

RAMADAN I. KH. AL-SHDEFAT, Ph.D.

Contact Information

Position Professor & Dean, Faculty of Pharmacy
Institution Jadara University, Irbid, Jordan
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Research Metrics

Publications	Citations	h-index	i10-index	Experience
85+	1,268	18	32	20+ Years

Professional Summary

A dedicated and accomplished academic leader with over 20 years of experience in pharmaceutical sciences, research, and university administration. Proven expertise in pharmaceutics, nanotechnology, and drug delivery systems, with a strong record of publications in high-impact journals. Experienced in curriculum development, academic advising, and strategic planning. Currently serving as the Dean of the Faculty of Pharmacy at Jadara University, fostering a collaborative environment for students and faculty to advance pharmaceutical education and research.

Education

Ph.D. in Pharmaceutical Sciences (Pharmaceutics) — 2002

The State University of Medicine and Pharmacy, Chisinau, Republic of Moldova -
Dissertation: Formulation and in vitro/in vivo evaluation of Nifedipine extended-release dosage forms - *Supervisor:* Professor Eugen Diug

Bachelor of Science in Pharmacy — 1997

Jordan University of Science and Technology, Irbid, Jordan

Research Interests

Area	Focus
Nanotechnology	Drug Delivery Systems, Nanoparticles, Microparticles
Pharmaceutical Technology	Formulation Development, Optimization
Pharmacokinetics	Bioavailability Studies, Drug Metabolism
Analytical Methods	HPLC, LC-MS/MS, Method Development & Validation
Therapeutic Areas	Cancer Treatment, Diabetes, Cardiovascular

Academic & Administrative Experience

Jadara University, Irbid, Jordan

Position	Period
Dean, Faculty of Pharmacy	Sep 2023 – Present
Dean, Faculty of Medical Allied Sciences & Pharmacy	Sep 2022 – Aug 2023
Vice President, Corporate Communication & Marketing	Sep 2021 – Aug 2022

Prince Sattam Bin Abdulaziz University, Al-Kharj, Saudi Arabia

Position	Period
Head of Department of Pharmaceutics	Aug 2015 – Aug 2017
Associate Professor	Aug 2016 – Aug 2017
Director of Research Center	Mar 2011 – Sep 2015
Assistant Professor	Sep 2009 – Aug 2016

Other Positions

Institution	Position	Period
Al-Isra University, Amman	Assistant Professor	Oct 2008 – Sep 2009
Riyadh Colleges of Dentistry and Pharmacy	Assistant Professor	Sep 2007 – Sep 2008
Technical Institute for Health Training, Riyadh	Assistant Professor & Director	Apr 2004 – Apr 2007
Specialized Academy for Medical Training, Riyadh	Lecturer	Sep 2003 – Apr 2004

Publications

2025

1. Anwer, M. K., Mirza, M. A., Aleemuddin, M., & Alshdefat, R. (2025). Enhanced cytotoxicity of osimertinib nanocrystals against lung cancer: Preparation, characterization and cytotoxicity studies against A549 cell lines. *Journal of Drug Delivery Science and Technology*, 107, 106805.
2. Anwer, M. K., Alshdefat, R., Akhtar, J., & Aleemuddin, M. (2025). Punica granatum Loaded Glycerosomes for Antibacterial Effect in Skin Infections: Preparation, Optimization, In Vitro and In Vivo Characterization. *BioNanoScience*, 15(2), 1-15.
3. Shakeel, F., Al-Shdefat, R., Ali, M., & Ahmad, U. (2025). Temperature-dependent solubilization and thermodynamic characteristics of ribociclib in varied {PEG 400+ water} combinations. *BMC chemistry*, 19(1), 79.
4. Jabbar, A. A., Al-Ani, I., Al-Shdefat, R. I., Ghazal, N., Jaffal, A., & Fayed, M. H. (2025). Design of Experiment Approach for Enhancing the Dissolution Profile and Robustness of Loratadine Tablet Using D- α -Tocopheryl Polyethylene Glycol 1000 Succinate. *Pharmaceutics*, 17(3), 380.
5. Ababneh, S. K., Khwaldeh, A., Alsarhan, A. A., Yousef, I., Al-Shdefat, R., Shoiab, A., & Ababneh, S. (2025). The Modulatory Effects of Statins, Vitamin E, and Moringa Oleifera Extract on CD3 Expression in Ribociclib-Induced Hepatotoxicity in Rats. *Acta Informatica Medica*, 33(2), 90.
6. Kumar, S., Khan, A. A., Ansari, M. J., Aodah, A., & Al-Shdefat, R. I. (2025). Chrono-drug Delivery Systems: Timed-release Formulations. In *Chronopharmacology* (pp. 140-163). CRC Press. **[Book Chapter]**

2024

7. Alsarhan, A. A., Khwaldeh, A., Shoiab, A. A., Al-Shdefat, R., Alkhawaldeh, A. K., Yousef, I., & Aldamen, N. (2024). Effect of curcumin and cacao extract on interleukin-6 expression on ribociclib-induced hepatotoxicity in rats. *Tropical Journal of Pharmaceutical Research*, 23(9), 1417-1422.
8. Shakeel, F., Al-Shdefat, R., Altamimi, M. A., & Ahmad, U. (2024). Solubility and thermodynamic analysis of aceclofenac in different {Carbitol+ water} mixtures at various temperatures. *BMC chemistry*, 18(1), 168.
9. Alsarhan, A. A., Khwaldeh, A. S., Al-Shawabkeh, J. D., Shoiab, A. A., Al-Shdefat, R., Al-Fawaeir, S., & Yousef, I. (2024). Investigating the hepato-protective properties of chamomile oil and olive leaves extracts against ribociclib-induced hepatotoxicity. *Brazilian Journal of Biology*, 84, e287535.
10. Maslat, A. O., Al-Mahmood, O. M., Al Khawaja, N. M., & Al-Shdefat, R. (2024). Association of Genetic polymorphisms of EDN1 gene and Endothelin-1 level in

patients with type 2 diabetes mellitus in the Jordanian population. *Heliyon*, 10(1), e23676.

2023

11. Alshogran, O. Y., Al-Shdefat, R., & Hailat, M. (2023). Simple and rapid quantification of ribociclib in rat plasma by protein precipitation and LC-MS/MS: An application to pharmacokinetics of ribociclib nanoparticles in rats. *Journal of Mass Spectrometry*, 58(12), e4984.
12. Al-Shdefat, R., Hailat, M., Alshogran, O. Y., Abu Dayyih, W., Gardouh, A., & Al Meanazel, O. (2023). Ribociclib Hybrid Lipid–Polymer Nanoparticle Preparation and Characterization for Cancer Treatment. *Polymers*, 15(13), 2844.
13. Al Meanazel, O., Alanazi, F. K., Hailat, M., Abu Dayyih, W., Al-Shdefat, R., Abu Assab, M., ... & Ibrahim, M. A. (2023). Performing Roux-N Y Gastric Bypass on Rabbits: Perspective Report to Evaluate Body Weight Changes Food Consumption and the Malabsorption of Vitamin D3. *bioRxiv*, 2023-01.

2022

14. Hailat, M., Al-Ani, I., Zakareia, Z., Al-Shdefat, R., & Abu Dayyih, W. (2022). Development and Validation of HPLC-DAD Method for the Determination of Favipiravir and Studying the Impact of Vitamin C on the Pharmacokinetics of COVID-19 Antiviral Drug Favipiravir. *Separations*, 9(10), 303.
15. Al-Shdefat, R., Hailat, M., & Alshogran, O. Y. (2022). Solubilization of a novel antitumor drug ribociclib in water and ten different organic solvents at different temperatures. *Drug Development and Industrial Pharmacy*, 48(1), 12-20.
16. Al-Shdefat, R., Kadhim, M. M., Mahdi, A. B., Lafta, H. A., & Kumar, A. (2022). Theoretical evaluation of poly (amidoamine) dendrimers with different peripheral groups as a purinethol drug delivery system in aqueous medium. *Colloids and Surfaces B: Biointerfaces*, 216, 112534.
17. Anwer, M. K., Fatima, F., Ahmed, M. M., Aldawsari, M. F., Alali, A. S., Kalam, M. A., ... & Al-shdefat, R. (2022). Abemaciclib-loaded ethylcellulose based nanosponges for sustained cytotoxicity against MCF-7 and MDA-MB-231 human breast cancer cells lines. *Saudi Pharmaceutical Journal*, 30(6), 726-734.
18. Hailat, M., Zakaraya, Z., Al-Ani, I., Al-Shdefat, R., Anwer, M. K., Saadh, M. J., & Dayyih, W. A. (2022). Pharmacokinetics and Bioequivalence of Two Empagliflozin, with Evaluation in Healthy Jordanian Subjects under Fasting and Fed Conditions. *Pharmaceuticals*, 15(2), 193.
19. Chakrabartty, S., Al-Shidaifat, A., Al-Shdefat, R., Alam, M. I., & Song, H. (2022). Drug and gene delivery by nanocarriers. In *Advances in Nanotechnology-Based Drug Delivery Systems* (pp. 281-320). Elsevier. **[Book Chapter]**

2021

20. Alkather, Z., Hailat, M., Al-Shdefat, R., & Dayyih, W. A. (2021). Development and validation of HPLC method for five gliptins in pharmaceutical dosage forms in finished marketed products. *Current Pharmaceutical Analysis*, 17(10), 1263–1271.
21. Abdel-Kader, M. S., Alam, P., Soliman, G. A., Al-Shdefat, R., & Afzal, O. (2021). Eco-friendly stability-indicating RP-HPTLC method for sildenafil analysis, characterization and biological evaluation of its oxidized stress degradation product. *Scientific Reports*, 11(1), 1-14.
22. AlAli, A. S., Aldawsari, M. F., Alalaiwe, A., Almutairy, B. K., Al-Shdefat, R., Walbi, I. A., & Fayed, M. H. (2021). Exploitation of Design-of-Experiment Approach for Design and Optimization of Fast-Disintegrating Tablets for Sublingual Delivery of Sildenafil Citrate with Enhanced Bioavailability Using Fluid-Bed Granulation Technique. *Pharmaceutics*, 13(6), 870-890.
23. Al-Shdefat, R., Hailat, M., Kharshid, A. M., Saadh, M. J., Hamed, M. F., Anwer, M. K., Abdel-Halim, H., & Dayyih, W. A. (2021). Evidence of Human Metabolites of Omeprazole and its Structure Elucidation by using HPLC-MS. *Journal of Molecular Structure*, 1230, 129902.
24. Al-Shdefat, R., Abudayyih, W., Tamimi, L., Awad, R., Abu Rayyan, W., & Al-Ani, I. (2021). Development and Validation of a Stability-Indicating Method for the Determination of Canagliflozin and Metformin Simultaneously in Combination Dosage Form Using HPLC-DAD. *Pharmaceutical Chemistry Journal*, 55(4), 406-413.
25. Dayyih, W. A., Ani, I. A., Al-Shdefat, R. I., Zakareia, Z., Hamid, S. A., & Shakya, A. K. (2021). Development and validation of a stability-indicating HPLC method for Empagliflozin and Linagliptin in tablet dosage form. *Asian Journal of Chemistry*, 33(2), 484-488.
26. Ahmad, R. A., Hailat, M. M., Jaber, M. A., Alkhawaja, B. A., Rasras, A. A., Al-Shdefat, R. A., Mallah, E., & Dayyih, W. A. (2021). RP-HPLC method development for simultaneous estimation of Empagliflozin, Pioglitazone, and Metformin in bulk and tablet dosage forms. *Acta Poloniae Pharmaceutica*, 78(3), 305-315.
27. Daradka, H. M., Aljohani, H. A., Alotaibi, M. K., Khabour, O. F., Eskandrani, A. A., Alsharif, S. M., Al-shdefat, R., Abu-Harirah, H. A., & Bataineh, Y. (2021). Evaluating the Effects Of Commiphora Molmol (Myrrh) Against Oxidative DNA Damage In Human Lymphocytes. *IJPSR*, 12(6), 1000-1007.
28. Alkather, Z., Hailat, M., Al-Shdefat, R., & Abu Dayyih, W. (2021). Development and Validation of an HPLC Method for Five Gliptins in Pharmaceutical Dosage Forms in Finished Marketed Products. *Current Pharmaceutical Analysis*, 17(1), 1-8.

2020

29. Al-Shdefat, R. (2020). Solubility determination, Hansen solubility parameters and solution thermodynamics of olmesartan medoxomil in (PEG-400 + water) cosolvent mixtures. *Drug Development and Industrial Pharmacy*, 46(12), 2098-2104.
30. Daradka, H. M., Al-Shdefat, R., & Eskandrani, A. A. (2020). Antioxidant Properties and Effect of Ethanolic Extract of *Pulcra crispa* on Biochemical and Hematological Parameters of Albino Rats. *International Journal of Pharmaceutical Sciences and Research*, 11(10), 5016-5022.
31. Hailat, M., Al-Shdefat, R., Ahmed, N., Attarabeen, O., & Alkhateeb, F. M. (2020). Public knowledge about dosage forms, routes of drug administration and medication proper storage conditions in Riyadh District, Saudi Arabia. *Journal of Pharmaceutical Health Services Research*, 11(3), 205-213.
32. Al-Badri, A., Mallah, E., Zakarya, Z., Al-Shdefat, R., El-Hajji, F. D., Ifraitekh, M., Kharshid, A., & Dayyih, W. A. (2020). Influence of Angiotensin Receptor Blocker (Candesartan) and ACE Inhibitor (Enalapril) Combined with Glimepiride on Glycated Hemoglobin in NIDDM Rats. *Journal of Pharmaceutical Research International*, 32(9), 40-51.
33. Daradka, H. M., Aljohani, H. A., Alotaib, M. K., Khabour, O. F., Eskandrani, A. A., Alsharif, S. M., & Al-shdefat, R. (2020). Protective effects of *Traganum nudatum* against oxidative DNA damage in human lymphocytes. *International Medical Journal*, 25(2), 913-923.

2019

34. Abu Dayyih, W., Al-Shdefat, R., Zakarya, Z., Hamad, M., & Felicio, G. (2019). Determination of Rosuvastatin and Dabigatran Simultaneously in Human Plasma for Application to Pharmacokinetic Parameters in Healthy Jordanian Subjects by LC-MS/MS-Method. *Journal of Pharmaceutical Sciences and Research*, 11(8), 2934-2941.
35. Mohammed, M., Alnafisah, M. S., Anwer, M. K., Fatima, F., & Al-Shdefat, R. (2019). Chitosan surface modified PLGA Nanoparticles loaded with brigatinib for the treatment of non-small cell lung cancer. *Journal of Polymer Engineering*, 39(10), 909-916.
36. Anwer, M. K., Mohammad, M., Fatima, F., Alshahrani, S. M., Aldawsari, M. F., Alalaiwe, A., Shakeel, F., & Al-Shdefat, R. (2019). Solubility, solution thermodynamics and molecular interactions of osimertinib in some pharmaceutically useful solvents. *Journal of Molecular Liquids*, 284, 53-58.
37. Ahmed, N. J., Al-Shdefat, R. I., Ain, M. R., Rabba, A. K., Zehravi, M., & Albassam, A. (2019). Lifestyle habits among pharmacy students: a pilot study in Alkharj, Kingdom of Saudi Arabia. *Indo American Journal of Pharmaceutical Sciences*, 06(04), 7296-7301.

38. Al-Shdefat, R., Anwer, M. K., Fayed, M. H., Alsulays, B. B., Tawfeek, H. M., Abdel-Rahman, R. F., & Soliman, G. A. (2019). Preparation and evaluation of spray dried rosuvastatin calcium-PVP microparticles for the improvement of serum lipid profile. *Journal of Drug Delivery Science and Technology*, 55, 101342.
39. Al-SAIKHAN, F. I., ABD-ELAZIZ, M. A., Al-SHDEFAT, R., ANWAR, M. K., & IQBAL, M. S. (2019). Preparation and evaluation of Aviptadil acetate loaded PLGA microparticles: A preliminary study to treat pulmonary hypertension. *Latin American Journal of Pharmacy*, 38(3), 545-52.

2018

40. Iqbal, M., Ezzeldin, E., Al-Rashood, K. A., Al-Shdefat, R., & Anwer, M. K. (2018). High throughput μ -SPE based elution coupled with UPLC-MS/MS for determination of eluxadoline in plasma sample: Application in pharmacokinetic characterization of PLGA nanoparticle formulations in rats. *Journal of Pharmaceutical and Biomedical Analysis*, 149, 172-178.
41. Iqbal, Z., Jaber, A. A. S., Mirza, M., Anwer, M. K., Alshetaili, A. S., Alshahrani, S., Taleagaonkar, S., & Al-Shdefat, R. (2018). Mucoadhesive Gels Loaded with Ciclopirox olamine Containing SLN for Sustained Vaginal Drug Delivery: In vitro and in vivo Characterization. *Latin American Journal of Pharmacy*, 37(2), 388-400.
42. Alshahrani, S. M., Alshetaili, A. S., Alalaiwe, A., Alsulays, B. B., Anwer, M. K., Al-Shdefat, R., Imam, F., & Shakeel, F. (2018). Anticancer Efficacy of Self-Nanoemulsifying Drug Delivery System of Sunitinib Malate. *AAPS PharmSciTech*, 19(1), 123-133.

2017

43. Anwer, M. K., Al-Shdefat, R., Ezzeldin, E., Alshahrani, S. M., Alshetaili, A. S., & Iqbal, M. (2017). Preparation, Evaluation and Bioavailability Studies of Eudragit Coated PLGA Nanoparticles for Sustained Release of Eluxadoline for the Treatment of Irritable Bowel Syndrome. *Frontiers in Pharmacology*, 20(8), 844.
44. Ahmed, N. J., Al-Shdefat, R. I., Yusuf, R. F., Ain, M. R., & Rabba, A. K. (2017). The attitudes and perceptions of pharmacy students toward applying pharmaceutical care after graduation in Alkharj city. *Bulletin of Environment, Pharmacology and Life Sciences*, 6(10), 1-4.
45. SHAMPA, I., ANWER, M. K., MIRZA, M. A., Al-SHDEFAT, R., TALEUZZAMAN, M., TALEGAOKAR, S., & IQBAL, Z. (2017). Development of Cefuroxime Axetil Loaded Solid Self-Nanoemulsifying Drug Delivery System with Improved Pharmacokinetic Profile. *Latin American Journal of Pharmacy*, 36(8), 1553-62.
46. Abujheisha, K. Y., Al-Shdefat, R., Ahmed, N., & Fouda, M. I. (2017). Public Knowledge and Behaviours Regarding Antibiotics Use: A Survey among the General Public. *International Journal of Medical Research & Health Sciences*, 6(6), 82-88.

47. Fayed, M. H., Abdel-Rahman, S. I., Alanazi, F. K., Ahmed, M. O., Tawfeek, H. M., & Al-Shdefat, R. I. (2017). New gentle-wing high shear granulator: Impact of processing variables on granules and tablets characteristics of high drug loading formulation using design of experiment approach. *Drug Development and Industrial Pharmacy*, 43(10), 1584-1600.
48. Ali, B. E., Al-shedfat, R. I., Fayed, M. H., & Alanazi, F. K. (2017). New methodology for development of orodispersible tablets using high-shear granulation process. *Acta Poloniae Pharmaceutica - Drug Research*, 74(3), 969-981.
49. Fayed, M. H., Abdel-Rahman, S. I., Alanazi, F. K., Ahmed, M. O., Tawfeek, H. M., & Al-Shdefat, R. I. (2017). High-shear granulation process: Influence of processing parameters on critical quality attributes of acetaminophen granules and tablets using design of experiment approach. *Acta Poloniae Pharmaceutica - Drug Research*, 74(1), 235-248.
50. Ahmed, M., Muqtader, M., Fatima, F., Ansari, M. J., Al-Shdefat, R., Anwer, M. K., Jamil, S., & Ahmed, M. O. (2017). Bacterial contamination of Saudi Arabian paper currency: A report from Al-Kharj. *Advancements in Life Sciences*, 4(2), 27-32.

2016

51. Al-Shdefat, R., Ali, B. E., Anwer, M. K., Fayed, M. H., Alalaiwe, A., & Soliman, G. A. (2016). Sildenafil citrate-Glycyrrhizin/Eudragit binary spray dried microparticles: A sexual behavior studies on male rats. *Journal of Drug Delivery Science and Technology*, 36, 141-149.
52. Shakeel, F., Raish, M., Anwer, M. K., & Al-Shdefat, R. (2016). Self-nanoemulsifying drug delivery system of sinapic acid: In vitro and in vivo evaluation. *Journal of Molecular Liquids*, 224(A), 351-358.
53. Shakeel, F., Haq, N., Raish, M., Anwer, M. K., & Al-Shdefat, R. (2016). Solubility and thermodynamic analysis of sinapic acid in various neat solvents at different temperatures. *Journal of Molecular Liquids*, 222, 167-171.
54. Ahmed, N. J., Al-Shdefat, R. I., & Ain, M. R. A. (2016). Empirical Study towards Status of Pharmaceutical Care Education in Asian and African Schools of Pharmacy. *Journal of Applied Pharmaceutical Science*, 6(02), 153-156.
55. Anwer, M. K., Al-Mansoor, M. A., Jamil, S., Al-Shdefat, R., Ansari, M. N., & Shakeel, F. (2016). Development and evaluation of PLGA polymer based nanoparticles of quercetin. *International Journal of Biological Macromolecules*, 92, 213-219.
56. Jamil, S., Anwer, M. K., Almalki, M., Ansari, M. J., Aqhmah, M. M., & Al-Shdefat, R. (2016). Ternary Complexation of Fluconazole with Cyclodextrin. *Advances in BioResearch*, 7(6), 08-11.

57. Ahmed, M. M., Farhat, F., Ansari, M. J., Al-Saikhan, F. I., Anwer, M. K., Jamil, S., Ali, B. E., Fayed, M. H., Dakhalallah, J., Al Shelewi, P., & Al-Shdefat, R. (2016). Equivalent Assessment of Ciprofloxacin Tablets Available in KSA: A Post Market Surveillance Study for Cost Effective Treatment. *Journal of Pharmaceutical Sciences and Research*, 8(1), 13-18.
58. Jamil, S., Yasir, G. A., Anwer, M. K., Ansari, M. J., Ahmad, M. M., & Al-Shdefat, R. (2016). RP-HPLC Method for the Analysis of Quercetin in Eruca Sativa with Green Solvent. *Current Pharmaceutical Analysis*, 13(3), 208-214.
59. Ansari, M. J., Ahmed, M. M., Anwer, M. K., Jamil, S., Harthi, M. O., Ibnouf, Y. S., Nour, P. A., & Abdel-Kader, M. S. (2016). Evaluation of Antifungal Activity of Olive Oil Based Nanoemulsions. *Bulletin of Environment, Pharmacology and Life Sciences*, 5(4), 01-04.
60. Ahmed, N. J., Jalil, M. A., Al-Shdefat, R. I., & Al-Tumah, H. N. (2015). The Practice of Preoperative Antibiotic Prophylaxis and the Adherence to Guideline in Riyadh Hospitals. *Bulletin of Environment, Pharmacology and Life Sciences*, 5(1), 8-14.

2015

61. Al-Saikhan, F. I., Al-Shdefat, R., Abd-Elaziz, M. A., & Ahsan, F. (2015). Pulmonary Hypertension Surveillance – Saudi Arabia, 2014. *Asian Journal of Biological and Life Sciences*, 4(2), 160-164.
62. Al-Shdefat, R. (2015). New complexes of inhaled furosemide and cyclodextrin: assessment of the bronchodilator effect. *European Journal of Hospital Pharmacy*, 22(6), 342-346.
63. Al-Shdefat, R. (2015). Effect of super-disintegrants combination on physical properties and release profile of orally disintegrating tablets of fluoxetine Hcl. *Latin American Journal of Pharmacy*, 34(7), 1380-1386.
64. Ansari, M. J., Anwer, M. K., Jamil, S., Al-Shdefat, R., Ali, B. E., Ahmad, M. M., & Ansari, M. N. (2015). Enhanced oral bioavailability of insulin-loaded solid lipid nanoparticles: pharmacokinetic bioavailability of insulin-loaded solid lipid nanoparticles in diabetic rats. *Drug Delivery*, 23(6), 1972-1979.
65. Al-Saikhan, F. I., Al-Shdefat, R., Abd-Elaziz, M. A., Adam, E. H. K., & Ahsan, F. (2015). Development and validation of RP-HPLC method for quantitation of Aviptadil Acetate and its degradation products. *Asian Journal of Biological and Life Sciences*, 4(1), 75-79.
66. Al-Saikhan, F. I., Al-Shdefat, R., & Abd-ElAziz, M. A. (2015). Evaluation of anti-oxidative and antigenotoxic potency of spirulina spin isolated human lymphocyte in vitro study. *International Journal of Biology, Pharmacy and Allied Sciences*, 4(1), 80-93.

67. Elsadig, H. A., & Al-Shdefat, R. (2015). Development and validation of a RP-HPLC method for simultaneous estimation of pyridoxine hydrochloride (Vitamin B6) and its degraded products formed under effect of different solvents. *Journal of Chemical and Pharmaceutical Sciences*, 8(2), 239-245.
68. Ahmed, M. M., Ansari, M. J., Alkharfy, K. M., Fatima, F., Al-Shdefat, R., & Anwer, M. K. (2015). Smart drug delivery systems: Thermo-pH responsive ciprofloxacin ophthalmic gels. *Der Pharmacia Lettre*, 6(5), 51-55.

2014

69. Ansari, M. J., Ahmed, M. M., Fatima, F., Anwer, M. K., Jamil, S., Al-Shdefat, R., Ali, B. E., Al awmi, F., & Abdel-Kader, M. S. (2014). Influence of hydrophilic polymers on complexation and solubilizing efficiencies of beta-cyclodextrin over silymarin. *International Journal of Biology, Pharmacy and Allied Sciences*, 3(10), 2414-2423.
70. Ansari, M. J., Ahmed, M. M., Fatima, F., Anwer, M. K., Jamil, S., Al-shdefat, R., & Ali, B. E. (2014). Solubility and stability enhancement of curcumin through cyclodextrin complexation. *International Journal of Biology, Pharmacy and Allied Sciences*, 3(11), 2668-2675.
71. Al-Shdefat, R., Abd-ElAziz, M. A., & Al-Saikhan, F. I. (2014). Genoprotective and Genotoxic Effects of Thymoquinone on Doxorubicin-induced Damage in Isolated Human Leukocytes. *Tropical Journal of Pharmaceutical Research*, 13(12), 2015-2020.
72. Anwer, M. K., Jamil, S., Ansari, M. J., Al-Shdefat, R., Ali, B. E., Ganaie, M. A., & Shakeel, F. (2014). Water soluble binary and ternary complexes of diosmin with β -cyclodextrin: Spectroscopic characterization, release studies and anti-oxidant activity. *Journal of Molecular Liquids*, 199, 35-41.
73. Al Shidaifat, A. A., Al-Shdefat, R., & Choi, H. K. (2014). Semi-automated Approach to Hippocampus Segmentation Using Snake from Brain MRI. *Journal of Korea Multimedia Society*, 17(5), 566-572.
74. Anwer, M. K., Al-Shdefat, R., Jamil, S., Alam, P., Abdel-Kader, M. S., & Shakeel, F. (2014). Solubility of bioactive compound hesperidin in six pure solvents at (298.15 to 333.15) K. *Journal of Chemical & Engineering Data*, 59(6), 2065-2069.
75. Anwer, M. K., Jamil, S., Ansari, M. J., Al-Shdefat, R., & Abdel-Kader, M. S. (2014). A new improved stability-indicating RP-HPLC method for determination of diosmin and hesperidin in combination. *International Research Journal of Biological Sciences*, 3(6), 41-46.
76. Ansari, M. J., Jamil, S., Anwer, M. K., Al-shdefat, R., & Ali, B. E. (2014). Development and validation of simple and rapid high performance liquid

chromatographic method for routine analysis of human insulin in formulations. *African Journal of Pharmacy and Pharmacology*, 8(40), 1018-1024.

2012

77. Al-Shdefat, R., Yassin, A. E. B., Anwer, K., & Alsarra, I. (2012). Preparation and characterization of biodegradable paclitaxel loaded chitosan microparticles. *Digest Journal of Nanomaterials and Biostructures*, 7(3), 1139-1147.

2011

78. Al-Massad, M., Al-Shdefat, R., & Khashroum, A. (2011). The effects of microbial phytase and dietary calcium level on the performance and eggshell quality in laying hens fed marginal phosphorus diets. *Asian Journal of Animal Sciences*, 5(2), 118-126.

Selected Conferences & Workshops

Year	Event	Role
2026	ACPE Workshop - 9th Regional Pharmacy Faculty Development Workshop, Ajman University, UAE	Participant
2023	JFDA Third International Conference on Pharmaceuticals, Amman, Jordan	Panel Member
2022	Al-Zaytoonah International Pharmaceutical Conference (ZIPC2022), Amman, Jordan	Participant
2021	COVID-19 Pandemic: Pharmaceutical & Biomedical Research, Jadara University	Conference Chairman
2020	1st Annual International Conference of Clinical Pharmacology (AICCP), Mansoura University, Egypt	Speaker
2019	7th International Pharmaceutical Conference (ZTIPC), Al-Zaytoonah University	Poster Presentation
2018	Modern Techniques in Pharmaceutical Sciences Conference, Mutah University	Speaker
2017	20th International Congress of Arab Association of Faculties of Pharmacy, Isra University	Poster Presentation
2015	World Congress on Pharmacology, Brisbane, Australia	Speaker & Session Co-Chair
2012	15th Scientific Congress of Association of Pharmacy Colleges in the Arab World, Amman	Speaker

Courses Taught

Undergraduate	Graduate/Advanced
Pharmaceutics I, II, III, IV	Drug Delivery Systems

Industrial Pharmacy	Pharmaceutical Quality Control & GMP
Biopharmaceutics & Pharmacokinetics	Sterile Dosage Forms
Cosmetic Preparations	Radiopharmaceuticals
Pharmacy Training 1 & 2	

Professional Memberships & Editorial Roles

Organization	Role	Since
Jordanian Pharmaceutical Association	Member	1997
Saudi Council for Health Specialties	Member	2004
Dean's Council, Jadara University	Member	2017
SCIREA Journal of Pharmacy	Editorial Board Member	2018
KACST (King Abdulaziz City for Science and Technology)	Reviewer	
Scientific Research and Innovation Support Fund (SRF)	Reviewer	
Multiple Journals	Peer Reviewer	

Skills

Technical Skills

Skill	Proficiency
MS Office Suite (Word, Excel, PowerPoint)	Expert
HPLC/LC-MS/MS Analysis	Expert
Drug Formulation & Development	Expert
Scientific Software	Advanced
Statistical Analysis	Advanced

Last Updated: January 2026