

# Curriculum Vitae

---



**Rania Aziz Helmy Ishak**

---

**Personal Data** **Date of Birth:** 25<sup>th</sup> of September, 1977  
**Marital status:** Married  
**Sex:** Female  
**Nationality:** Egyptian  
**Mobile Number:** (+2) 01222930214  
**E-mail:** [raniaaziz77@yahoo.com](mailto:raniaaziz77@yahoo.com), [raniaaziz@pharma.asu.edu.eg](mailto:raniaaziz@pharma.asu.edu.eg)

- Education**
- **May 2000** Bachelor of Pharmaceutical Sciences, Faculty of Pharmacy, Ain Shams University. General grade: Excellent with honor.
  - Excellent grade in Post graduate general and special courses for the master's degree in Pharmaceutics.
  - **December 2006 master's degree** in Pharmaceutical Sciences through working on Metronidazole in floating drug delivery systems by using both single and multiple-unit dosage forms for treatment of Helicobacter pylori causing gastric and duodenal ulcer.
  - Excellent grade in Post graduate special courses for Ph.D. degree in Pharmaceutics.
  - Pass with success Comprehensive Exam with a project presentation entitled; "Tamoxifen Derivative Containing Deformable and Flexible Vesicles for breast cancer targeting".
  - **July 2011 PhD Degree** in Pharmaceutical Sciences (Pharmaceutics) through working on PLA/PLGA nano- and micro-particles for controlled release of an antipsychotic drug 'Clozapine'.

**Experience**

**2000 – 2006: Teaching Assistant of Pharmaceutics, Department of Pharmaceutics, Faculty of Pharmacy, Ain Shams University-Cairo, Egypt.**

**2007 – 2011: Assistant Lecturer of Pharmaceutics, Department of Pharmaceutics, Faculty of Pharmacy, Ain Shams University-Cairo, Egypt.**

**2011 – 2016: Lecturer of Pharmaceutics and Industrial Pharmacy, Department of Pharmaceutics, Faculty of Pharmacy, Ain Shams University-Cairo, Egypt.**

**2017 - 2021: Associate Professor of Pharmaceutics and Industrial Pharmacy, Department of Pharmaceutics, Faculty of Pharmacy, Ain Shams University-Cairo, Egypt.**

**2021 till now: Professor of Pharmaceutics and Industrial Pharmacy, Department of Pharmaceutics, Faculty of Pharmacy, Ain Shams University-Cairo, Egypt.**

<http://pharm.shams.edu.eg/departments/ceutics/staff.shtml>

- Participated as a demonstrator in teaching different practical courses of Pharmaceutics I, Physical Pharmacy, Pharmaceutics II, Pharmaceutics III, Sterile Products, Biopharmaceutics, and Pharmacy Practice for undergraduate First Year, Second Year, Third Year, and Fourth Year students and undergraduate Level 1, Level 2, and Level 3 students (Drug Design Program).
- Supervised as assistant lecturer on students' research.
- Participated in the preparation of practical notes of first year till fourth year courses.
- Participated as a demonstrator in teaching practical sessions of 'Drug Product Design' course for postgraduate students (master's degree).
- Participated as a lecturer in Pharmaceutics I, Pharmaceutics II, Pharmaceutics III, Sterile Products, and Pharmacy Practice for undergraduate Regular and Drug Design Program courses.
- Supervised as a supervisor on practical courses of Pharmaceutics I, Pharmaceutics II, Pharmaceutics III, Sterile Products, and Pharmacy Practice for undergraduate Regular and Drug Design Program courses.
- Participated as a course coordinator for Pharmaceutics I Course for Level 1 students, Drug Design Program.
- Participated as a course coordinator for Pharmaceutics II and Pharmaceutics III Courses for Second Year- First and Second Semester - Regular Program.
- Participated as a course coordinator for Pharmaceutics III Course for Level 3 students, Drug Design Program.
- Participated as a lecturer and course coordinator for Pharmaceutics II Course for Level 2 students, Pharm D Clinical Program.
- Participated as a lecturer in 'Review Article on Selected Topics' and 'Drug Product Design' courses for postgraduate students (master's degree).
- Participated as a lecturer in ' Selected Topics' course for postgraduate students (PhD Degree).

- Participated as a lecturer and course coordinator in 'Specialized Pharmaceuticals' course for postgraduate students (master's degree – Specialty of Pharmaceutical Technology).
- Participated as a lecturer for Pharmaceutics I Course at MIU (Misr International University), Cairo, Egypt.
- Participated as an oral examiner for all Pharmaceutics and Industrial Pharmacy courses of undergraduate students, Faculty of Pharmacy, Ain Shams University, Cairo University, Tanta University, Misr International University (MIU), Future University in Egypt (FUE), and British University in Egypt (BUE).

### **Auxiliary Experience**

- Member of **Examination Control of First, Second and Third year (regular system)** - Faculty of Pharmacy- Ain Shams University- Cairo- Egypt.
- Member of **Cumulative Examination Control** – Faculty of Pharmacy- Ain Shams University- Cairo- Egypt.
- Coordinator for **Management Information System (MIS) software program** of Students Affairs Section- Faculty of Pharmacy- Ain Shams University- Cairo- Egypt.
- Coordinator for **International Publications committee**- Faculty of Pharmacy- Ain Shams University- Cairo- Egypt.
- Member of **'Scientific Laboratory Equipment'** committee- Faculty of Pharmacy- Ain Shams University- Cairo- Egypt.
- Member of **International Relations Office**- Faculty of Pharmacy- Ain Shams University- Cairo- Egypt.
- President of **Teaching and learning Standards - Quality Assurance Unit** - Faculty of Pharmacy- Ain Shams University- Cairo- Egypt و رئيس معيار التدريس (Since 2018 to date).  
رئيس معيار التدريس و (Since 2018 to date). كلية الصيدلة جامعة عين شمس
- Manager of **information technology (IT) unit** - Faculty of Pharmacy- Ain Shams University- Cairo- Egypt مدير وحدة تكنولوجيا المعلومات- كلية الصيدلة جامعة عين شمس (Since 2015 to 2018).
- President of **Examination Control of Third year Students (Regular system)** - Faculty of Pharmacy- Ain Shams University- Cairo- Egypt رئيس كمنترول الفرقة الثالثة- (Since February 2017 till September 2019).  
رئيس كمنترول الفرقة الثالثة- (Since February 2017 till September 2019). كلية الصيدلة جامعة عين شمس
- Member of **Education and Student Affairs Committee – Faculty of Pharmacy – Ain Shams University** لجنة شئون التعليم و الطلاب – كلية الصيدلة جامعة عين شمس (Since 2012 to date).
- Member of **Postgraduate Affairs Committee – Faculty of Pharmacy – Ain Shams University** لجنة شئون الدراسات العليا- كلية الصيدلة جامعة عين شمس (Since 2012 to date).
- Member of **Environmental Affairs and Community Service Committee – Faculty of Pharmacy – Ain Shams University** لجنة شئون البيئة و خدمة المجتمع – كلية الصيدلة جامعة عين شمس (Since 2012 to date).
- Member of **Scientific Committee for Evaluation of Drug Stability Studies** - Central Administration of Pharmaceutical Affairs- **Egyptian Drug Authority - Egypt** عضو اللجنة العلمية لتقييم دراسات الثبات- هيئة الدواء المصرية (Since February 2013 to date)
- Member of **Scientific Quality Committee for Evaluation of CTD files** - Central Administration of Pharmaceutical Affairs- **Egyptian Drug Authority- Egypt** هيئة الدواء المصرية (Since March 2019) عضو اللجنة العلمية للجودة لتقييم ملفات التسجيل بنظام CTD الدواء المصرية

- to date).
- Member of **Scientific Committee for Evaluation of Stability Studies of CTD files** - Central Administration of Pharmaceutical Affairs- **Egyptian Drug Authority** - هيئة الدواء المصرية - Egypt - عضو اللجنة العلمية لتقييم دراسات الثبات للمستحضرات - CTD (Since March 2019 to date).
  - Member of **Scientific Committee for Evaluation of Medical Devices Stability Studies** - Central Administration of Pharmaceutical Affairs- **Egyptian Drug Authority** - Egypt - هيئة الدواء المصرية - عضو اللجنة العلمية لتقييم دراسات ثبات المستلزمات الطبية - (Since July 2021 to date)
  - **Manager of Experiments and Advanced Pharmaceutical Research Unit (EAPRU)** – Faculty of Pharmacy – Ain Shams University و مدير وحدة التجارب و (Since November 2018 to date).
  - Member of the **Award Committee of the Arab Company for Pharmaceutical Industries and Medical Appliances (ACDIMA) for the best scientific research in the field of applied pharmaceutical sciences** in its first session 2018/2019. عضو لجنة جائزة الشركة العربية للصناعات الدوائية والمستلزمات الطبية (أكديما) لأفضل بحث علمي في مجال العلوم الصيدلانية التطبيقية في دورته الأولى ٢٠١٨/٢٠١٩.
  - Member of **Scientific Research Ethics Committee** – Faculty of Pharmacy – Ain Shams University – كلية الصيدلة – جامعة عين شمس عضو لجنة أخلاقيات البحث العلمي – (Since September 2020 till now).
  - **Member of the Egyptian General Organization for Standardization and Quality** (from May 2023 to date) عضو لجنة الهيئة المصرية العامة للمواصفات والجودة
  - **Member of International accreditation committee at Faculty of Pharmacy, Ain Shams University from ACCREDITATION COMMITTEE FOR PHARMACY EDUCATION (ACPE, USA)** – Just received international accreditation (June 2023).
  - **Member of revising committee of Guidelines for the rules and regulations of the training program for the sixth year (excellence) for the Bachelor of Pharmacy degree (PharmD)** الدليل الاسترشادي لقواعد وضوابط البرنامج التدريبي للسنة السادسة (الامتياز) لدرجة بكالوريوس الصيدلة (فارم دي) – لجنة منبثقة من لجنة قطاع الدراسات الصيدلانية بالمرسلة (June 2023)

As a supervisor for several Master and PhD degree theses entitled:

### Theses Supervision

1. أنظمة إيذاء دوائية موضعية لمنتج Topical Delivery Systems for a Natural Product طبيعى
2. أنظمة توصيل دوائية متقدمة لعلاج اضطرابات الأذن Advanced Drug Delivery Systems for Treatment of Ear Disorders
3. التوصيل الرئوي لجسيمات ميكرونية مركبة ذاتية التحلل Pulmonary Delivery of Biodegradable Composite Microparticles
4. أنظمة توصيل نانوية لتعزيز التوافر الحيوي لعقار خافض لارتفاع ضغط الدم. Nano-delivery Systems for Bioavailability Enhancement of an antihypertensive Drug.
5. حاملات الذهب النانوية لتحسين العلاج الضوئي الحراري المضاد للسرطان Gold Nanocarriers for Enhanced Photothermal Anticancer Therapy.
6. مستحضرات التجميل النانوية القائمة على الفيتوبوليفينول لعلاج بعض Dermatological Disorders Phyto-Polyphenol based Nano-cosmeceuticals for Treatment of some
7. تعزيز التوافر الحيوي لكيريبيات الأتروبين لعلاج تسمم الفوسفور. Enhancement of Atropine Sulphate Bioavailability for the Treatment of Organophosphorus Poisoning.

## العضوي

8. Development and Optimization of Liquid Crystalline Nanostructures for Enhanced Ocular Delivery تطوير و تعظيم بلورات سائلة لتحسين التوصيل الدوائي للعين
9. Biocompatible Microemulsions for Enhanced Drug Mucosal Delivery نظام المستحلب الميكروني المتوافق حيويًا لتعزيز إيذاء دواء عن طريق الأغشية المخاطية
10. Protein based Nanocarriers for Breast Cancer Targeting حاملات نانوية بروتينية لاستهداف سرطان الثدي
11. Effect of Microneedles Array Technology on Transdermal Delivery of an Anticoagulant Drug. تأثير تقنية مصفوفة الأبر الميكرونية علي توصيل عقار مضاد للتجلط عبر الجلد.
12. Manufacture of Drug-Loaded Liposomes for Effective Targeting of Breast Cancer تصنيع حويصلات دهنية محملة بالدواء من أجل الاستهداف الفعال لسرطان الثدي
13. Nanoparticles of methotrexate sodium for targeting cancer cells
14. Formulation and evaluation of vesicular systems for enhanced transdermal drug delivery
15. Lipid nanocarriers for treatment of certain types of cancer.
16. Preparation and evaluation of medicated intra-articular delivery systems.
17. Composite biodegradable systems for localized treatment of osteomyelitis.
18. A Lipid-Based Carrier for Ocular Delivery of Difluprednate. قاعدة دهنية لتوصيل ديفلوريدنات للعين

## Projects

- Co-investigator of Experiments & Advanced Research Unit Project 2011 entitled: “Comparative *in-vitro* Dissolution profile of hyoscyamine sulfate from Spazaway® 0.125mg sublingual tablets (manufactured by شسحتق for Pharmaceutical Industries for Jasper Pharmaceutical Industries, Egypt) and Levsin SL® 0.125mg sublingual tablets (manufactured by Schwarz Pharma AG /Alaven Pharmaceutical LLC,USA)”. دراسة الذوبان المقارن لمستحضر سبازأوي أقراص تحت اللسان - شركة جاسبر للصناعات الدوائية - مصر
- Co-investigator of Experiments & Advanced Research Unit Project 2011 entitled: “A comparative, randomized, two-period, two-treatment, two-sequence, single dose, crossover bioequivalence study of Elmodoxacin (Ciprofloxacin 750 mg) tablets in healthy participants under fasting conditions. - Sea Pharma Company for Pharmaceuticals دراسة التكافؤ الحيوي لمستحضر المودوكساسين (سيبروفلوكساسين ٧٥٠ مجم) أقراص - شركة سي فارما للأدوية - مصر
- Co-investigator of Ain Shams University Project for Scientific Research 2018/2020 entitled: “Composite Biodegradable Systems for Localized Treatment of Osteomyelitis”. أنظمة مركبة ذاتية التحلل للعلاج الموقعي لإلتهاب العظام.
- Co-investigator of Ain Shams University Project for Applied Research 2018/2020 entitled: “Pirfenidone loaded Biodegradable Composite Microparticles Targeting Idiopathic Pulmonary Fibrosis”. جسيمات ميكروية مركبة ذاتية التحلل محملة بالبيرفينيدون مهدفة لمرض التليف الرئوي مجهول السبب
- Co-investigator of Ain Shams University Project for Applied Research 2018/2020 entitled: “Biocompatible microemulsions for enhanced mucosal drug delivery”. مستحلبات ميكرونية متوافقة حيويًا من أجل تحسين التوصيل المخاطي للأدوية.
- Co-investigator of Ain Shams University Project for Scientific Research

2019/2021 entitled: “Nanotechnology-based Delivery of Plant-derived Nutraceuticals for Biomedical Applications”. توصيل المغذيات المستمدة من النباتات باستخدام تكنولوجيا النانو للتطبيقات الطبية الحيوية

- Principal investigator of Experiments & Advanced Research Unit Project 2020 entitled: “Bioequivalence Study DILO FLEX® tablets vs Cataflam® 50mg sugar-coated tablets & LYSANTIN 50mg film-coated tablets – Mediphar Co. – Lebanon.” دراسة التكافؤ الحيوي لمستحضر ديلوفلكس أقراص – شركة ميديفار - لبنان

## Conferences

- The **National Research Center** first conference of pharmaceutical sciences, March 2004 with 2 posters entitled:
  - "Preparation and *in-vitro* Evaluation of Metronidazole Floating Alginate Beads"
  - "Preparation and *in-vitro* Evaluation of Metronidazole Floating Tablets"
- **APGI Conference '7th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology'**, from 8th to 11th March 2010 in Malta entitled: "Controlled Release of Clozapine from Injectable Conventional and *in situ* Forming Biodegradable PLGA Microparticles".
- The **German University in Cairo (GUC)** conference of Humboldt Kolleg "Pharmaceutical and Biotechnological Therapies", 28 September – 1 October 2012 with a poster entitled: "Effect of Different Hydrophilic Shielding Materials on Entrapment Efficiency, Particle Size, Surface Charge and Hydrophobicity of Biodegradable Poly-ester Based Nano-carriers"
- **Future University in Egypt (FUE) - "International Conference on Pharmaceutical Sciences"**, April 13-15, 2013 at Cairo International Conference Center, Cairo, Egypt.
- **19<sup>th</sup> International Symposium on Microencapsulation, September 9-11, 2013 – Pamplona, Spain** with a poster entitled: “Preparation and *in vitro* Evaluation of Injectable PLGA Microparticles for Acute Psychosis Using an Experimental Factorial Design”.
- **Future University in Egypt (FUE) - "3<sup>rd</sup> FUE International Conference of Pharmaceutical Sciences"**, February 9-11, 2015 with a poster entitled: "Formulation and *in vitro* Evaluation of Nano-sized Ethosomal Systems for Transdermal Delivery of an Antiemetic Drug".
- **1st European conference on Pharmaceutics and Drug Delivery, April 13-14, 2015- Reims, France** with a poster entitled: "Lecithin/TPGS-based spray-dried SMEDDS for lung cancer: *in vitro* pulmonary deposition and cytotoxicity".
- **5<sup>th</sup> Scientific Ain Shams University Conference “Egypt and the Future – Towards Intellectual and Scientific Visions” – 12-14 April 2016.**
- **43<sup>rd</sup> CRS Annual Meeting & Exposition, July 17-20, 2016- Seattle,**

Washington, USA with a poster entitled: "Surface Functionalization of Methotrexate-loaded Chitosan Nanoparticles with Hyaluronic acid/Human serum albumin: Comparative characterization and in vitro cytotoxicity".

- **Future University in Egypt (FUE) - "5<sup>th</sup> FUE International Conference of Pharmaceutical Sciences", January 28-30, 2019** with a poster entitled: "Transdermal Delivery of Atorvastatin Nanoemulsion: Optimization and Mechanism".
- **CRS Virtual Annual Meeting & Exposition: 2020 Vision for Global Impact, June 29-July 2, 2020** with a poster entitled: "Towards Exploring the Critical Process Parameters in the Development of Novel Integrated Nanovesicles 'Flexosomes'".
- **CRS Virtual Annual Meeting & Exposition: 2020 Vision for Global Impact, June 29-July 2, 2020** with a poster entitled: "Flexosomes, A Novel Integrated Nanovesicle for Boosting Transdermal Drug Delivery: Characterization, *ex vivo* and *in vivo* evaluation".

## **Publications**

- 1- Rania A.H. Ishak, Gehanne A.S. Awad, Nahed D. Mortada, Samia A.K. Nour, Preparation, in vitro and in vivo evaluation of stomach-specific metronidazole-loaded alginate beads as local anti-Helicobacter pylori therapy. **Journal of Controlled Release**, Vol. 119, Issue 2, June 2007, Pages 207-214. **Impact Factor: 9.776****
- 2- Rania A.H. Ishak, Gehanne A.S. Awad, Noha M. Zaki, Abd El-Hamid El-Shamy, Nahed D. Mortada, A comparative study of chitosan shielding effect on nano-carriers hydrophilicity and biodistribution. **Carbohydrate Polymers**, Vol. 94, April 2013, Pages 669-676. **Impact Factor: 9.381****
- 3- Rania A.H. Ishak, Nahed D. Mortada, Noha M. Zaki, Abd El-Hamid El-Shamy, Gehanne A.S. Awad, Impact of microparticle formulation approaches on drug burst release: a level A IVIVC. **Journal of Microencapsulation**, Vol. 31 (7), 2014, Pages 674-684. **Impact Factor: 3.142****
- 4- Rania A.H. Ishak. Buoyancy-generating agents for stomach-specific drug delivery: an overview with special emphasis on floating behavior. **Journal of Pharmacy and Pharmaceutical Sciences**, 2015;18(1):77-100. **Impact Factor: 1.667****
- 5- Rania A.H. Ishak, Rihab Osman. Lecithin/TPGS-based spray-dried self-microemulsifying drug delivery systems: In vitro pulmonary deposition and cytotoxicity. **International Journal of Pharmaceutics**, 2015 May 15; 485(1-2):249-60. **Impact Factor: 5.875****
- 6- Rania A. Hashad, Rania A.H. Ishak, Samar Mansour, Ahmed S. Genedy. Chitosan-tripolyphosphate nanoparticles: optimization of formulation variables for improving production yield. **Egyptian Journal of Biomedical Sciences**, March, Volume 47 (2015)**

- 7-** Sally Safwat, Rania M. Hathout, **Rania A. Ishak**, Nahed D. Mortada. Augmented simvastatin cytotoxicity using optimized lipid nanocapsules: A potential for breast cancer treatment. **Journal of Liposome Research**, 2016; Published online 12 Feb: pp. 1-10. <http://dx.doi.org/10.3109/08982104.2015.1137313>. **Impact factor: 3.648**
- 8-** Rania A. Hashad, **Rania A.H. Ishak**, Sherif Fahmy, Samar Mansour, Ahmed S. Geneidi. Chitosan-tripolyphosphate nanoparticles: Optimization of formulation parameters for improving process yield at a novel pH using artificial neural networks. **International Journal of Biological Macromolecules**, 2016; 86:50-8. **Impact factor: 6.953**
- 9-** **Rania A.H. Ishak**, Rihab Osman, Gehanne A.S. Awad. Dextran-based Nanocarriers for Delivery of Bioactives. **Current Pharmaceutical Design**, 2016; 22(22):3411-28. **Impact Factor: 3.116**
- 10-** Rania A. Hashad, **Rania A.H. Ishak**, Ahmed S. Geneidi, Samar Mansour. Methotrexate loading in chitosan nanoparticles at a novel pH: Response surface modeling, optimization and characterization. **International Journal of Biological Macromolecules**, 2016; 91:630-39. **Impact factor: 6.953**
- 11-** **Rania A.H. Ishak**. HP- $\beta$ -cyclodextrin/TPGS composite complexes for enhanced Resveratrol solubility, *in vitro* pulmonary deposition and cytotoxicity. **International Journal of Pharmacy and Pharmaceutical Research**, October 2016; 7(3): 199-221.
- 12-** Ayman A Abdellatif, Manal M Kamal, **Rania A.H. Ishak**. Addition of dexamethasone–chlorpheniramine mixture reduces the incidence of vomiting associated with oral ketamine premedication after pediatric dental procedures. **Ain Shams Journal of Anaesthesiology**, 2016; 9(4): 478-484.
- 13-** Hanaa A. Abdel Messih, **Rania A.H. Ishak**, Ahmed S. Geneidi, Samar Mansour. Nanoethosomes for transdermal delivery of Tropisetron HCl: Multi-factorial predictive modeling, characterization and ex-vivo skin permeation. **Drug Development and Industrial Pharmacy**, January 2017; Volume 43, Issue 6, Pages 958-971. **Impact factor: 3.225**
- 14-** Rania A. Hashad, **Rania A.H. Ishak**, Ahmed S. Geneidi, Samar Mansour. Surface functionalization of methotrexate-loaded chitosan nanoparticles with hyaluronic acid/human serum albumin: Comparative characterization and *in vitro* cytotoxicity. **International Journal of Pharmaceutics**, April 2017, Volume 522, Issues 1–2, Pages 128-136. **Impact Factor: 5.875**
- 15-** Sally Safwat, **Rania A. Ishak**, Rania M. Hathout, Nahed D. Mortada. Statins anticancer targeted delivery systems: re-purposing an old molecule. **Journal of Pharmacy and Pharmacology**, June 2017, Volume 69, Issue 6, Pages 613-624. **Impact Factor: 3.765**
- 16-** Enas Elmowafy, Rihab Osman, **Rania A.H. Ishak**. Polymer-Based Novel Lung



Targeted Delivery Systems. **Current Pharmaceutical Design**, 2017, Volume 23, Issue 3, Pages 373-392. **Impact Factor: 3.116**

- 17-** Sally Safwat, **Rania A. H. Ishak**, Rania M. Hathout, Nahed D. Mortada. Nanostructured lipid carriers loaded with simvastatin: effect of PEG/glycerides on characterization, stability, cellular uptake efficiency and in vitro cytotoxicity. **Drug Development and Industrial Pharmacy**, March 2017; Volume 43, Issue 7, Pages 1112-1125. **Impact factor: 3.225**
- 18-** **Rania A. H. Ishak**, Nada M. Mostafa & Amany O. Kamel. Stealth lipid polymer hybrid nanoparticles loaded with rutin for effective brain delivery – comparative study with the gold standard (Tween 80): optimization, characterization and biodistribution. **Drug Delivery**, December 2017; Volume 24, Issue 1, Pages 1874-1890. **Impact factor: 6.419**
- 19-** **Rania A. H. Ishak** Ayman A Abdellatif, Manal M Kamal. Addition of dexamethasone–chlorpheniramine mixture reduces the incidence of vomiting associated with oral ketamine premedication after pediatric dental procedures. **Ains Shams of Anesthesiology**, 2017, Volume 9, Issue 4, Pages 478-484.
- 20-** Hanaa A. Abdel-Messih, **Rania A.H. Ishak**, Ahmed S. Geneidi, Samar Mansour. Tailoring novel soft nano-vesicles ‘Flexosomes’ for enhanced transdermal drug delivery: Optimization, characterization and comprehensive *ex vivo – in vivo* evaluation. **International Journal of Pharmaceutics**, April 2019, Volume 560, Pages 101-115. **Impact Factor: 5.875**
- 21-** Dalia S. Shaker, **Rania A. H. Ishak**, Amira Ghoneim, and Muaeid A. Elhuoni. Nanoemulsion: A Review on Mechanisms for the Transdermal Delivery of Hydrophobic and Hydrophilic Drugs. **Scientia Pharmaceutica**, 2019, 87(3), 17; <https://doi.org/10.3390/scipharm87030017>. **Impact Factor: 2.011**
- 22-** May Abou-ElNour, **Rania A.H. Ishak**, Mattia Tiboni, Giulia Bonacucina, Marco Cespi, Luca Casettari, Mahmoud E.Soliman, Ahmed S. Geneidi. Triamcinolone acetate-loaded PLA/PEG-PDL microparticles for effective intra-articular delivery: synthesis, optimization, in vitro and in vivo evaluation. **Journal of Controlled Release**, Volume 309, 10 September 2019, Pages 125-144. **Impact Factor: 9.776**
- 23-** Dalia S. Shaker, **Rania A.H. Ishak**, Muaeid A. Elhuoni, Amira M. Ghoneim. Boosting transdermal delivery of atorvastatin calcium via o/w nanoemulsifying system: Two-step optimization, ex vivo and in vivo evaluation. **International Journal of Pharmaceutics**, Volume 578, 30 March 2020, 119073. **Impact Factor: 5.875**
- 24-** Mohamed A. El-Gendy, Mai Mansour, Mona I.A. El-Assal, **Rania A.H. Ishak**, Nahed D. Mortada. Delineating penetration enhancer-enriched liquid crystalline nanostructures as novel platforms for improved ophthalmic delivery. **International Journal of Pharmaceutics**, Volume 582, 30 May 2020, 119313. **Impact Factor: 5.875**

- 25-** May Abou-ElNour, Mahmoud E.Soliman, Athanasios Skouras, Luca Casettari, Ahmed S. Geneidi, **Rania A.H. Ishak**, Microparticles-in-Thermoresponsive/Bioadhesive Hydrogels as a Novel Integrated Platform for Effective Intra-articular Delivery of Triamcinolone Acetonide. **Molecular Pharmaceutics**, 2020, Volume 17(6), Pages 1963-1978. **Impact Factor: 4.939**
- 26-** Noha H. Radwan, Maha Nasr, **Rania A.H. Ishak**, Gehanne A.S. Awad. Recent trends in the use of bioceramics for treatment of osteomyelitis. **Archives of Pharmaceutical Sciences Ain Shams University**, 1/6/2020, Volume 4(1), Pages 1-19.
- 27-** Noha H. Radwan, Maha Nasr, **Rania A.H. Ishak**, Nourtan F. Abdeltawab, Gehanne A.S. Awad. Chitosan-calcium phosphate composite scaffolds for control of post-operative osteomyelitis: Fabrication, characterization, and in vitro–in vivo evaluation. **Carbohydrate Polymers**, Volume 244, 15 September 2020, 116482. **Impact Factor: 9.381**
- 28-** Noha H. Radwan, Maha Nasr, **Rania A.H. Ishak**, Gehanne A.S. Awad. Moxifloxacin-loaded in situ synthesized Bioceramic/Poly (L-lactide-co-ε-caprolactone) composite scaffolds for treatment of osteomyelitis and orthopedic regeneration. **International Journal of Pharmaceutics**, Volume 602, May 2021, 120662. **Impact Factor: 5.875**
- 29-** Doaa H. Shakshak, **Rania A.H. Ishak**, Amany O. Kamel, Nahed Mortada. Appraising the Competency of Lipid Nano-Platforms as Non-invasive Paradigms for the Treatment of Ocular Inflammations: A review. **Archives of Pharmaceutical Sciences Ain Shams University** 5 (1), 2021, 71-96.
- 30-** Safwat, S., Hathout, R.M., **Ishak, R.A.**, Mortada, N.D. Elaborated survey in the scope of nanocarriers engineering for boosting chemotherapy cytotoxicity: A meta-analysis study. **International Journal of Pharmaceutics**, 2021, 610, 121268. **Impact Factor: 6.510**
- 31-** Atef, B., **Ishak, R.A.H.**, Badawy, S.S., Osman, R. Exploring the potential of oleic acid in nanotechnology-mediated dermal drug delivery: An up-to-date review. **Journal of Drug Delivery Science and Technology**, 2022, 67, 103032. **Impact Factor: 5.062.**
- 32-** Magdy, M., Elmowafy, E., Ellassal, M., **Ishak, R.A.H.** Localized drug delivery to the middle ear: Recent advances and perspectives for the treatment of middle and inner ear diseases. **Journal of Drug Delivery Science and Technology**, 2022, 69, 103149. **Impact Factor: 5.062.**
- 33-** El-Gayar, M.H., **Ishak, R.A.H.**, Esmat, A., Aboulwafa, M.M., Aboshanab, K.M. Evaluation of lyophilized royal jelly and garlic extract emulgels using a murine model infected with methicillin-resistant Staphylococcus aureus. **AMB Express**, 2022, 12(1), 37. **Impact Factor: 4.245**
- 34-** Magdy, M., Elmowafy, E., Ellassal, M., **Ishak, R.A.H.** Engineered triamcinolone acetone loaded glycerosomes as a novel ear delivery system for the treatment of

otitis media. **International Journal of Pharmaceutics**, 2022, 628, 122276. **Impact Factor: 6.510**

**35-** Rinada Hussein, Heba Gad, Sahar Badr El-Din, Dalia S. Shaker, **Rania A. H. Ishak**. Chitosan nanoparticles for intranasal delivery of olmesartan medoxomil: Pharmacokinetic and pharmacodynamic perspectives. **International Journal of Pharmaceutics**, 2022, 628, 122278. **Impact Factor: 6.510**

**36-** Gad, Heba A., **Ishak, Rania A.H.**, Labib, Rola, Kamel, Amany. Ethyl lauroyl arginate-based hydrophobic ion pair complex in lipid nanocapsules: A novel oral delivery approach of rosmarinic acid for enhanced permeability and bioavailability. **International Journal of Pharmaceutics**, 2023, 630, 122388. **Impact Factor: 6.510.**

**37-** Mohamed A. El-Gendy, Mai Mansour, Mona I. A. El-Assal, **Rania A. H. Ishak** and Nahed D. Mortada. Travoprost Liquid Nanocrystals: An Innovative Armamentarium for Effective Glaucoma Therapy. **Pharmaceutics**, 2023, 15(3), 954. **Impact Factor: 6.525.**

**38-** Atef, Bassant, **Rania A. H. Ishak**, Sabry S. Badawy, and Rihab Osman. 10-Hydroxy Decanoic Acid-Based Vesicles as a Novel Topical Delivery System: Would It Be a Better Platform Than Conventional Oleic Acid Ufasomes for Skin Cancer Treatment?" **Pharmaceutics**, 2023, 15, no. 5: 1461. **Impact Factor: 6.525.**

**39-** Rinada H. Hassan, Heba A. Gad, Dalia S. Shaker, **Rania A. H. Ishak**, Exploring the potential of intranasal drug delivery systems in the management of hypertension, **RPS Pharmacy and Pharmacology Reports**, Volume 2, Issue 2, April 2023, rqad021, <https://doi.org/10.1093/rpsppr/rqad021>

**40-** Sara Ahmed, Mai Mansour, **Rania A. H. Ishak** and Nahed D. Mortada. Customizable resveratrol spray-dried micro-composites for inhalation as a promising contender for treatment of idiopathic pulmonary fibrosis. **International Journal of Pharmaceutics**, 2023, 642, 123117. **Impact Factor: 6.510.**

#### **Awards**

- The **International Publishing Award** from Ain Shams University for the successive years starting from 2008 till now.
- جائزة مسابقة عين شمس تبتكر ٢٠٢٢ – المركز الثاني في القطاع الطبي مسار الباحثين تحت عنوان Protein based Nanocarriers for Breast Cancer Targeting
- جائزة شركة أكديما لأفضل بحث علمي في مجال العلوم الصيدلانية التطبيقية لعام ٢٠٢٢ - عنوان البحث: Engineered triamcinolone acetone loaded glycosomes as a novel ear delivery system for the treatment of otitis media.

#### **Role as a reviewer for scientific**

- **Scientific Reports**; Publisher: Nature. **Impact Factor: 4.379**
- **Carbohydrate Polymers**; Publisher: Elsevier. **Impact Factor: 9.381**
- **International Journal of Pharmaceutics**; Publisher: Elsevier. **Impact Factor:**

## **journals**

**6.510**

- **Drug Delivery**; Publisher: Bentham Science. **Impact Factor: 6.419**
- **Pharmaceutics**; Publisher: MDPI. **Impact Factor: 6.525.**
- **IET Nanobiotechnology**; Publisher: IET Digital Library. **Impact Factor: 1.859**
- **Drug Development and Industrial Pharmacy**. Publisher: Taylor & Francis Online. **Impact Factor: 3.225**
- **Journal of Microencapsulation**; Publisher: Taylor & Francis Online. **Impact Factor: 3.142**
- **ACS Applied Materials & Interfaces**; Publisher: ACS Publications. **Impact Factor: 8.758**
- **Biomedical Physics & Engineering Express**; Publisher: IOPscience. **Impact Factor: 1.39**
- **Drug Delivery Letters**; Publisher: Bentham Science. ISSN (Print): 2210-3031. ISSN (Online): 2210-304X.

## **Oral seminar presentations for the department**

- 1- Dissolution testing methods for special dosage forms
- 2- How to write a thesis?
- 3- Floating drug delivery systems
- 4- Polymeric and solid lipid nanoparticles
- 5- Growing cells in culture

## **Training Courses & Workshops**

- 1- Thinking skills- Ain Shams University – 24-26/7/2006
- 2- Communication skills - Ain Shams University – 16-18/1/2007
- 3- Credit hour system - Ain Shams University – 23-25/1/2007
- 4- Novel trends in teaching - Ain Shams University – 13-15/2/2007
- 5- Workshop entitled "Writing Annual Report for Faculties" at Quality Assurance and Accreditation Center, Ain Shams University – 18-19 February 2007.
- 6- Effective presentation skills - Ain Shams University – 1-3/4/2008.
- 7- Workshop entitled "Basic Techniques in Cell Culture" at Medical Technology Center for Research and Services, Alexandria University - August 2008, covering the following topics:
  - Introduction to cell and tissue culture
  - Serum-containing and serum-free culture media
  - Trypsinization
  - Cell counting, viability and growth curves
  - Growth of adherent and non-adherent cells
  - Adaptation to suspension culture
  - Cryopreservation and cryothawing
- 8- Use technology in teaching - Ain Shams University – from 31/1/2009 to 2/2/2009.
- 9- International publication - Ain Shams University – 23- 25/5/2009.
- 10- Ethics of scientific research - Ain Shams University – 29- 31/12/2009.
- 11- Organization of conferences - Ain Shams University- from 29/6/2010 to 1/7/2010.
- 12- Workshop entitled "Familiarization and Operation of Agilent HPLC Model 1200 and Chemstation Software" – Faculty of Pharmacy, Ain Shams University – 14th of June, 2010.
- 13- Workshop entitled "How to make an Exam" at Quality Assurance and Accreditation Center - Faculty of Pharmacy, Ain Shams University –January

2012.

- 14- Communication Skills in different education aspects – 8- 10/9/2012.
- 15- Financial and legal Aspects in universities – 18-20/9/2012
- 16- Question Bank and E-learning module – 19-21/1/2014.
- 17- SPSS – 18/2/2014 (18 hours)
- 18- Strategic Planning – 27-28/8/2014 (15 hours)
- 19- Time and Meeting Management – 3-4/9/2014 (15 hours)
- 20- Workshop entitled “Mathematical Modelling Using Design Expert®: Introduction and Applications” – May 2016.
- 21- - دورة تدريبية “إدارة بنوك الأسئلة وأساليب التقويم إلكترونيا” – من ٢٠١٩/٢/١٠ إلى ٢٠١٩/٢/١١ – مركز ضمان الجودة والاعتماد – جامعة عين شمس
- 22- - ميكروسوفت - ٢٠١٩/٢/٢٧ - "Microsoft 365 Workshop" ورشة عمل
- 23- أيام ٢٢ و٢٤ و٢٨ و٣٠ - "Systematic Review & Meta-Analysis" دورة
- 24- - "Updated of a register requirement and bioequivalence studies" ورشة عمل - ٢٠١٩/١٢/٢٨
- 25- - دورة تدريبية “بنوك الأسئلة” – يومي ٢٠٢٠/١٠/٢٨ و ٢٠٢٠/١٠/٣١ – الوحدة المركزية للقياس والتقييم – إدارة تطوير التعليم – جامعة عين شمس
- 26- - "Nature Research Academies Workshop: Logical Manuscript Structure" ورشة عمل - بنك المعرفة المصري - November 2020
- 27- - "Funding Institutional – Onboarding (Ain Shams University)" ورشة عمل - 25 November 2020 – Research Academy - Elsevier.
- 28- - "Research Funding Workshop" - ٢٠٢٠/١٢/١ – Clarivate Web of Science - بنك المعرفة المصري
- 29- - "Nature Research Academies Workshop: Effective Post-Submission Publishing Strategies" ورشة عمل - بنك المعرفة المصري - December 2020
- 30- - Teaching Excellence in Pharmacy Education برنامج 2020 - في الفترة من ابريل إلى نوفمبر - بنك المعرفة المصري - ACPE - ٢٠٢٠
- 31- - "Lesson Planning" دورة البرنامج التدريبي - ٢٠٢١/٢/٩ إلى ٢٠٢١/٢/١٠ - ١٥ ساعة تدريبية) - مركز التدريب والتطوير - جامعة عين شمس
- 32- - "Applications of Microsoft Office 365 (Level 1)" دورة البرنامج التدريبي - ٢٠٢١/٢/١٢ إلى ٢٠٢١/٢/١١ - ١٥ ساعة تدريبية) - مركز التدريب والتطوير - جامعة عين شمس
- 33- - "Moodle ٢٠٢١/٣/٤" دورة البرنامج التدريبي “التعلم الإلكتروني باستخدام - ٢٠٢١/٣/٥ (١٥ ساعة تدريبية) - مركز التدريب والتطوير - جامعة عين شمس
- 34- - "بنك المعرفة المصري" برنامج التعلم عن بعد من ٢٠٢١/٣/١١ إلى ٢٠٢١/٣/١٢ - ١٥ ساعة تدريبية) - مركز التدريب والتطوير - جامعة عين شمس
- 35- - "Self-Management and Marketing" دورة البرنامج التدريبي - ٢٠٢١/٣/٣٠ إلى ٢٠٢١/٣/٣١ - ١٥ ساعة تدريبية) - مركز التدريب والتطوير - جامعة عين شمس
- 36- - "الساعات المعتمدة والإرشاد الأكاديمي" برنامج التعلم عن بعد من ٢٠٢١/٤/٨ إلى ٢٠٢١/٤/٩ - ١٥ ساعة تدريبية) - مركز التدريب والتطوير - جامعة عين شمس
- 37- - "Nature Research Academies Workshop: Journal Editor 2" ورشة عمل - ٢٠٢١/٤/٩ - بنك المعرفة المصري

## Languages

- Arabic: Mother tongue.
- English: Very good Written and spoken.
- French: Very good Written and spoken.

## Skills & Activities

**Computer Skills:** WinWord, Excel, PowerPoint, Internet and mailing.

**Personal Skills:**

- Excellent presentation skills.
- Effective working individually or as a part of a team.
- Gain Experience and skills quickly.

**Research  
Interests**

**Scopus H-  
index**

Interested in conducting research work in advanced drug delivery technology esp. gene delivery systems, biodegradable particulate systems, and nanotechnology.

**Profile**

16

ResearchGate: [https://www.researchgate.net/profile/Rania\\_Ishak](https://www.researchgate.net/profile/Rania_Ishak)

Google Scholar: <https://scholar.google.ca/citations?user=21cQNIMAAAAJ&hl=en>

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=16309714600>

ORCID: <https://orcid.org/0000-0003-3393-0477>