro produced embryos in camels. Cairo University, Egypt. 4 July 2021.
- 5. PhD thesis: Effect of phytoestrogens on haemato-biochemical parameters and semen characteristics of male rabbits. Alexandria University, October 2018.
- 6. **MS thesis:** Preparation, charactarization and evaluation of the effect of chitosan-LHRH nanoparticles on reproductive functions of rabbits. **Alexandria University, 2020.**
- 7. **MS thesis:** Effect of supplementing organic selenium during the summer on reproductive performance of male and female rabbits. **Alexandria University, 2020**
- 8. MS thesis: Effect of supplementing Rahmani ewes with vitamins A and C on their reproductive performance and productivity during summer season. Alexandria University, 2018.
- 9. **MS thesis:** Effect of energy sources on productive and reproductive efficiency in dairy cows.**Alexandria University**, **2013.**
- 10.**MS thesis**: Effect of ethanol extract for *Moringa oleifera* leaves on reproductive performance of rabbit bucks. **Alexandria University, 2017.**

Member of Qualifying Examiners Committee: 2020: Poultry physiology.

<u>Reviewer board :</u>

1- A reviewer member of the promotion committee of professors and associate professors, Supreme Council of Universities , Egypt.

2- An **academic reviewer** at The Science, Technology & Innovation Funding Authority (STDF) for evaluating projects/proposals scientific eligibility.

3- A verified reviewer at Publons web site, Clarivate analysis. (Web of Science Researcher ID: H-6869-2019; https://publons.com/dashboard/records/review/).

Pharmaceutics- Agriculture- Life-Diagnostic- Domestic Animal Endocrinology

International Journal of Molecular Sciences- Animals- Reproductive biology- Italian Journal of Animal Science- Gene- Science of the Total Environment- Environment, Development and Sustainability- Frontiers in Veterinary Science- Veterinary Medicine and Science - Environmental Science and Pollution Research- Tropical Animal Health and Production - Archive of Animal Breeding- BioMed Research International- Plos One

Asian Basific Journal of Reproduction- Open Veterinary Journal <u>http://www.openveterinaryjournal.com/reviewersandreferees.htm</u>- Animal of Physiology and Animal Nutrition- the Annual Review & Research in Biology- Molecular Biology- Reports- Journal of Applied Animal Research- Annals of Animal Science- Theriogenology- Andrology- World Rabbit Science - Veterinary World

- Fermentation

Project participation:

- 1) CO-PI: Use of nutritional, molecular, and physiological techniques to alleviate heat stress and methane emission from ruminants. Arab Research & Innovation Co-Funded Alliances. Project no: ARICA23-914 - From 2024-2027
- باحث مساعد: استخدام تقنيات غذائية و جزيئية و فسيولوجية مختلفة للتقليل من الاجهاد الحراري وانبعاث (2

غاز الميثان في المجترات- التحالفات العربية للبحث العلمي و الابتكارات- مشروع رقم914-

3) PI: Designing an industrial prototype for innovating microbial-based feed additives using nano-encapsulation technology for improving performance and immunity of farm animals. Funded by Academy of Scientific Research and Technology, Science and Technology Center,



Grant Type : National Strategy for Genetic Engineering and Biotechnology/ Phase iii: Applications & Products Development 2022.

تصميم نموذج صناعي لابتكار اضافات علفية تعتمد على الميكروبات باستخدام تقنية التغليف النانوية لتحسين اداء ومناعة حيوانات المزرعة

1- Co-PI: Milk and meat safety and greenhouse gas emissions from ruminants fed on organo modified nanoclays as feed additives- supported by STDF, 2020- 2023-code of the project: 34802, STDF innovation.

سلامة الالبان و اللحوم و انبعاث غازات الاحتباس الحراري من المجترات و التي تتغذي علي مركبات الطين في صورة النانو -(34802) ممول من صندوق دعم العلوم والتكنولوجي

4) Researcher: Endogens rumen yeast strains combined with organo modified nano montmorillonite as novel feed additives for ruminants. الخمائرالمخلقة داخليا بالكرش و المخلوطة. Funded by Academy of vertice Research and Technology, Science and Technology, Grant Type: National Strategy for Genetic Engineering and Biotechnology/Phase iii: Applications & Products Development, 2022.

- 5) Implementation staff member of the project entitled: "Utilization of alternative feed resources for maximization of meat and milk productivity and mitigate methane emission in ruminants" supported by STDF 2016-2018.
- 6) **Implementation staff member** of the project entitled: of the project entitled "**Nutrition**, **Reproduction and Genotype Interaction in Dairy Cows and Buffaloes**" which supported by Alexandria University from 2010-2012. Supported by ALEX-REP, Alexandria University, Egypt.
- 7) Implementation staff member of the project entitled: Using of current techniques in reproduction of farm animals- supported by HEPF- 2006.

Contribution to journal editorial boards:

- 1) An editorial board member of BMC Veterinary Research
- 2) An academic editor in <u>PLOSE ONE</u> journal.
- 3) An advisory editorial board member of Iraqi Journal of Agricultural research.
- 4) Reviewer Editor in Frontiers in Veterinary Science, Animal Reproduction, Theriogenology, <u>https://www.frontiersin.org/journals/veterinary-science/sections/animal-reproduction---</u> <u>theriogenology.</u>
- 5) Topic Editor of <u>Frontiers in Veterinary Science</u> for a research topic: **Exploring the Application** of **Diagnostic Ultrasonography in Reproductive Veterinary Medicine.** https://www.frontiersin.org/research-topics/44520/exploring-the-application-of-diagnosticultrasonography-in-reproductive-veterinary-medicine.
- 6) Guest Editor of a Research Topic :**Farm Animal Welfare and Climate Change**: **Methods of Assessment and Mitigation.** <u>Frontiers in Veterinary Science</u>, https://www.frontiersin.org/research-topics/35033/farm-animal-welfare-and-climatechange-methods-of-assessmentandmitigation?fbclid=IwAR0MKAPx9G6DnFgErSyVLr_ZwCyq6mNMyT7pdRjIa7C0HrT2rR6Sm E3da0U#articles.
- 7) Guest Editor of a Research Topic: Anti-Nutritional Factors in Food: Their Occurrence, Health-Hazards and Effect of Cooking Thereon. <u>Frontiers in Nutrition</u>, https://www.frontiersin.org/research-topics/36072/anti-nutritional-factors-in-food-their-



occurrence-health--hazards-and-effect-of-cooking thereon?fbclid=IwAR1fOvRvr81JZWoBQCtBzWdhTSqcFAZzuKa_NMEGB7mo-HeznQwrnijuJA4

- 8) A member of the Asian Council of Science Editors (up to 31 December 2021).
- 9) Guest Editor of a special issue: Nanotechnology in Animals Science, <u>Animals</u>, https://www.mdpi.com/journal/animals/special_issues/Nanotechnology_in_Animal_Science A special issue of Animals (ISSN 2076-2615).
- 10) Guest Editor of a special issue: Antioxidants in Animal Production, Reproduction, Health and Welfare, <u>Animals</u>, https://www.mdpi.com/journal/animals/special_issues/Animal_Antioxidants?fbclid=IwAR3L 0R9Zu-ceaK-4-vbg2pEJqCpebziUR0nmXKGIgBksyWOqGmqVr2w4tbM <u>Animals</u> (ISSN 2076-2615).
- 11) UTTAR PRADESH JOURNAL of ZOOLOGY (from 10/7/2020 to 10/7/2023).
- 12) Asian Journal of Research in Animal and Veterinary Sciences (from 5/12/2019 to 4/12/2023).
- 13) International Journal of Animal Science and Technology http://www.ijast.net/editorialboard.
- 14) Journal of Veterinary Science and Research.
- 15) An editorial board member of *SCIREA Journal of Biology* (<u>http://www.scirea.org/journal/Biology</u>).

Training courses:

- 1- Attending a training course: **Solid Waste Management**, Indian Technical and Economic Cooperation (ITEC), Ministry of External Affairs, Environment Protection Training and Research Institute, Hyderabad, **India**, **6-25 November 2023**.
- 2- Understanding the foundation of Research Metrics in Evaluation. organized by **ELSEVIER** at Alexandria University STEM Sector, on **Monday 12 June, 2023.**
- 3- Attending an online seminar on Intelligent Agriculture Development for Belt and Road Countries organized by the Division of Capacity Building and International Exchange of the Center of International Cooperation Service (CICOS), Ministry of Agriculture and Rural Affairs, 26 November to 7 December, 2021, Peoples Republic of China.
- 4- Attending an online seminar on **Agriculture development policies and measures** sponsored by the Ministry of Commerce and organized by Center of International Cooperation Service of Ministry of Agriculture and rural affairs, **4-24 August**, **2021**, Peoples Republic of **China**.
- 5- Attending a **TOT** course for **Learning Management System** (LMS), MOODLE program ADIP trainers USAID in the period 5-21 May 2020 Alexandria University.
- 6- Attending a **TOT** course Technical and Vocational Education and Training TVET- in the period 10-14 January 2020 Al-Waha Hotel Cairo Alexandria Desert Road Egypt.
- 7- Agriculture Technology Innovation and management for BRI Country. **China**, 5-26 November, 2019.
- 8- Production question of short assay and modified essay Q& exam papers. Measure and evaluation center, MEC, Faculty of Agriculture, Alexandria University 22 October 2019.
- 9- Preparation of statistical reports using eVAL OMR, Unit of Measurement and Assessment, Alexandria University, Alexandria.
- 10- University laws and roles. Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria, Egypt.
- 11- Statistical analysis, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria



- 12- Strategic planning, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria
- 13- Electronic exams, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria
- 14- New trends in teaching, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria
- 15- Code of ethics, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria
- 16- Teaching with technology, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria.
- 17- Effective presentation skills, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria
- 18- Communication skills, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria
- 19- Credit hours, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria
- 20- References management system, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria
- 21- Electronic learning, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria
- 22- Time and meetings management, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria
- 23- Competing for research funds, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria
- 24- Conference organization, Faculty and Leadership Development Center (FLDC), Alexandria University, Alexandria
- 25- Using of current techniques in reproduction of farm animals, funded from Higher Education Enhancement Project Fund.
- 26- Training workshop for methods of teaching and learning. Workshop held in Agriculture Faculty, Alexandria University, Alexandria E-Learning Center, 2015.
- 27- Training workshop for preparation of electronic courses for E-learning: E-Learning Workshop held in Agriculture Faculty, Alexandria University, Alexandria E-Learning Center from 2/4 to4/4 2012.
- 28- Training workshop for preparation of scientific projects, organized by Grants, Innovation & Technology Transfer, Agriculture Faculty, Alexandria University.

Coordination, Attendance, and lecturing of Conferences and workshops:

- 1) **Organizer of the workshop:** Integrated industrial applications of nanotechnology and microbiology for sustainable livestock production under recent climate change challenges, 1 November 2023, Agriculture Faculty, Alexandria University, Egypt
- 2) Lecturer: New insights in nanotechnology for integrated management of livestock productivity and health, Future of Livestock and Food Security, 6th International Conference of Animal and Fish Production Dept., Agriculture Faculty, Alexandria University, Egypt, 31 October - 3 November 2023.
- 3) Lecturer (Seminar): Agri-nanotechnology approches: Paving the way for green and sustainable production, Seminar, Vegetables Department, Agriculture Faculty, Alexandria University, Egypt, 29 October 2023.
- 4) Lecturer and Organizer : The future of nanotechnology in the field of animal production: from bench to market, on workshop: Nanotechnology for sustainable development of



agricultural production and greenhouse gas emission. 16 August, 2023, Agriculture Faculty, Alexandria University, Egypt

- 5) Invited Speaker: Meat safety and quality, Workshop on food safety and quality, Scientific Society of Food Industries, Faculty of Agriculture, Alexandria University, Alexandria, Egypt, July and August 2023.
- 6) Attendance: the second Scientific Conference of the Faculty of Veterinary Medicine: Challenges in Veterinary Medicine "Difficulties and Solutions", Matrouh University,25-26 December 2022.
- Lecturer (seminar): Environmental and biological hazards of endocrine disrupting chemicals, Pesticide and Pets Control Dept., Agriculture Faculty, Alexandria University, Egypt. 30 October, 2022.
- 8) **Invited Speaker**:Negative energy balance during the transition period in dairy animals. IINAPGE Intentional Symposium. Centro Universitario de Mineiros, State of Goias, Brazil, 24 November 2022 (online).
- 9) Lecturer (seminar): International publication of research articles: Benefits and key steps. Crop Production Dept., Agriculture Faculty, Alexandria University, Egypt. 30 October, 2022.
- 10) Invited Speaker: Climate change, livestock production and animal food safety, Workshop on Impact of climate change on food safety, Scientific Society of Food Industries, Faculty of Agriculture, Alexandria University, Alexandria, Egypt, 13 October 2022.
- 11) **Trainer** :Ultrasound applications in farm animals, **training course** on Utilization of recent reproductive techniques in farm animals. Desert Research Center, Elmatrya, **Cairo**, Egypt, 3 October 2022.
- 12) Attendance of an online conference: Ciclo de confferecias vrtuales de ciencia animal, Division regional deciencia animal de la universidad autonoma Agaria Antonio Narro- Unidad Laguna, Mexico, 5-7 October 2022.
- 13) Attendance: 19th Congress on Animal Reproduction, Bolonga, <u>Italy</u>, 25-30 June 2022.
- 14) Invited speaker: Phytogenic active components for serving one health approaches,1st International Symposium on Animal Welfare and One Health at SBBUVAS Pakistan., On 21-22 March 2022 (online) <u>https://www.mdpi.com/journal/animals/events/14335.</u>
- 15) **Invited speaker and moderator**: Nanotechnology as a new emerging industrial technology for advancing phytogenics and veterinary drugs use in livestock production, **Workshop on** Development of drugs from natural sources, Faculty of Science, Alexandria University, Alexandria, Egypt,15-16 May 2022.
- 16) Invited speaker: Meat production: towards safe agricultural practices, Workshop on Safety of Arabian Food. Arabian Union of Urban Communities, 22 March 2021, Safir hotel, Cairo, Egypt.
- 17) **Attendance:** 3rd International **Congress** on Microbiota & Microbiome in Health& Disease, online, 26-27 November 2021.
- 18) Attendance: The 18th Scientific Conference of Animal Nutrition 22-25 November, 2021 *Hurghada*, Red Sea, Egypt.
- 19) **Invited speaker**: Nanotechnology Applications in Farm Animals: Are they Ready for Real Use? at 5th International Conference on Sustainable management of Smart Livestock's farming, organized by Animal and fish Production Dept., Faculty of Agriculture, Alexandria University, **Alexandria**, Egypt, 3-4 November 2021.
- 20) **Coordination and attendance:** 5th International **Conference** on Sustainable Management of Smart Livestock's Farming, organized by Animal and fish Production Dept., Faculty of Agriculture, Alexandria University, Egypt, 3-4 November 2021.
- 21) **Coordination, attendance, and lecturing: Workshop:** Nanotechnology Applications for Sustainable Animal Production, funded by STDF project No.34802 and organized by Animal and fish Production Dept., Faculty of Agriculture, Alexandria University, Egypt, 2 November 2021. Lecture: Nanotechnology in farm animals: between research and applications.



- 22) **Attendance:** Safety of Arabian Food. **A conference** held by Arabian Union of Urban Communities, 22 March 2021, Safir hotel, Cairo, Egypt.
- 23) **Attendance**: Future of Scientific Research and Agribusinesses in the era of Smart Agriculture. Online Educational Platform of Agriculture Faculty, Alexandria University. 16 March 2021.
- 24) **Attendance**: Sustainable Management of Saline Agriculture in Marginal Lands. On line Educational Platform of Agriculture Faculty, Alexandria University. 3 March 2021.
- 25) **Attendance**: Applications of Nanotechnology in Modern Agriculture. Online Educational Platform of Agriculture Faculty, Alexandria University. 16 February 2021.
- 26) **Attendance**: Novel Covid-19 Virus Between Intimidation and Underestimation. Online Educational Platform of Agriculture Faculty, Alexandria University. 26 January 2021.
- 27) **Lecturer**: International publication of research articles: Benefits and key steps. Home Economy Dept., Agriculture Faculty, Alexandria University, Egypt. November 9, 2021.
- **28) Invited speaker:** Nano-hormone delivery system a new insight into reproductive management of farm animals. Biodiversity and sustainable production in farm animals. Faculty of Agriculture, Pages 59-60, Menoufia University, March 17-19, 2020, Menoufia, Egypt. (Oral presentation and abstract publication).
- 29) Attendance: Workshop,_Role of the Scientific Woman in Struggling COVID-19 Outbreak (دور) رالمرأة العلمية في مواجهة جائحة كورون), organized by the National Woman Committee, ASRT, and National woman council, 28 December 2020, Cairo, Egypt.
- **30)** Attendance: Egypt-Japan Science Forum, Alexandria Library, Alexandria University, Egypt, 15 February 2020.
- 31) Attendance:_Food additive. Workshop the Scientific Society of Food Industries Faculty of Agriculture Alexandria University December 18- 2019 .
- **32)** Attendance: Workshop of Production Question of Qhort Assay and Modified Essay Q& Exam Papers. Measure and evaluation center, MEC, Faculty of Agriculture, Alexandria University 22 October 2019.
- **33) Coordination and attendance:** of the Small Projects as an Income Source for Small Holders and Graduates. Workshop. 24-25 July 2019. https://www.facebook.com/372995496059179/posts/3505403646151666.
- 34) Attendance and poster presentation: The first conference for graduate students and research. Agriculture Faculty, Alexandria University May , 2019
- **35)** Coordination of exhibition and attendance: The 9th Environmental Forum: Future of Lake Mariout & Alexandria Development19/21 April 2019.
- 36) **Coordination and attendance of the workshop**: Strategy of developing livestock, poultry and fish industry: challenges and solution. Agriculture Faculty, Alexandria University February , 2019.
- 37) **Coordination of the workshop**: Start your project: small and medium agricultural enterprises. Agriculture Faculty, Alexandria University, February , 2019.
- 38) **Attendance of** The 2nd International Agricultural Exhibition in Alexandria (Agro Alex), Radisson Blu Hotel, Burj Al Arab 10-12 November 2018.
- 39) Attendance of the 10th International Poultry Conference Sharm El-Sheikh, Egypt, November 2018.
- 40) Attendance of American Egyptian Veterinary Workshop for Vetrinary Drugs Marriott Hotel, Zamalek, Cairo, Egypt September 2018.
- 41) **Coordination of the workshop**: Management of dairy farms. Agriculture Faculty, Alexandria University. 12-13 August, 2018.
- 42) **Coordination and attendance** of the workshop: Practical applications in fattening and dairy farms. Agriculture Faculty, Alexandria University, 29-30 April, 2018.
- 43) **Presentation of lecture and attendance**: The 1st International Agricultural Exhibition in Alexandria (Agro Alex), Radisson Blu Hotel, Burj Al Arab 10-12 November 2018.



- 44) **Attendance of** Scientific Symposium: The National Project of Veal: Cones and pores. Agriculture Faculty, Alexandria University, December, 2017.
- 45) **Coordination and attendance** of 3rd International Conference "Sustainable Development of Livestock's Production. Agriculture Faculty, Alexandria University, November 2017.
- 46) **Attendance of** Workshop: Modern Trends of Palm Oil Applications in Food Processing. Tulip Hotel Alexandria September 2017.
- 47) **Attendance of** The Second International Conference of the University of Alexandria: Knowledge Integration and Innovation as a Way of Progress. Faculty of Medicine -Alexandria University, Egypt, September 2017.
- 48) **Attendance of** The 8th Environmental **Forum** of Alexandria University" Green Sustainable Cities", Alexandria University, April 19-22, **2017**.
- **49)** Attendance of workshop: Using Performance Indicators for Digital Measurement of Scientific Research: A Case Study of Middle Eastern Universities. Agriculture Faculty, Alexandria University, 30 March 2017.
- 50) **Presentation of lecture Attendance of the** workshop: The reality of animal wealth in Egypt and the prospects for its development. Agriculture Faculty, Alexandria University 27 February, 2017.
- 51) **Coordination of an exhibition and Attendance of the** 1st International conference of Agriculture Faculty Agriculture Faculty, Alexandria University, February 2017.
- 52) **Invited speaker:** 3rd International Conference "Sustainable Development of Livestock's Production. Agriculture Faculty, Alexandria University, November 2017.
- 53) **Coordination and attendance** of the training course Recent breeding and reproductive applications in rabbit farms. 27-29 November 2016.
- 54) **Coordination and attendance** 2nd International Conference on the Modern Approaches in Livestock's Production Systems Agriculture Faculty, Alexandria University November 2015 (ICMALPS2015).
- 55) **Attendance of the** International Conference of Animal Production, Hurghada, Egypt, Agriculture Faculty, Cairo University, November 2015.
- 56) Attendance of the 7thInternational Conference For Poultry Science, November 2014, Ellsokhna, Egypt.
- 57) Attendance of the 5th and 6th Rabbit Sciences Conference, Agriculture Faculty, Cairo University Cairo University, Egypt, December 2012, 2013.
- **58)** Coordination and attendance of the "International Workshop on Recent Strategies in Animal Production" Animal Production Department, Faculty of Agriculture, Alexandria University, Alexandria, 5-7 November 2012.

University activities

Faculty committees' membership

- Member of the innovation group, Agriculture Faculty, Alexandria University (2022).
- Member of the Community Service Affairs and Environment Development Committee (2020-2021).
- Agricultural Caravan Activity Coordinator (2018-2019).
- Supervisor of rabbit production and breeding activity of the fodder and fattening unit.
- Member of the Quality and Accreditation Committee, Representative of Animal and Fish Dept., Agriculture Faculty, Alexandria University. (2010 to 2017).
- Member of the Disaster and Crisis Management Committee. Agriculture Faculty, Alexandria University (2013)
- Member of the Cultural Committee. Agriculture Faculty, Alexandria University (2014-2015).

Lab development and establishment



- Establishing and the supervisor of Nanoencapsulation and biotechnology laboratory, Faculty of Agriculture , Alexandria University (August 2023).
- Renew and develop the Physiology laboratory, Faculty of Agriculture , Alexandria University.
- Establishing and the supervisor of Rabbit Physiology Research, Faculty of Agriculture, Alexandria University.

Social activities and community service

- 1- Attendance program of AWEARNESS EMBASSADORES organized by the Ministry of Social Solidarity, Agriculture Faculty, Leader Foundation, and General Information Authority, 6-11/5/52023.
- 2- Consultant, extensional services, of the agricultural caravan for serving rural villages, Abis area, Alexandria, 30 October 2022 (Technical advice to mitigate climate change impacts on livestock smallholders).

3- A lecturer and trainer at Ejada platform lunched by ALALFI foundation for human and social development, Ministry of Higher Education, and Supreme Council of Universities as part of **President initiative** صنايعية مصر<u>http://ejada-edu.com/Browse/AuthorDetails/84</u>.

4- An agricultural advisory member at the combined services caravan organized by Alexandria University as an activity of Presidential initiative: **HYAYH KAREMA** for developing Egyptian villages (EL-nahda village, Elamria), 10/2/ 2022.

- 5- An agricultural advisory member at the combined services caravan organized by Alexandria University as an activity of Presidential initiative: HYAYH KAREMA for developing Egyptian villages, 22/9/ 2021.
- 6- Present lectures in Management and Administration Department, Alexandria Governorate to develop leadership skills of administrative agricultural establishments.
- 7- A member and lecturer in Voluntary Training Society, Faculty of Agriculture, Alexandria University.
- 8- A member in Agricultural Caravan for Society and Environment Service organized by Rural Development Project, Agriculture Ministry.
- 9- A member in a social responsibility committee for developing Egyptian village (Bab-elabid), Alexandria University and Alexandria governors 2019.
- 10- Contribution to the activity of medical-veterinarian-agricultural caravan for serving the civil society in Sedy-Barani, Matrouh, Organized by Alexandria-Matrouh Universities, 10-13 September 2019.
- 11- Contribution to many extension presentations for serving public society in the media (TV and radio).

Scientific Societies membership

- 1- A member of the Scientific Society of Food Industries
- 2- A member of the Egyptian Society of Animal Production
- 3- A member of the Society of Buffalo Breeding and Production
- 4- A member of the Egyptian Poultry Science Association
- 5- A member of the World Poultry Science Association (WPSA)

Contribution to social media

- 1- A TV presentation on animal health signs and meat quality (22 June 2023, Channel 5 Alexandria) <u>https://youtube.com/watch?v=G9grQmwepVk&feature=share</u>
- 2- A radio conversation on animals handling during slaughter and meat safety (Alexandria broadcasting, 22 June 2023)



- 4- A TV presentation about National Animal Production Projects in Egypt and Food security (3 June 2021, Channel 5 Alexandria)<u>https://www.youtube.com/watch?v=QuniMhtsOts</u>
- 5- A radio conversation on Rule of rural **woman** and development of agricultural sector (Alexandria broadcasting, 16 March 2021)
- 6- A TV presentation about Importance of Agricultural sector (21 October 2020, Channel 5 Alexandria TV) <u>https://www.youtube.com/watch?v=rgAr1njS3BQ&feature=youtu.be&fbclid=IwAR2s5ZLfiWp</u> X8w9W0ZuQpNT5uM3qWDLd9 DAx1XDfdGUxrDYiNWGU7jd-lo
- 7- Publishing article: Digitalization of Agriculture, التحول الرقمي الزراعي El Ahram, national newspaper, 23/12/2020
- 8- Publishing article: Rural tourism, السياحة الريفية, El Ahram, national newspaper, 23/2/2021

Publications

Books and book chapters:

- 1) Attia Y.A., Kim W.K., **Hashem N.M.**, de Olivera M. (Eds). Antioxidants in Animal Production, Reproduction, Health and Welfare.ISBN 978-3-0365-8969-5 (Hbk); ISBN 978-3-0365-8968-8 (PDF), Published: October 2023, https://doi.org/10.3390/books978-3-0365-8968-8
- Gonzalez-Bulnes A., Hashem, N.M. (Eds.). Nanotechnology in Animal Science. ISBN 978-3-0365-5945-2 (Hbk); ISBN 978-3-0365-5946-9 (PDF), Published: December 2022, https://doi.org/10.3390/books978-3-0365-5946-9.
- 3) El-Desoky, N.I.; Hashem, N.M., Gonzalez-Bulnes, A., Elkomy, A.G., Abo-Elezz, Z.R. 2021. Effects of a Nanoencapsulated Moringa Leaf Ethanolic Extract on the Physiology, Metabolism and Reproductive Performance of Rabbit Does during Summer. In: *The Potential of Dietary Antioxidants*. Irene Dini and Domenico Montesano (Eds.), MDPI, ISBN 978-3-0365-4952-1 (Hbk); ISBN 978-3-0365-4951-4 (PDF), https://doi.org/10.3390/books978-3-0365-4951-4.
- 4) Sallam S.M.A., Mahmoud A.A.A., Hashem N.M., Attia M.F.A., Mesbah M.M., et al, (2021). Alterations of Productive and Reproductive Efficiencies in Dairy Cows by the Inclusion of Protected Fats and Full-Fat Soy in the Diet. *Animal Science*, MedDocs Publishers. Vol. 1, chapter 2, pp.18-30.
- 5) Hashem N. M. and E. M. AbouTour. 2020. Nutritional Manipulation of Milk Fatty Acid for Production of Milk with Functional Value. In: *Milk: Nutrition, Consumption, and Health*, nova science publisher, https://novapublishers.com/shop/milk-nutrition-consumption-and-health/. ISBN: 978-1-53618-871-4 Categories: 2021, Chemistry, Editor's Picks, Food and Beverage Consumption and Health, Food Science and Technology, Imprints, Nova, Science and Technology
- 6) Swelum A.AA., **Hashem N.M**., Abo-Ahmed A.I., Abd El-Hack M.E., Abdo M. (2020) The Role of Heat Shock Proteins in Reproductive Functions. In: Heat Shock Proteins. Springer, Dordrecht. https://doi.org/10.1007/7515_2020_32



International ISI journals:

- Hashem, N.M., Essawi, W.M., El-Demerdash, A.S., El-Raghi, A.A. 2024. Biomoleculeproducing probiotic bacterium *Lactococcus lactis* in free or nanoencapsulated form for endometritis treatment and fertility improvement in buffaloes. Journal of Functional Biomaterials, 15, no. 6: 138. https://doi.org/10.3390/jfb15060138
- Hashem, N.M., Abdelnaby, E., Madkour, M., El-Sherbiny, H. 2024. Melatonin administration during the first half term of pregnancy improves physiological response and reproductive performance of rabbits under heat stress conditions. Reproduction, Fertility and Development, 2024 May;36:RD23139. doi: 10.1071/RD23139. PMID: 38753959.
- Yu, X., Ma, F., Dai, H., Liu, J., Hashem, N.M., Sun, P. 2023. Effects of different galactooligosaccharide supplementation on growth performance, immune function, serum nutrients, and appetite-related hormones in Holstein calves. Animals, 13: 3366. https://doi.org/10.3390/ani13213366
- 4) Liu, J., Yu, X., Ma, F., Wo, Y., Jin, Y., **Hashem, N.M**., Sun, P. **2023**. Early supplementation with zinc proteinate does not change rectal microbiota but increases growth performance by improving antioxidant capacity and plasma zinc concentration in preweaned dairy calves. **Frontiers in Veterinary Science**, 10:1236635. doi: 10.3389/fvets.2023.1236635Abd.
- 5) El- Azeem, N.A., Madkour, M., **Hashem, N.M**., Alagawany, M. **2023**. Early nutrition as a tool to improve the productive performance of broiler chickens, **World's Poultry Science Journal**, DOI: 10.1080/00439339.2023.2262443.
- 6) Hashem, N.M., Martinez-Ros, P., Gonzalez-Bulnes, A., El-Raghi, A.A. **2023.** Case Studies on Impacts of Climate Change on Smallholder Livestock Production in Egypt and Spain. **Sustainability**, 15, 13975. https://doi.org/10.3390/su151813975
- Hashem, N.M., Hosny, N., El-Desoky, N.I., Soltan, Y.A., Elolimy, A.A., Sallam, S.M., Abu-Tor, E.M. 2023. Alginate nanoencapsulated synbiotic composite of pomegranate peel phytogenics and multi-probiotic species as a potential feed additive: Physichochemical, antioxidant, and antimicrobial activities. Animals 13, 2432. https://doi.org/ 10.3390/ani13152432.
- 8) EL-Sherbiny H.R., Hashem N.M., Abdelnaby E.A. 2023. Coat color affects the resilience against heat stress impacts on testicular hemodynamics, reproductive hormones, and semen quality in Baladi goats. BMC Veterinary Research 19,107, https://doi.org/10.1186/s12917-023-03653-w
- 9) El-Raghi, A. A., Hassan, ME.A., Hashem, N.M., Abdelnou, S.A., 2023. Struggling Thermal Stress Impacts on Growth Performance and Health Status of Newly Weaned Rabbits Using Nanoemulsion of Origanum majorana Considering the Economic Efficiency of Supplementation. Animals 13, 1772. https://doi.org/10.3390/ani13111772
- 10) Hashem, N.M., El-Hawy, A.S., El-Bassiony, Saber, A., Radwan, M.A., Ghanem, N. 2023. Melatonin administration during the first half of pregnancy improves the reproductive



performance of rabbits: Emphasis on ovarian and placental functions. **Theriogenology**, 205, 40-49, <u>https://doi.org/10.1016/j.theriogenology.2023.04.006</u>

- 11) Hashem, N.M., El-Hawy, A.S., El-Bassiony, M.F., El-Hamid, I.S.A., Gonzalez-Bulnes, A., Martinez-Ros, P. 2023. Use of GnRH-Encapsulated Chitosan Nanoparticles as an Alternative to eCG for Induction of Estrus and Ovulation during Non-Breeding Season in Sheep. Biology 12, 351. https://doi.org/10.3390/biology1203035
- 12) Shehata, S. F., Baloza, S. H., Elsokary, M. M., Hashem, N. M., Khawanda, M. M. 2022. Effect of stocking density and vitamin E or zinc supplementation on growth, physiology, gene expression, and economic efficiency of growing broiler chicks. Tropical Animal Health Production 54: 403. <u>https://doi.org/10.1007/s11250-022-03382-6</u>
- 13) Soltan Y.A., Morsy A.S., **Hashem N.M**. et al. **2022**. Potential of montmorillonite modified by an organosulfur surfactant for reducing aflatoxin B1 toxicity and ruminal methanogenesis in vitro. **BMC Veterinary Research** 18: 387. <u>https://doi.org/10.1186/s12917-022-03476-</u>
- Raza S.H.A., Wijayanti D., Pant S., Abdelnour S.A., Hashem N. M., Amin A., ... & Zan L. 2022. Exploring the physiological roles of circular RNAs in livestock animals. Research in Veterinary Science 152: 726-735.
- **15)** El-Raghi A.A, **Hashem N.M. 2022**. Maternal, Postnatal, and Management-Related Factors Involved in Daily Weight Gain and Survivability of Suckling Zaraibi Goat Kids in Egypt. **Animals** *12*, no. 20: 2785. <u>https://doi.org/10.3390/ani12202785</u>
- 16) Madkour M., Shakweer W.M.E., Hashem N.M., Abd El-Azeem O.A., Shourrap M.oelazab.
 2022. Antioxidants status and physiological responses to early and late heat stress in two rabbit breeds. Journal of Animal Physiology and Animal Nutrition, 1–10.
- 17) Kamal Mahmoud , Youssef I. M., Khalil H. A., Ayoub M.A., and Hashem N.M. 2022. Multifunctional role of chitosan in farm animals: a comprehensive review. Annals of Animal Science, DOI: https://doi.org/10.2478/aoas-2022-0054
- 18) Wani, A.K., Akhtar, N., Singh, R. Prakash A., Raza S., Cavalu S., Chopra C., Madkour M., Elolimy A., Hashem N.M. 2022. Genome centric engineering using ZFNs, TALENs and CRISPR-Cas9 systems for trait improvement and disease control in Animals. Veterinary Research Communication . https://doi.org/10.1007/s11259-022-09967-8.
- 19) Hashem N.M., EL-Sherbiny H.R., Fathi M., Abdelnaby E.A. **2022**. Nanodelivery System for Ovsynch Protocol Improves Ovarian Response, Ovarian Blood Flow Doppler Velocities, and Hormonal Profile of Goats. **Animals**, *12*, 1442. <u>https://doi.org/10.3390/ani12111442</u>.
- 20) El-Desoky N.I., Hashem N.M., Elkomy A.G., Abo-Elezz Z.R. 2022. Improving rabbit doe metabolism and whole reproductive cycle outcomes via fatty acid-rich *Moringa oleifera* leaf extract supplementation in free and nano-encapsulated forms. Animals, 12, 764. https://doi.org/10.3390/ani12060764.



- 21) Hashem N.M., Gonzalez-Bulnes, A. 2022. Perspective on the relationship between reproductive tract microbiota eubiosis and dysbiosis and reproductive function. Reproduction, Fertility and Development, 34(7):531-539, doi: 10.1071/RD21252. https://doi.org/10.1071/RD21252.
- 22) Atif K. Wani, Nesrein M. Hashem, Nahid Akhtar, Reena Singh, Mahmoud Madkour and Ajit Prakash. 2022. Understanding microbial networks of farm animals through genomics, metagenomics and other meta-omic approaches for livestock wellness and sustainability. Annals of Animal Science, https://doi.org/10.2478/aoas-2022-0002.
- 23) Hashem N.M., Gonzalez-Bulnes, A. 2022. The Use of Probiotics for management and improvement of reproductive eubiosis and function. Nutrients, 21;14(4):902.http:// doi: 10.3390/nu14040902.
- 24) Mousa G.A., Allak M.A., Shehata M.G., **Hashem N.M**., Hassan O.G.A. **2022.** Dietary Supplementation with a Combination of Fibrolytic Enzymes and Probiotics Improves Digestibility, Growth Performance, Blood Metabolites, and Economics of Fattening Lambs. **Animals**, 12, 476. https://doi.org/10.3390/ani12040476.
- 25) Madkour, M., Salman F. M., El-Wardany, I., Abdel-Fattah S.A., Alagawany, M., Hashem, N.M., Abdelnour, S.A., El-Kholy M.E., Dhama, K., 2022. Mitigating the detrimental effects of heat stress in poultry through thermal conditioning and nutritional manipulation. Journal of Thermal Biology, 103,103169. https://doi.org/10.1016/j.jtherbio.2021.103169
- 26) Hashem N.M., Hosny N.S., El-Desoky N.I., Shehata, M.G. **2021.** Effect of Nanoencapsulated alginate-synbiotic on gut microflora balance, immunity, and growth performance of growing rabbits. **Polymers**, 13, 4191. https:// doi.org/10.3390/polym13234191
- 27) Soltan Y., Morsy A., Hashem N.M., Elazab M., Sultan M., Marey H., Lail G.A.E., El-Desoky N., Hosny N., Mahdy A., et al. 2021. Modified nano montmorillonite and monensin modulate in vitro ruminal fermentation, nutrient degradability, and methanogenesis differently. Animals, 11, 3005. https:// doi.org/10.3390/ani11103005.
- 28) Hashem, N.M., Morsy, A.S., Soltan Y.A., Sallam S.M. **2021.** Potential benefits of boswellia sacra resin on immunity, metabolic status, udder and uterus health, and milk production in transitioning goats. **Agriculture**, 11, 900. https://doi.org/10.3390/agriculture11090900.
- 29) Swelum, A.A., Abdelnour S.A., Sheiha, A.M., Hashem, N.M., Tah, a A.E., Khafaga, A.F., Attia, Y., Al-Mutary, M.G., Abd El-Bar, M.M., Ohran, H., Nagadi, S.A., Abd El-Hack, M.E. 2021. Enhancing in vitro oocyte maturation competence and embryo development in farm animals: roles of vitamin-based antioxidants a review, Annals of Animal Science, DOI: 10.2478/aoas-2021-0054.
- 30) El-Desoky, N.I.; Hashem, N.M., Gonzalez-Bulnes, A., Elkomy, A.G., Abo-Elezz, Z.R. 2021. Effects of a Nanoencapsulated Moringa Leaf Ethanolic Extract on the Physiology, Metabolism and Reproductive Performance of Rabbit Does during Summer. Antioxidants, 10, 1326. https://doi.org/10.3390/antiox10081326.



- 31) El-Raghi, A.A., Hassan, M.A.E., El-Ratel, I.T., **Hashem, N.M.,** Abdelnour, S.A. **2021**. Sustainable Management of Voluntary Culling Risk in Primiparous Zaraibi Goats in Egypt: Roles of Season and Reproductive and Milk Production-Related Traits. **Animals**, 11, 2342. https://doi.org/10.3390/ani11082342.
- 32) Seidavi, A., Tavakoli, M., Slozhenkina, Gorlov, M., Hashem, N.M., Asroosh, F., Taha, A.E., Abd El-Hack, M.E., Swelum, A.A. 2021. The use of some plant-derived products as effective alternatives to antibiotic growth promoters in organic poultry production: a review. Environmental Science Pollution Research. https://doi.org/10.1007/s11356-021-15460-7.
- 33) Hashem, N.M., Gonzalez-Bulnes, A. **2021.** Nanotechnology and Reproductive Management of Farm Animals: Challenges and Advances. **Animals**, 11, 1932. doi: 10.3390/ani11071932.
- 34) Hashem, N.M., Shehata, M.G. 2021. Antioxidant and Antimicrobial Activity of *Cleome droserifolia* (Forssk.) Del. and Its Biological Effects on Redox Status,mImmunity and Gut Microflora. Animals, 11, 1929. https://doi.org/10.3390/ani11071929.
- 35) Abdelnour, S.A., Alagawany, M., Hashem, N.M.; Farag, M.R.; Alghamdi, E.S.; Hassan, F.U., Bilal, R.M., Elnesr, S.S., Dawood, M.A.O., Nagadi, S.A., et al. 2021. Nanominerals: Fabrication Methods, Benefits and Hazards, and Their Applications in Ruminants with Special Reference to Selenium and Zinc Nanoparticles. Animals, 11, 1916. https://doi.org/10.3390/ ani11071916.
- 36) Swelum, A.A., Hashem, N.M., Abdelnour, S.A., Taha, A.E., Ohran, H., Khafaga, A.F., El-Tarabily, K.A., Abd El-Hack, M.E. 2021. Effects of Phytogenic Feed Additives on the Reproductive Performance of Animals. Saudi Journal of Biological Sciences, 28:10, 5816-5822, https://doi.org/10.1016/j.sjbs.2021.06.045.
- 37) **Hashem, N.M.**, Hassanein, E.M., Hocquette, J.-F., Gonzalez-Bulnes, A., Ahmed, F.A., Attia, Y.A., Asiry, K.A. 2021. Agro-Livestock farming system sustainability during the covid-19 era: a cross-sectional study on the role of information and communication technologies. **Sustainability**, *13*, 6521. https://doi.org/10.3390/su13126521.
- 38) Soltan, Y. A., Morsy, A. S., **Hashem, N. M.**, Sallam, S. M. **2021.** Boswellia sacra resin as a phytogenic feed supplement to enhance ruminal fermentation, milk yield, and metabolic energy status of early lactating goats. **Animal Feed Science and Technology**, 114963.
- 39) El-Azrak, K. M., Morsy, A. S., Soltan, Y. A., Hashem, N. M., Sallam, S. M. A. 2021, Impact of specific essential oils blend on milk production, serum biochemical parameters and kid performance of goats. Animal Biotechnology, 1-9, doi: 10.1080/10495398.2021.1898978
- 40) Hashem, N.M., Hassanein, E.M., Simal-Gandara, J. **2021.** Improving reproductive performance and health of mammals using honeybee products. Antioxidants, 10, 336. https://doi.org/10.3390/antiox10030336.
- 41) Hassanein E.M., Hashem N.M., El-Azrak KE-DM., Gonzalez-Bulnes A., Hassan G.A., Salem M.H. 2021. Efficiency of GnRH–loaded chitosan nanoparticles for inducing LH secretion and



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- 43) Hashem N.M., Abdelnour S. A., Swelum A. A. Potential impacts of COVID-19 on Reproductive Health, Scientific Findings and Social Dimension. Saudi journal of Biological Science, 28 (3):1702-1712. https://doi.org/10.1016/j.sjbs.2020.12.012
- 44) Hashem N.M., Gonzalez-Bulnes A., Simal-Gandara, J. **2020**. Polyphenols in Farm Animals: Source of Reproductive Gain or Waste? **Antioxidants**, *9*, 1023.
- 45) EL-Shoukary R.D., Nasreldin N., Osman A.S., **Hashem N.M.**, Saadeldin I., Swelum A. A. **2020.** Housing management of male camels during the rut season: effects of social contact between males and movement control on sexual behavior, blood metabolites and hormonal balance. **Animals**, **10**, 1621; doi:10.3390/ani10091621
- 46) Hashem N.M., Gonzalez-Bulnes, A., Rodriguez-Morales, A.J.. 2020. Animal Welfare and Livestock Supply Chain Sustainability under COVID-19 Outbreak: An Overeview. Frontiers in Veterinary Science, 7:582528. doi: 10.3389/fvets.2020.582528
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- **51)** Hashem N.M., Abu-Tor E.M., Abo-Elezz Z.R., Latif M.G.A. **2019**. Relevance of antioxidant vitamin supplementation for improvement of milk production, milk quality and energy status of lactating ewes. **Small Ruminant Research** 177: 153–159.
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- El-Alfy S.s., Mohsen M., Hashem N.M. 2023. Effect of the addition of probiotic as antibiotic alternatives the quality of colled stored semen in rabbits. Journal of Agricultural and Environmantal Sciences, 22 (no3).
- 2) El-Azrak K.M., Hashem N.M., Sallam S.M.A. 2023. Influence of cinnamon essential oil administration on semen characteristics, testosterone concentration and sexual libido of Barki rams. Egyptian Journal of Feed and Nutrition, In press.
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- Sobhy M.A. Sallam, Mohamed N. El-Gendy, Mohamed M. Anwar, Wael G. Fahmy, Samir Z. El-Zarkouny, Nesrin M. Hashem, Adel N. M. Nour El-Din, Marwa F.A.Attia, El-Saeed A. El-wakeel.
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- 6) Hashem N.M., Soltan Y.A., 2016. Impacts of phytoestrogens on livestock production: A review. Egyptian Journal of Nutrition and Feeds, 19 (1):81-89.
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- 8) Hashem, N. M., El-Zarkouny, S. Z., **2013**. Serum bio-chemical profile, growth performance and health conditions of pre-weaning Holstein calves supplemented with yeast extract or eucalyptus oil. **Egyptian Journal of Feed and Nutrition**, 16(2):273-279.
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Conference publications (abstract):

- Hashem N., Fathi M., El-Sherbiny H., Abdelnaby E. Nanodelivery system for ovsynch protocol improves ovarian response, doppler sonographic analysis, and hormonal profile of goats. 19th Congress on Animal Reproduction, Bolonga, Italy, 25-30 June 2022.
- 2) Hashem N., El-Azrak, K., Morsy A., Soltan Y., <u>El-Zaiat</u> H., Matloub O., Attia M., El-Wakeel E., Sallam S. Reproductive performance of ewes fed secondary metabolites rich-drought-tolerance plants. 19th Congress on Animal Reproduction, Bolonga, Italy, 25-30 June 2022.
- 3) Soltan Y., Morsy A., Hashem N.M., Elazab M., Sultan M., Marey H., Lail G.A.E., El-Desoky N., Hosny N., Mahdy A., et al. Organo-modified nano-montmorillonite by quaternary ammonium cationic surfactant affected the aflatoxin b1 toxicity and ruminal nutrient degradability and methanogenesis in vitro. The 8th International Greenhouse Gas and Animal Agriculture Conference (GGAA, 2022), University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS), June 5-9 - Orlando, Florida, USA.
- 4) Soltan Y., Morsy A., Hashem N.M., Elazab M., Sultan M., Marey H., Lail G.A.E., El-Desoky N., Hosny N., Mahdy A., et al. Montmorillonite modified by anionic organosulfur surfactant supplemented on a basal diet contaminated with aflatoxin B1 affected the rumen fermentation and nutrient degradability. The 18th Scientific Conference of Animal Nutrition 22-25 November, 2021 Hurghada, Red Sea, Egypt.
- 5) Hashem N.M. Nanotechnology Applications in farm animals: are they read for real use?. 5th International Conference on Sustainable Management of Smart Livestock's Farming, organized



by Animal and fish Production Dept., Faculty of Agriculture, Alexandria University, Egypt, 3-4 November 2021. <u>https://smslf.mailchimpsites.com/</u>

- 6) Younis F.E., Hashem N.M., Khidr R.E. Precision Livestock Farming: Techs applied in livestock production: A review and perspectives. 5th International Conference on Sustainable Management of Smart Livestock's Farming, organized by Animal and fish Production Dept., Faculty of Agriculture, Alexandria University, Egypt, 3-4 November 2021. https://smslf.mailchimpsites.com/
- 7) Morsy A., Soltan Y., Hashem N.M., Taha T.K., Altaif R.E.M., Sallam S.M. Impact of magnetic water or aloe vera extract on performance, blood metabolites and carcass characteristics of growing rabbits. 5th International Conference on Sustainable Management of Smart Livestock's Farming, organized by Animal and fish Production Dept., Faculty of Agriculture, Alexandria University, Egypt, 3-4 November 2021. <u>https://smslf.mailchimpsites.com/</u>
- 8) El-Desoky N.I., Hashem N.M., Elkomy A.G., Abo-Elezz Z.R. Effect of free or nano-encapsulated Moringa leaf extract supplementation on milk yield, composition, and fatty acid profile and on litter characteristics in rabbit does. 5th International Conference on Sustainable Management of Smart Livestock's Farming, organized by Animal and fish Production Dept., Faculty of Agriculture, Alexandria University, Egypt, 3-4 November 2021. https://smslf.mailchimpsites.com/
- 9) Hashem N.M. 2020. Nano-hormone delivery system new insight of reproductive management of farm animals. Biodiversity and sustainable production in farm animals. Faculty of Agriculture, Pages 59-60, Menoufia University, March 17-19, 2020, Menoufia, Egypt. (oral presentation and abstract publication).
- 10) Hashem, N.M., El-Desoky N. E., Hosny, N.S., Shehata M.G. Gastrointestinal microflora homeostasis, immunity and growth performance of rabbits supplemented with innovative nonencapsulated or encapsulated synbiotic. The 1st International Electronic Conference on Animals—Global Sustainability and Animals: Science, Ethics and Policy, 5/12/2020 - 20/12/202, 10.3390/IECA2020-08894 (registering DOI) (Accepted on November, 26, 2020). https://sciforum.net/conference/IECA2020?fbclid=IwAR3ztOIIu1htdQxgHe_06AONY8IuLw0aerdqJI3Ca3gHuka3U-EzqSoTnI, Public version information: https://sciforum.net/paper/view/conference/8894)
- 11) Soltan Y., El-Zaiat H., Morsy A, Hashem N., El-Azrak K, Marwa Attia M., Elwakeel E., Matloup O., Sallam S. Ruminal fermentation and *methane* mitigation of salt tolerant Mediterranean shrubs in relation to their phenolics. At the 7th GGAA Greenhouse Gas and Animal Agriculture Conference that was held from August 4th to 10th at Foz do Iguassu, Brazil, 2019.
- 12) <u>El-Azrak</u> K.M., Hashem N.M., Sallam, S.M. 2019. Effect of cinnamon oil administration on semen characteristics and sexual libido of Barki rams. 2ndinternational conference of veterinary, animal science and pathology- Tokyo-Japan. J. Vet.Sci. Med. Diagn (2019; vol 8, page 18).
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- 15) Hashem N.M., Soltan Y.A., El-Desoky N.I., Morsy A.S., Sallam S.M.A.[•] 2017. Extracts of *Moringa oleifera* leaves and roots as alternatives to monensin: effects on hemato-biochemical attributes, caecal fermentation, and growth performance of rabbits. 3rd International Conference "Sustainable Development of Livestock's Production. 7-9 November, Agriculture Faculty, Alexandria University, Alexandria, Egypt.
- 16) Hashem N.M., Abu-Tor E-S.M., Latif M.G.A., Abo-Elezz[,] Z.R. 2017. Can vitamin A or C affect milk production, fatty acid quality and milk oxidative stability in sheep? 3rd International Conference "Sustainable Development of Livestock's Production. 7-9 November, Agriculture Faculty, Alexandria University, Alexandria, Egypt.
- 17) Abo-elsoud M. A., Hashem N.M., Nour El-Din A.N.M., Kamel K.I., Hassan G.A. 2017. Consequences of exposure to purified soybean isovlavones on libido and testis functions of adult rabbit bucks.
 3rd International Conference "Sustainable Development of Livestock's Production. 7-9 November, Agriculture Faculty, Alexandria University, Alexandria, Egypt.
- 18) Hashem N.M., Abd-Elrazek D., Abo-Elezz Z.R., Latif M.G.A., 2015. Effect of supplementing Rahmani ewes in summer breeding season with vitamin A or C on physiological and hematobiochemical parameters, ovarian activity and reproductive efficiency. The International Conference of Animal Production, Agriculture Faculty, April, 7-10, 2015, Hurghada, Egypt (Abstract).
- 19) Kheir El-Din M. El-Azrak, Nesrein M. Hashem, Yosra A. Soltan and Sobhy M. Sallam., 2015. Influence of specific blend of essential oils on blood biochemical features and productive statues in goats. 2nd International Conference on the Modern Approaches in Livestock's Production Systems, Faculty of Agriculture, Alexandria University, October 12-14, 2015, Alexandria, Egypt. (Abstract)
- 20) Hashem N.M., Abd-Elrazek D., Abo-Elezz Z.R., Latif M.G.A., 2015. Effect of supplementing Rahmani ewes in summer breeding season with vitamin A or C on physiological and hematobiochemical parameters, ovarian activity and reproductive efficiency. The International Conference of Animal Production, Agriculture Faculty, April, 7-10, 2015, Hurghada, Egypt (Abstract).
- 21) Hashem N.M., Enhancement of Reproductive Efficiency of Small Ruminants Using Current Nutritional Strategy. 2012. International Workshop on Recent Strategies in Animal Production Agriculture Faculty, 2012, Hurghada, Egypt (Abstract).

Conference publications (full text):

1) Hashem N.M., Soltan, Y.A. 2017. Early embryonic loss in farm animals: causes and solutions (Review article) . 3rd International Conference "Sustainable Development of Livestock's Production. 7-9 November, Agriculture Faculty, Alexandria University, Alexandria, Egypt.



- 2) Soltan Y.A^{,,} , Morsy A.S., Hashem N.M., Sallam S.M. 2017. Utilization of *Moringa oleifera* in ruminant nutrition (Review article). 3rd International Conference "Sustainable Development of Livestock's Production. 7-9 November, Agriculture Faculty, Alexandria University, Alexandria, Egypt.
- 3) Hashem N.M. and Soltan Y.A., 2015. Impacts of phytoestrogens on livestock production: A review. 2nd International Conference on the Modern Approaches in Livestock's Production Systems, Faculty of Agriculture, Alexandria University, 12-14 October 2015, Alexandria, Egypt.
- 4) Soltan Y.A., Morsy A. S., Sallam S. M.A., Hashem N. M., Abdalla A. L.^a 2015. Propolis as natural feed additive in ruminants diets; can propolis affect the ruminants performance?" (Review article) 2nd International Conference on the Modern Approaches in Livestock's Production Systems, Faculty of Agriculture, Alexandria University, 12-14 October 2015, Alexandria, Egypt.
- 5) Hashem N.M. 2012. Enhancement of reproductive efficiency of small ruminants using current nutritional strategy" International Workshop on Recent Strategies in Animal Production, Animal Production Department, Faculty of Agriculture, Alexandria University, 5-7 November 2012, Alexandria, Egypt.

International collaboration

-Horonary adjunct professor (2023-2028), School of Bioengineering and Biosciences, Lovely Professional University, India.

-Coordinator of a visit for Professor Dr. Antonio Gonzalez-Bulnes, Professor of Comparative Physiology, Department of Animal Production and Health, CEU Cardenal Herrera University, Valencia, Spain, 5-15 March 2022.

-Working with researchers from different intentional Universities/institutes: Spain, France, Colombia, India, Romania, Iran, USA, KSA, China, and Pakistan.