

Organization: **Akhtar Saeed College of Pharmaceutical Sciences**
Designation: **Assistant professor**
Location: **Lahore, Pakistan**
Tenure: **(Oct-2016 to August 2017)**

Organization: **Lahore College of Pharmaceutical Sciences**
Designation: **Senior Lecturer**
Location: **Lahore, Pakistan**
Tenure: **(July-2012 to Feb-2014)**

Organization: **Kolak Snack foods ltd.**
Designation: **Laboratory Analyst**
Location: **London, UK**
Tenure: **6-months (April-2011 to Oct-2011)**

Organization: **Kasmani Pharmacy, Hayes**
Designation: **Pharmacy Technician**
Location: **London**
Tenure: **1-Year (Nov-2009 to Nov-2010)**

Post-Graduate Students Supervisor

- M. Phil Produced as Principal Investigator (12)
- M. Phil in progress (08)
- M. Phil Produced as Co-Principal Investigator (12)
- PhD. as co-supervisor (2)

Patent:

- A Pharmaceutical Composition of a Polymeric biodegradable film for Diabetic Wound Healing. (**Granted**) Patent no. 144070.
- Portable Viscometer for predicting Nanogel Viscosity, UK patent (**Granted**) Patent no. 6401901.

Research Publications:

1. Arshad, Nida, Farwa Shaheen, Iqra Noor Khan, Saba Naeem, Maria Riaz, **Muhammad Irfan Siddique**, Maryam Ayesha, and Muhammad Ahsan Waqar. 2024. "A Comprehensive Review on Niosomes: Novel Manufacturing Techniques, Factors Influencing Formation, Applications and Recent Advances. November 1–18. **International Journal of Polymeric Materials and Polymeric Biomaterials. I.F. 2.5.**
2. Bano M, Waqas MK, Chohan TA, Batool F, Mushtaq A, Asiri YI, Hassan MZ, Mujtaba MA, Anwer MK, **Muhammad Irfan Siddique**, Riaz A, Khurshid U. Utilizing Cinnamomum verum (a Culinary Spice), as a Functional Food Ingredient Ameliorating Hypercholesterolemia.: In-Vivo, In-Vitro, and In-Silico Multi-Model Analysis. 2024 Sep 23:105153. **Food Bioscience. I.F. 4.8.**
3. Ali A. Ameliorative Effects of MnO Nanoparticles on Acute Kidney Injury Model in Rats. 2024 Oct 24;18(3). **Asian Journal of Pharmaceutics (AJP). I.F. 0.4**
4. Imran M, Alshammari AK, SajdiAlmutiri S, Albasha FS, Almutairi FA, Aljasim MA, Siddique MI, Eltaib L. Recent Advances in Artificial Intelligence Applications in Pharmacy Practice. 2024 Jul;18(3):655. **Asian Journal of Pharmaceutics (AJP). I.F. 0.4**
5. M Rasool, NM Alotaibi, M Sarfraz, **MI Siddique**. Stability and Safety Analysis of Statin-Loaded Nano-films for the Treatment of Diabetic Wound (Analisis Kestabilan dan Keselamatan Filem Nano Sarat Statin untuk Rawatan Luka ... 53 (1), 201-215. **Sains Malaysiana. I.F. 0.8**
6. Mohd Imran, Abida, Lina Eltaib, **Muhammad Irfan Siddique**, Mehnaz Kamal, Syed Mohammed Basheeruddin Asdaq, Neelam Singla, Marwan Al-Hajeili, Fatemah Abdulaziz Alhakami, Ahmed

- Farhan AlQarni, Altaf A. Abdulkhaliq, Ali A. Rabaan. Beyond the genome: MALAT1's role in advancing urologic cancer care 256 (2024) 155226. **Pathology - Research and Practice. I.F. 2.7**
7. Sarfraz M, Arafat M, Zaidi SHH, Eltaib L, Siddique MI, Kamal M, Ali A, Asdaq SMB, Khan A, Aaghaz S, et al. Resveratrol-Laden Nano-Systems in the Cancer Environment: Views and Reviews. **Cancers. I. F. 5.2.**
 8. Muhammad Sarfraz, Abida Khan, Gaber El-Saber Batiha, Muhammad Furqan Akhtar, Ammara Saleem, Basiru Olaitan Ajiboye, Mehnaz Kamal, Abuzer Ali, Nawaf M. Alotaibi, Shams Aaghaz, **Muhammad Irfan Siddique**, Mohd Imran. Nanotechnology-Based Drug Delivery Approaches of Mangiferin: Promises, Reality and Challenges in Cancer Chemotherapy. **Cancers. I. F. 5.2.**
 9. Salizatul Ilyana Ibrahim *, Nadeem Irfan Bukhari, Ummarah Kanwal, Abu Bakar Abdul Majeed &, **Muhammad Irfan Siddique**. Transmembrane Diffusion of α -Tocopherol as a Model Drug Across Synthetic Membrane in Automated Vertical Diffusion Cells – Validation of Device and Drug Related Factors. **Latin American Journal of Pharmacy. I. F. 0.229.**
 10. Muhammad Khurram Waqas, Haleema Sadia, Muhammad Imran Khan, Muhammad Ovais Omer, **Muhammad Irfan Siddique**, Shaista Qamar, Muhammad Zaman, Muhammad Hammad Butt, Mian Waqar Mustafa, Naeem Rasool. Development and characterization of niosomal gel of fusidic acid: in-vitro and ex-vivo approaches. **Designed Monomers and Polymers. I.F. 3.718.**
 11. Qurrat-al-ain Khan¹, **Muhammad Irfan Siddique**^{1*}, Muhammad Sarfaraz², Khurram Rehman³, Muhammad Farhan Sohail^{4,5}, and Haliza Katas⁶. Oral Dispersible Films from Product Development to End-User Acceptability: A Review. **Critical Reviews in Therapeutics Drug Carrier System. I.F. 3.09.**
 12. Misbah Hameed, Akhtar Rasul, Sumera Latif, Maria Rasool, Ghulam Abbas, **Muhammad Irfan Siddique**, Muhammad Khurram Waqas, Ikram Ullah Khan, Abid Mehmood Yousaf, Pervaiz Akhtar Shah. Fabrication of Moxifloxacin HCl loaded biodegradable chitosan nanoparticles for potential antibacterial and accelerated cutaneous wound healing efficacy. **Journal of Microencapsulation. I.F. 4.034.**
 13. Murtada A. Oshi, Adnan Haider, **Muhammad Irfan Siddique**, Alam Zeb, Syed Babar Jamal, Atif Ali Khan Khalil, Muhammad Naeem. Nanomaterials for chronic inflammatory diseases: the current status and future prospects. **Applied Nanoscience. I.F. 3.869.**
 14. Saima Tufail, **Muhammad Irfan Siddique***, Muhammad Sarfraz, Muhammad Farhan Sohail*, Nabeel Shahid, Muhammad Ovais Omer, Haliza Katas, and Fatima Rasool. Simvastatin nanoparticles loaded polymeric film as a potential strategy for diabetic wound healing: in vitro and in vivo evaluation. **Current Drug Delivery. I.F. 3.758.**
 15. **Siddique MI**, Katas H, Muhammad Sarfraz, Tahir Ali Chohan, Jamil A, Amin IM, Cairul M. Clinical insight into topically applied Multipronged Nanoparticles in Subject with Atopic Dermatitis. **Journal of Drug Delivery Science and Technology. I.F. 5.062.**
 16. Qurat-ul-ain Shoaib Sumera Latif, Qazi Amir Ijaz, Hafsa Afza. Muhammad Irfan Siddique, Amjad Hussain, Muhammad Sohail Arshad, Nadeem Irfan Bukhari and Nasir Abbas. Solubility and dissolution rate enhancement of ibuprofen by cyclodextrin based carbonate nanosponges. **PJPS 10.36721/PJPS.2021.34.3.SUP.1045-1055.1. I.F. 0.863.**
 17. Qurrat-ul-ain Khan, **Muhammad Irfan Siddique***, Fatima Rasool, Muhammad Naeem, Muhammad Usman & Muhammad Zaman. Development, and characterization of orodispersible film containing cefixime trihydrate. **Drug Development and Industrial Pharmacy, I.F. 3.4**
 18. Ahmad Z, Khan MI, **Siddique MI**, Sarwar HS, Shahnaz G, Hussain SZ, Bukhari NI, Hussain I, Sohail MF. Fabrication and Characterization of Thiolated Chitosan Microneedle Patch for Transdermal Delivery of Tacrolimus. **AAPS PharmSciTech. 2020 Feb;21(2):1-2. AAPS PharmSci Tech. I.F. 3.3.**
 19. Wardah Ashfaq, Khurram Rehman, **Muhammad Irfan Siddique** & Qurrat-Al-Ain Khan. Eicosapentaenoic Acid and Docosahexaenoic Acid from Fish Oil and Their Role in Cancer Research. **Food reviews international. I.F. 5.8.**

20. **Siddique MI**, Saima Tufail, Ze Heng Ker, Tahir Mehmood Khan, Fatima Rasool, Muhammad Farhan Sohail and Nabeel Shahid. Towards fast and cost-effective up-scaling of Nano-encapsulations by Ionic-gelation method using model drug for the treatment of atopic dermatitis. *PJPS I.F.* **0.863**.
21. Muhammad Ijaz Riaz, Hafiz Shoaib Sarwar, Mubashir Rehman, Umar Farooq Gohar, Syed Atif Raza, **Muhammad Irfan Siddique**, Gul Shahnaz, Muhammad Farhan Sohail. Study of erythrocytes as a novel drug carrier for the delivery of artemether. *BJPS I.F.* **1.3**.
22. **Siddique MI**, Katas H, Amin MC, Ng SF, Zulfakar MH, Buang F, Jamil A, Syed Maaz Nadeem. Potential treatment of atopic dermatitis: tolerability and safety of cream containing nano-particles loaded with hydrocortisone and hydroxytyrosol in human subjects. *Drug Delivery and Translational Research*, **I.F. 5.4**.
23. **Siddique MI**, Nabeel shahida, Zunera Razzaqa, Haliza Katasb, Muhammad khurram waqasa, Kashif-ur-Rahmana. Fabrication and characterization of Matrix Type Transdermal Patches Loaded with Tizanidine Hydrochloride: Potential Sustained Release Delivery System. *Drug Development and Industrial Pharmacy*, **I.F. 3.4**
24. **Siddique MI**, Haliza Katas, Chai Yi Wen, Zahid Hussain, and Fatin Hanini Mohd Fadhil. Thermoresponsive curcumin/DsiRNA nano-particle gels for the treatment of diabetic wounds: synthesis and drug release **Therapeutic Delivery**, March 2017, Vol. 8, No. 3, Pages 137-150 (doi: 10.4155/tde-2016-0075).
25. **Siddique MI**, Katas H, Amin IM, Cairul M, Ng SF, Zulfakar MH, Buang F, Jamil A. Minimization of Local and Systemic Adverse Effects of Topical Glucocorticoids by Nanoencapsulation: In Vivo Safety of Hydrocortisone–Hydroxytyrosol Loaded Chitosan Nanoparticles. *Journal of Pharmaceutical sciences*. 2015 Dec 1; 104(12):4276-86. **I.F. 3.8**
26. **Siddique MI**, Katas H, Amin MC, Ng SF, Zulfakar MH, Jamil A. In-vivo dermal pharmacokinetics, efficacy, and safety of skin targeting nanoparticles for corticosteroid treatment of atopic dermatitis. *International journal of pharmaceutics*. 2016 Jun 30; 507(1):72-82. **I.F: 5.8**.

Book Chapters:

1. Muhammad Faisal Nadeem, Adeel Masood Butt, Waseem Ashraf, Nazish Matti, Muhammad Akmal Farooq, Maaz bin Nasim, Muhammad Irfan Siddique, Tahir Mehmood Khan. The Impact of Fluid and Electrolyte Imbalance on the Severities of Diseases and Their Management in Developing Countries. Handbook of Medical and Health Sciences in Developing Countries: Education, Practice, and Research Pages 1-20 Springer International Publishing.

Chief organize of Seminars:

1. Two-day first aid training session in collaboration with Pakistan Red Crescent Society 17-18 Jan-22.
2. **First Aid Training seminar** in collaboration with ERC and Rescue 1122. 11-08-22
3. Organize **Breast Cancer Awareness Seminar** on 20-10-2021.
4. Organize **Awareness Seminar on Diabetes and COPD** on 18-11-2021.
5. First Aid Training seminar in collaboration with Red Crescent Society. 10-09-21.
6. Organize **Breast Cancer Awareness Seminar** on 28-10-2020.
7. **First Aid Training seminar** in collaboration with Rescue 1122. 03-03-21.

Conferences:

1. **Muhammad Irfan Siddique**, “Preparation and in-vivo Biocompatibility of Tizanidine Hydrochloride loaded patch: Potential Sustained Release Delivery System” Two-day STEM international conference **24-25th March 2022. Islamia University Bahawalpur, IUB.**
2. **Muhammad Irfan Siddique**, “Nanotechnology and New Challenges” invited speaker at Lahore College of Pharmaceutical Sciences, 7th September 2021.
3. **Muhammad Irfan Siddique**, “Formulation and characterization of rapid dissolving oral film of piroxicam and clove oil” Two-day STEM international conference **30-31st March 2021. Islamia University Bahawalpur, IUB.**

4. **Muhammad Irfan Siddique**, Preparation and Physicochemical characterization of Orodispersible Film Containing Insoluble Drug Molecule, Two-day One health international conference **25-26th November 2020. College of Veterinary & Animal Sciences, Jhang.**
5. **Muhammad Irfan Siddique**, Development and Characterization of Simvastatin Loaded Chitosan Nanoparticles for its Potential Effect on Diabetic Wound Healing''. Webinar Recent Advancement in Miniaturized Drug Delivery System 28th October 2020. **International Medical University, Malaysia.**
6. **Muhammad Irfan Siddique**, Molecular characterization of drug-loaded chitosan nanoparticles''. Recent Advances in pharmaceutical research, 3rd September 2020. **COMSAT University Islamabad, Pakistan.**
7. **Muhammad Irfan Siddique**, Development and Characterization of Tizanidine Hydrochloride Loaded Transdermal Patch. International Pharmacy Conference & **Exhibition IPCE-2020 (Islamia University Bahawalpur, Pakistan).**
8. **Muhammad Irfan Siddique**, Preparation and Characterization of Curcumin Loaded Chitosan Nanoparticles in Sodium Alginate Based Gel. **International Pharmacy Conference (Lahore College for Women University-2019).**
9. **Muhammad Irfan Siddique**, Preparation and Characterization of Glucocorticoids Loaded Nanoparticles and its Antibacterial Activity. **International Pharmacy Scientific Symposium, University of Central Punjab-2019).**
10. **Muhammad Irfan Siddique**, Nanotechnology in Dermatology. "*Nanotechnology, The Future of Medicine*" **Lahore College of Pharmaceutical Sciences-2019).**
11. **Muhammad Irfan Siddique**^{*1,2}, Haliza Katas², Mohd Cairul Iqbal Mohd Amin². Scaling-up the nano-fabrication and stability study of hydrocortisone and hydroxytyrosol co-loaded chitosan nano-particles. **Advances in Phytochemical Analysis (Trends in Natural Products Research, Liverpool, United Kingdom)-2018.**
12. **Muhammad Irfan Siddique**^{*1,2}, Haliza Katas², Mohd Cairul Iqbal Mohd Amin². Preparation of drug loaded nanoparticle on large scale and its characterization for the treatment of atopic dermatitis. **Pharmaceutical and Biochemical Sciences (PBS) 7th Pak Pharma. & Healthcare EXPO 2018.**
13. **Muhammad Irfan Siddique**^{*1,2}, Haliza Katas², Mohd Cairul Iqbal Mohd Amin². Preparation of drug loaded nanoparticle on large scale and its characterization for the treatment of atopic dermatitis. **Pharma Asia, PPMA 2018.**
14. **Muhammad Irfan Siddique**^{*1,2}, Haliza Katas², Mohd Cairul Iqbal Mohd Amin². Fabrication of chitosan nanoparticles for boosting transdermal delivery of topical glucocorticoids: *in-vivo* permeation and pharmacokinetic assessment. **3rd International Health Trigon Summit 2018.**
15. **Muhammad Irfan Siddique**^{*1,2}, Haliza Katas², Mohd Cairul Iqbal Mohd Amin². Safe and non-irritant cream containing hydrocortisone and hydroxytyrosol co-loaded chitosan nanoparticles: Acute dermal toxicity and irritation studies. **National Conference on Recent Advancement in Pharmaceutical Sciences 2018.**
16. **Muhammad Irfan Siddique**^{*1}, Haliza Katas¹, Mohd Cairul Iqbal Mohd Amin¹. Clinical Investigation and Biocompatibility of Encapsulated Topical Glucocorticoids. **International conference on recent advances in clinical research-2017. UVAS, Lahore**
17. **Muhammad Irfan Siddique**^{*1}, Haliza Katas¹, Mohd Cairul Iqbal Mohd Amin¹, Ali Naim². Development of chitosan nanoparticles of hydrocortisone-hydroxytyrosol for targeted delivery and safety in albino Wistar rats. **International pharmacy conference and exhibition, 2016.**
18. **Muhammad Irfan Siddique**^{*1}, Haliza Katas¹, Mohd Cairul Iqbal Mohd Amin¹, Shioh-Fern Ng¹, Mohd Hanif Zulfakar¹, Phataheya Buang¹, Adawiyah Jamil². In-Vivo Dermal Pharmacokinetics,

Efficacy, and Safety of Skin Targeting Nanoparticles for Corticosteroid Treatment of Atopic Dermatitis. **Pharmaceutical science Research Day 2016.**

19. **Muhammad Irfan Siddique**¹, Haliza Katas¹, Mohd Cairul Iqbal Mohd Amin¹, Shiow-Fern Ng¹, Mohd Hanif Zulfakar¹, Fhataheya Buang¹, Adawiyah Jamil². Nanoparticles Enhance Targeted Topical Corticosteroids Delivery into the Skin with Improved Safety for the Treatment of Atopic Dermatitis: In-Vivo Safety of Hydrocortisone-hydroxytyrosol Loaded Chitosan Nanoparticles. **Control release and drug delivery symposium, 2015.**
20. **Muhammad Irfan Siddique**¹, Haliza Katas^{1*}, Mohd Cairul Iqbal Mohd Amin¹, Shiow-Fern Ng¹, Mohd Hanif Zulfakar¹, Fhataheya Buang¹, Adawiyah Jamil² Preclinical safety evaluation of hydrocortisone-hydroxytyrosol co-loaded chitosan nano-particles cream in albino Wistar rats. **Pharmaceutical science Research Day 2015.**
21. **Muhammad Irfan Siddique***, Haliza Katas, Mohd Cairul Iqbal Mohd Amin. Acute dermal toxicity and acute dermal irritation of hydrocortisone-hydroxytyrosol chitosan nanoparticles in albino Wistar rat skin. **Control release and drug delivery symposium, 2014.**

Training /Workshops/ Professional Development:

1. One-on-One Free Consultancy on Patent Drafting Techniques workshop, ORIC, UVAS, in collaboration with the Business Incubation Centre (BIC) and Small & Medium Enterprise Development Authority (SMEDA) on 28th July 2022.
2. Advances in Metabolomics and plant Research, IPS, UVAS on 12th July 2021.
3. Webinar on Understanding the Significance of Patent Document and Patent Information Search, on 7th January 2021.
4. Elsevier Workshop on Journal indexing in Scopus Confirmation, 21st January 2021.
5. How to Manage Your References Using Refworks, ProQuest and Higher Education Commission, Islamabad. 26th October 2020
6. UVAS Technology Transfer Support Fund, ORIC UVAS, Lahore 19th November- 2020
7. Workshop on "PATENT DRAFTING" Organized by Technology and Innovation Support Centre (TISC) Organized by ORIC, UVAS, Lahore, 07-08th January 2020.
8. Training Workshop on Ethical Teaching in Collaboration with QEC, Organized by IPS, UVAS, Lahore on 25th July 2019.
9. Intellectual Property Rights and Requirements of Patent Filing, University of Veterinary & Animal Sciences, Lahore, 16th April 2019
10. Pharmconvention-2019 (**Resource Person**) Organized by IPS, UVAS, Lahore on 11th April 2019.
11. 1st National Conference on Sterile Compounding and Antiseptic Techniques, "A Special focus on Handling of Hazardous Materials' University of Veterinary & Animal Sciences, Lahore on 2nd January 2019.
12. One Day Workshop on current Good Manufacturing Practices. FORMAN CHRISTIAN, University, Lahore on 4th May 2018.
13. Solution by one Agilent Road Show at University of Veterinary & Animal Sciences, Lahore on 17th October 2017.
14. Immunostaining, Confocal Laser Scanning Microscopy and image analysis workshop, Tissue Engineering Centre, Hospital Canselor Tuanku Muhriz, UKM Medical Centre on 18-20 August 2015.
15. Chair oral presentations session in the Controlled Release and Drug Delivery Symposium 2015, Targeted Delivery: Translating Ideas into new Technology" held at Kuala Lumpur on 15-16 August 2015.

16. Introduction workshop, Laboratory Animal Care and Management held at Laboratory Animals Resource Unit, faculty of Medicine on 24, March 2014.
17. Workshop on Research Methodology (**Organizer**), at Lahore College of Pharmaceutical Sciences in Collaboration with Punjab University College of Pharmacy, University of the Punjab, on February, 2013.
18. Introduction to Practical HPLC course by Stuart Jones HPLC Academy, London, United Kingdom on 14th July 2011.

Research Grants:

- Northern Border University, PHAR-2023-12-2375, worth 1.68 million SAR.
- Punjab Agriculture Research Board, worth of 16.671 million PKR, 2021.
- Pakistan Science Foundation, worth of 7.12286 million PKR, 2021.
- National Research Program for Universities, HEC, worth 6.1502 PKR million PKR, 2021.
- Approved SRGP research grant from HEC. Worth 0.5 million PKR, 2018.

Computer Skills:

Operating Systems: Windows 7/ Windows XP
Office Tools: MS Excel, MS Power Point and MS Word.
Skilled in data compilation and documentation

Language Proficiency:

Proficient in spoken and written English, Malay, Urdu and Punjabi

References:

Will be furnished upon request.