

**Dr. Mohammad Irfan Khan**  
 Associate Professor  
 DOJ- 22/08/2015  
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## Synopsis

<b>Research Guidance of Ph.D. and M.Pharm Students</b> (Anexure –I)	<b>Publications- 94,Books-3,Chapter-5,Patent(5)</b> (Anexure –II)
<b>FDP/Workshops/Conferences/Seminars/Symposia etc.</b> (Anexure –III)	<b>Invited or guest lecture &amp; Project</b> (Anexure –IV)

### Total experience in Teaching & Research (15Years)

- ❖ **Doctoral Research** on “Quality Control and Biological Evaluation of Some Traditional Medicinal Plants” for the award of Ph.D. degree (2008-2012).
- ❖ **M. Pharm. dissertation** on “Development and validation of HPLC method for the analysis of Oleanolic acid and Betaine in *Achyranthes aspera*” at Phytochemistry Lab, Hamdard University (2007-2008).

### Professional Career

<b>Position held</b>	<b>Affiliation</b>	<b>Duration</b>
Lecturer	Shaheed Bhagat Singh College of Pharmacy, Patti, Punjab	July-2005-June-2006
Assistant Professor	School of Pharmacy & Medical Sciences Singhania University, Rajasthan, India.	July 2008 – April 2011
Assistant Professor	Department of Pharmacy of SRMS College of Engineering and Technology (Pharmacy) Bareilly, Uttar Pradesh, India.	May 2011- November 2013
Research & Development Manager	Unit of Pharmaceutical & Nutraceutical Formulations, Deccan Healthcare Pvt. Ltd., Sidcul Rudrapur, Uttrakhand, India.	December 2013- August-2015
Assistant Professor	Faculty of Pharmacy, Integral University, Lucknow-26	August 2015- August 2017
Associate Professor	Faculty of Pharmacy, Integral University, Lucknow-26, India.	September 2017- October-2017
Associate Professor	Faculty of Pharmacy, Integral University, Lucknow-26, India.	November-2022- till date

## **PROFESSIONAL QUALIFICATIONS:**

### **Professional Qualifications Area of Specialization**

<b>2008-2012</b>	<b>Ph.D. (Pharmacognosy &amp; Phytochemistry)</b> Singhania University, Rajasthan, India.
<b>2006-2008</b>	<b>Master of Pharmacy (Pharmacognosy &amp; Phytochemistry)</b> <b>First Division (72.58%)</b> , Jamia Hamdard, New Delhi
<b>2001-2005</b>	<b>Bachelor of Pharmacy, First Division (63.59%)</b> , Jamia Hamdard

### **Additional Qualifications and Achievements:**

- **Certificate course in Unani Pharmacy**, from Hamdard University, New Delhi in 2005.
- Qualified **GATE**, IIT Mumbai in 2006.
- Awarded fellowship from Jamia Hamdard as Student Aid Fund (HNF) during B. Pharm.
- Awarded UGC-**JRF** during M. Pharm.

### **Professional Memberships**

- Approved Chemist member by Utrakhnad FDA in Hard Gelatin Capsule.
- Uttar Pradesh Pharmacy Council, Lucknow (Membership No. 55104).
- Member-Faculty Board of Studies, Integral University, Lucknow .
- Member-Faculty Board Committee, Integral University, Lucknow.
- **Course Coordinator** of B.Pharm course, Faculty of Pharmacy, Integral University.
- Member-The Indian Science Congress Association Kolkata(L41000)

### **Personal Details**

Father's Name : Mr. Mohammad Islam Khan  
Date of Birth : 20<sup>th</sup> Dec 1982  
Nationality : Indian  
Marital Status : Married  
Languages Known : Hindi, English & Urdu  
Permanent Address : Vill. Basant pur, Pachperwa, Distt.- Balrampur (U.P.) India.

### **References**

Professor S. M. Hassan Dean F/o Pharmacy Integral University Lucknow	Professor Juber Akhtar Head D/o Pharmacy Integral University Lucknow
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**Annexure- I**

**PG students guided/pursuing(14)**

<b>S.N</b>	<b>Candidate</b>	<b>Title</b>	<b>Status</b>
1	Shahla Parveen	Pharmacological evaluation of Vitamin D and flax seed oil formulation against dexamethasone induced osteoporosis in rats	Completed
2	Mohd. Mujtaba	Development of fixed dose combination of herbal formulations and evaluation of their cardio-protective potential.	Completed
3.	Mohammad Nasiruddin	Role of Metformine with Caffeic acid in STZ induced diabetic rats.	Completed
4.	Rizwana	Effect of <i>Asarum Europaeum</i> root extract in rats with streptozotacin induced diabetes mellitus: A biochemical and histopathological study	Completed
5.	Gazanfer	Formulation development and pharmacological evaluation of fixed dose combination of turanj ( <i>Citrus medica</i> ) peel extract, almond oil & coenzyme Q10 against doxorubicin induced myocardial toxicity in rats.	Completed
6.	M Tarique	Formulation development and pharmacological evaluation of fixed dose combination of <i>Bombyx mori</i> extract, Flaxseed oil & coenzyme Q10 against doxorubicin induced cardiomyopathy in rats.	Completed
7.	Prashant Kumar Singh	Effect of Ambergris and Vitamin E combination against Reserpine induced Parkinsonism	Completed
8.	Suhail Ahmad	To evaluate the effect of olive oil extract of turmeric against anti-tubercular drug induced hepatotoxicity in rats.	Completed
09.	Mohammad Mujahid	Combined effect of saxagleptin and caffeic acid on STZ induced diabetic	Completed
10.	Laiba Rind	Effect of scopoletin on memory against scopolamine induced memory impairment in rats.	Completed

11.	Chandan Yadav	Formulation development and evaluation of Proliposome of Curcumin	Completed
12.	Shami Iqbal	Effect of curcumin and N- acetyl cistein in rats with streptozotocin induced diabetic mellitus :A biochemical and Pathological study.	Completed
13.	Km. Rukhsar Anwar	Possible effects of Biocanine-A and Metformin combination against streptozotocin induced diabetic rats.	Completed
14	Fahad	Effect of trans-stilbene in isoprenaline-induced cardio toxicity in diabetic rats.	Completed
15	Nigarish Zia	Assessment of metabolic effect of metformin with Arq E Kasni in diabetic rats	Completed
16	Intekhab Alam	Effect of lysine with metformin in Streptozotacin induced diabetic rats	Completed

#### Ph.D. students guided/Enrolled(07)

S. No.	Candidate	Title	Status
1.	Annie G. Aggrawal	Metabolic and pharmacological studies of the isolated bioactive secondary metabolites from selected medicinal plants.	Awarded
2.	Rajesh Kumar (En.no.1701083)	Combined effect of Solasodine & Co-enzymes Q10 against high fat-diet induced metabolic syndrome.	Awarded
3.	Zeba Siddique (En.no.1801005)	Pharmacognostical appraisal, phytochemical and pharmacological investigation of some indigenous medicinal plants for diabetes.	Awarded
4.	Manvi (En.no.2001049)	Pharmacognostical, phytochemical and diuretic potential of traditionally used plant	Awarded
5.	Gayyur Fatima (En.no.2001069)	Pharmacognostical appraisal, phytochemical and pharmacological investigation of some indigenous medicinal plants with hepatoprotective potential	Pursuing
6.	Shadab Alam (En.no.2100102)	Formulation development, Standardisation and antidiabetic potential of <i>Coccinia</i>	Pursuing

		<i>Inidica</i> fruit phytosome	
7.	Vinay Kumar Singh(En.no.2100100)	Pharmacognostic, phytochemical and anti ulcer evaluation of <i>Phaseo Vulgaris</i> and <i>Disomodium Triflorum</i>	Pursuing

**Annexure -II**

**LIST OF PUBLICATIONS/BOOK (3)/CHAPTER (5) Total published paper: 94)**

1. Irfan khan\*, Vidhu Aeri, S. Alam. Validated HPLC Method for the quantification of Oleanolic acid in the whole plant of *Achyranthes aspera* Linn and marketed formulation. *International Journal of Pharmacy and Pharmaceutical Sciences*. vol 2, 74-78,2010.
2. Fardale AM, Ahmad A, Naiyer S, Khan MI, Deshpande A., Human cancer cell-based models to investigate the anticancer potential of Indian medicinal plants. *International Journal of Contemporary Research and Review*.|Volume 01|Issue 03| 1-7, 2010.
3. Chandola V, Ahmad D, Khan MI, Kulkarni A, Kunwar P, Daniel V. Formulation and Evaluation of Multilayer Floating Tablet. *International Journal of Contemporary Research and Review*. August, 2010|Volume 01|Issue 03|.
4. A.R. Chavhan , Ayaz Ahmed, M Irfan, Naiyer Shahzad, Amit Deshpande., Cytotoxic Screening of Plant extracts and Angiogenesis: A Landmark approach to cancer. *International Journal of Pharmaceutical & Biological Archives*. 1(2):169 – 174, 2010.
5. Naveen Sheokand, Ayaz Ahmed, Naiyer Shahzad, Irfan Khan., a review on design, evaluation and need of bioequivalence study. *The Pharma Research*. 3; 150-156, 2010.
6. Deshmukh PV, Ahmed A, Irfan M, Shahzad N, Deshpande A., Effect of herbal plants on human cancer cell lines using cell based models. *International Journal of Contemporary Research and Review*. |Volume 01 (03)| 1-6, 2010
7. Arun K, Ch.V. Rao, M I Khan Vijayakumar M., Ayaz A, Shahzad N. Anti-ulcerogenic and ulcer healing effects of *Zingiber officinale* (L.) on experimental ulcer models: Possible mechanism for the inhibition of acid formation. *IJPR* Vol.1, Issue 2, June 2010; 1(2): 75-85.
8. Kamal Kishore Rewatkar, Ayaz A, Irfan Khan, Shahzad N. A Landmark approach to Aphrodisiac property of *Abelmoschus manihot* L. *Int. J of Phyt. Med*. 2 (2010) 312-19.
9. Irfan khan\*, Vidhu Aeri, M Khan and N Shahzad, A validated HPLC Method for the quantification of Betaine in the whole plant of *Achyranthes aspera* Linn and marketed formulation. *IJPWR*.vol 2 issue-1\*(2011).
10. Md. Mujahid, Md. Azizur Rahman\*, Hefazat H. Siddiqui, Arshad Hussain, Vaseem Ahamad Ansari and Mohammad Irfan Khan. Phytoconstituents from the Leaves of *Adenanthera Pavonina* Linn And *Erythrina variegata* L. *Current Trends in Biotechnology and Pharmacy*, Vol. 10 (1) 29-35 January 2016.
11. Amir Siddiqui M, Badruddeen\*, Juber Akhtar, Shahab Uddin M.S., Mohammad Irfan Khan, Mohammad Khalid. Molecular mechanism of interactions between Chrysin and I-kappa-B kinase epsilon (IKKe) / Tank Binding Kinase-1(TBK1): Cell based assay and insilico

molecular docking studies. *Journal of Biomolecular Structure & Dynamics*. DOI: 10.1080/07391102.2019.1581086 (IF: 3.392)

12. Amir Siddiqui, Badruddeen\*, Juber Akhtar, Shahab Uddin MS, Chandrashekar S, Mohammad Irfan Khan, Mohammad Khalid. Highly Sensitive LC-MS/MS-ESI method Development for the Determination of 5,7-dihydroxyflavone in Mouse Plasma and Pharmacokinetic Study in Lean and Diet Induced Obese Mice. *Der Pharmacia Lettre*, 2018; 10 (11): 1-12. (IF: 1.96)
13. Khan MM, Badruddeen Ahmad U, Akhtar J, Khan MI, Khan MF. Cerebroprotective effect of pterostilbene against global cerebral ischemia in rats. *Heliyon*. 1;7(5):e07083. (IF: 2.85)
14. Khan MM, Mujahid M, Akhtar J, Khan MI, Ahmad U. An Overview of Stroke: Mechanism, In vivo Experimental Models Thereof, and Neuroprotective Agents. *Current Protein and Peptide Science*. 2020 Sep 1;21(9):860-77. (IF: 3.272)
15. Rind L, Ahmad M, Khan MI, Akhtar J, Badruddeen, Ahmad U, Yadav C, Owais M. An insight on safety, efficacy, and molecular docking study reports of N-acetylcysteine and its compound formulations. *Journal of Basic and Clinical Physiology and Pharmacology*. 2021 Feb 8. (IF: 1.65)
16. KalamUrfi, Md. Mujahid, Badruddeen, JuberAkhtar, Mohammad Khalid, Mohammad Irfan Khan and AfreenUsmani. *Tamarix gallica*: For traditional uses, phytochemical and pharmacological potentials. *Journal of Chemical and Pharmaceutical Research*, 2016; 8(1): 809-814
17. Sumit kumar, Badruddeen, singh s p, Mohammad irfan khan. A prospective study of adverse drug reactions due to Platinum analogs - chemotherapy in a tertiary care hospital. *Asian J Pharm Clin Res*, 2018; 11(6):1-4.
18. Muztaba M, Khan MI, Khalid M, Tarique M, Akhtar J, Ahmad M. CoQ10: A miraculous and clinically vital coenzyme for normal body functions, prevention and treatment of diseases. *Journal of Pharmaceutical Sciences and Research*. 2018 May 1;10(5):976-82.
19. Siddiqui A, Badruddeen, Akhtar J, Uddin MS S, Khan MI, Khalid M, Ahmad M. A Naturally Occurring Flavone (Chrysin): Chemistry, Occurrence, Pharmacokinetic, Toxicity, Molecular Targets and Medicinal Properties. *Journal of Biologically Active Products from Nature*. 2018 Jul 4;8(4):208-27.
20. Khan MI, Rahman MA, Badruddeen, Khalid M, Khushtar M, Mujahid M. Quality Control Standardization and Evaluation of Antimicrobial Potential of Daruhaldi (*Berberis aristata* DC) Stem Bark. *Journal of dietary supplements*. 2018 Sep 29:1-3.
21. R. Kumar, M. I. Khan\*, M. Prasad, Badruddeen. Solasodine: A Perspective on their roles in Health and Disease. *Research J. Pharm. And Tech*. 12(5): May 2019
22. Mohd Yusuf, Mohammad Nasiruddin, Nazneen Sultana, Badruddeen\*, Juber Akhtar, Mohammad Irfan Khan, Mohammad Ahmad. Regulatory mechanism of Caffeic acid on glucose metabolism in Diabetes. *R. J. Pharm. And Tech*. 2019; 12(10): 4735-4740.
23. Mohammad Tarique, Badruddeen\*, Farogh Ahsan, Juber Akhtar, Mohammad Irfan Khan, Mohammad Khalid. Formulation development and pharmacological evaluation of fixed dose

combination of Bombyx mori cocoon extract, Flaxseed oil & coenzyme Q10 against Doxorubicin induced cardiomyopathy in rats. *Oriental Pharmacy and Experimental Medicine*. DOI: 10.1007/s13596-019-00360-6.

24. Sumit kumar, Badruddeen, S. P. Singh, juber akhtar, mohammad irfan khan, mohammad ahmad, usama ahmad. Assessment of analgesics induced adverse drug reactions in a tertiary care hospital. *R. J. Pharm. And Tech*. 2020; 13(10).
25. Ahmad A, Khushtar M, Kumar R, Badruddeen, Riyaz A, Khan MI, Rahman A. Augmented Reversal of Cisplatin-Induced Delayed Gastric Emptying by Amla (*Emblica Officinalis*) Fruit Extract in Sprague-Dawley Rats. *Journal of dietary supplements*. 2018; 15(5): 684-91. Doi.org/10.1080/19390211.2017.1385562.
26. Badruddeen, Juber Akhtar, Muhammad Arif, Mohammad Irfan Khan, Md. Mujahid, Mohammad Ahmad. Long term administration of lovastatine and rivastigmine: An In Vitro evaluation on cognitive functions and Brain Acetylcholinesterase activity. *INNOSC Theranostic and Pharmacological science*. 2019; 2(2): 37-42.
27. Alam F, Badruddeen, Kharya AK, Juber A, Khan MI. Naringin: Sources, Chemistry, Toxicity, Pharmacokinetics, Pharmacological Evidences, Molecular Docking and Cell line Study. *Research Journal of Pharmacy and Technology*. 2020;13(5):2507-15.
28. Chandan Yadav, Md. Asif, Juber Akhtar, Badruddeen, Mohammad irfan Khan, Saquib, Tanveer, Mohammad Ahmad, Liba Rind. An outline on Curcumin: Its prolipoiposome formulations. *Research Journal of Pharmacy and Technology*. 2020;13(12):000.
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31. Badruddeen, Juber Akhtar, Mohammad Irfan Khan et al. Saxagliptin: a systematic review on its pharmacological potential and analytical aspects. *Innovat International Journal Of Medical & Pharmaceutical Sciences*. 2020 Sep 1;5(5).
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33. Kumar R, Khan MI\*, Prasad M, Badruddeen, Akhtar J, Swarnalata N. Solasodine with Coenzyme Q10 Supplementation Ameliorates High Fat Diet-Induced Metabolic Syndrome in Rats by Modulating Adipokines and Lipid Peroxidation. *Int J Cur Res Rev*. 2021; 13(11): 38-44.
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infiltration in diet-induced obese mice. *Drug Development Research*. 2022 Feb;83(1):194-207.

35. Mohammad Tarique, Badruddeen, Farogh Ahsan, Mohammad Irfan Khan, Juber Akhtar, Mohammad Khalid, Gazanfer, Mohammad Muztaba. Pharmacological and nutritional benefits of flaxseed's (*Linum usitatissimum* Linn.) biocomponents. *Current Functional Foods*. 2022; 1:1-1.
36. ZEBA SIDDIQUI\*, BADRUDDEEN, MOHAMMAD IRFAN KHAN. *Casearia esculenta*: A promising herb for the management of diabetes. *International Journal of Pharmaceutical Research*. 2021; 13(3): 1395-1401.
37. Asad Jamal, Nishat Fatima, Mohd. Ajmal, Badruddeen, Shweta, Shyna Bano, Mohammad Munwwar, Juber A, Khan MI. An overview on the management cum treatment of neuropathy in type -1 Diabetes Mellitus. *Research & Reviews: Journal of Medical Science and Technology*. 2020; 9(3): 19-38.
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40. Alam F, Badruddeen\*, Kharya AK, Juber A, Khan MI. Relationship between the dose administered and toxicity level after acute oral exposure to Lupeol and Naringin combination in rats. *Research Journal of Pharmacy and Technology*. 2022;15(8).
41. Rajesh Kumar, M. Irfan Khan, Mahesh Prasad, Ritesh Kumar Srivastav, Vishal Kumar Vishwakarma, Juber Akhtar. Co-adjuvancy of Solasodine & CoQ10 against high fat diet-induced insulin resistance rats via modulating IRS-I and PPAR- $\gamma$  proteins expression. *Drug Research*. 2022 (IF: 1.864)
42. Firoj Alam, Badruddeen\*, Anil Kumar Kharya, Juber Akhtar, Mohammad Irfan Khan, Mohammad Ahmad. Synergistic effect of lupeol and naringin again bile duct ligation induced cardiac injury in rats via modulatin nitrite level (eNos) and NF-kB/p65 expression. *Drug Research*. DOI: 10.1055/a-1879-2944
43. Gazala Noor, Badruddeen\*, Juber Akhtar, Bhuwanendra Singh, Mohammad Ahmad Khan, Mohammad Irfan Khan. Pharmacological and nutraceuticals profile of *Citrus medica*: A Vitamin C rich source. *Azerbaijan Medical Journal*. 2022, 62(6)
44. Manvi, Mohammad Irfan Khan Badruddeen, Juber Akhtar, Mohammad Ahmad. Pharmacognostic studies and antimicrobial activity of *Corchorus olitorius* L. leaf. *Pharmacognosy research*. 2022 (Accepted)
45. Zeba Siddiqui, Mohammad Irfan Khan Badruddeen, Juber Akhtar, Mohammad Ahmad. Star gooseberry (*Phyllanthus acidus* L): a prospective therapeutic agent for management of diabetes and associated complications: A review. *Biomedical and Pharmacology*.
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Complications: A Review. Biomedical and Pharmacology Journal. 2022 Dec 20;15(4):1821-31.

- 47.** Mohd Zafar Khan, Badruddeen\*, Mohammad Khushtar, Juber Akhtar, Mohammad Irfan Khan. Mohammad Ahmad and Ishana Chand. A Systematic Review of COVID-19 Impact on Cardiovascular Diseases. *Cronaviruses*, DOI:10.2174/2666796704666230608121558
- 48.** Singh VK, Ahmad M, Singh VK, Badruddeen , Akhtar J, Khan MI. A Critical Review Based on Coenzyme Q10 (Coq10). *NeuroQuantology*. 2022;20(17):1367.
- 49.** Md Sohel Akhter, Badruddeen\*, Mukhtar Ahmad, Juber Akhtar, Mohammad Irfan Khan, Mohd Ajmal, Mohammad Khushtar, Kanav Khera, Ajit Singh. IMPACT OF MEDICATION ERRORS ON OUTCOMES IN ADMITTED CORONARY ARTERY DISEASE PATIENTS: A. *Eur. Chem. Bull*. 2023, 12(Special Issue 10), 389 –397.
- 50.** Km Rukhsar Anwar, Badruddeen\*, Juber Akhtar, Mohammad Irfan Khan and Mohammad Ahmad Khan. An Outlook on Pathological Pathways of Diabetes and Molecular Mechanisms of Anti-diabetic Phytobioactives. *Letters in Functional Foods*, 2023, 1, 1-20. DOI: 10.2174/2666939001666230718142652
- 51.** Rizwana Bee, Mohammad Ahmad\*, Shashi Verma, Badruddeen, Juber Akhtar and Mohd. Irfan Khan. An Updated Review on Possible Therapeutic Role of Vincamine Via 5-HT Receptors in the Treatment of Depression. DOI:10.2174/2666082219666230726123452
- 52.** Preeti, Juber Akhtar\*, Amit Verma, Badruddeen, Mohammad Irfan Khan and Mohammad Ahmad. Kaempferol: Topical Applications and Nanoformulations in the Treatment of Diseases. *Current Bioactive Compounds*, 2023, 19(9), 1-11. DOI: 10.2174/1573407219666230418121102
- 53.** Manvi, Khan MI, Akhtar J, Badruddeen, Ahmad M, Siddiqui Z, Fatima G. Role of plant bioactive as diuretics: General considerations and mechanism of ieresis. *Current Hypertension Reviews*. DOI: 10.2174/1573402119666230612115220
- 54.** Manvi, Khan MI, Akhtar J, Badruddeen, Ahmad M. Pharmacognostic Studies and Antibacterial Activity of *Corchorus olitorius* L. Leaf. *Pharmacognosy Research*. 2022;14(4): 474-482
- 55.** Goswami K, Badruddeen\*, Arif M, Akhtar J, Khan MI, Ahmad M. Flavonoids, isoflavonoids and others bioactives for insulin sensitizations. *Current Diabetes Reviews*. DOI: 10.2174/1573399819666230427095200
- 56.** Noor G, Badruddeen\*, Akhtar J, Singh B, Ahmad M, Khan MI. An outlook on the target-based molecular mechanism of phytoconstituents as immunomodulators. *Phytotherapy Research*. DOI: 10./ptr.7969

57. Ahmad A, Kumar M, Bhoi NR, Badruddeen, Akhtar J, Khan MI, Ajmal M, Ahmad M. Diagnosis and management of uterine fibroids: current trends and future strategies. *Journal of Basic and Clinical Physiology and Pharmacology*. 2023 Mar 30;34(3):291-310.
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59. Avani Gupta, Juber Akhtar, K.C. Rastogi, Badruddeen, Mohammad Irfan Khan, Mohammad Ahmad and Sanjay Kumar. Enteric coated microgranules of pantoprazole sodium in gastroesophageal reflux disease. *Annals of Phytomedicine*. 2023, 12(1): 1-6.
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62. Arun Kumar, Amit Verma, Juber Akhtar\*, Badruddeen, Mohammad Irfan Khan, Mohammad Ahmad, Navneet Verma. A scientific review over silver nanoparticles as a potential alternative broad spectrum antiviral agent. *Eur. Chem. Bull*. 2023,12(5), 1674-1689.
63. Akhlaque Khan, Badruddeen\*, Anuradha Mishra, Arun Kumar, Mohammad Irfan Khan, Juber Akhtar, Mohammad Ahmad, Mohammad Khalid. Cognition Enhancing and Antioxidant Activities of *Nepeta hindostana* (Roth) Haines flowers extract against Scopolamine-induced amnesia in Sprague Dawley rats. 2023, 22(05): 1212-1226.
64. Mohd Ajmal, Badruddeen\*, Mukhtar Ahmad, Md Sohel Akhter, Mohammad Khushtar, Juber Akhtar, Mohammad Irfan Khan, Shahla Parveen, Azaz Ahmad. AN UPDATE ON FIXED-DOSE COMBINATION OF SGLT-2 AND DPP-4 INHIBITORS IN THE MANAGEMENT OF TYPE-2 DIABETES. *Eur. Chem. Bull*. 2023, 12(Special Issue 10), 707 –716.
65. Alam F, Badruddeen\*, Kharya AK, Srivastav RK, Akhtar J, Khan MI, Ahmad M. Synergetic Effect of Lupeol and Naringin Against Bile Duct Ligation Induced Cardiac Injury in Rats via Modulating Nitrite Level (eNos) and NF-kB/p65 Expression. *Drug Research*. 2023, 73(01):23-9.
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and the role of curcumin on the mediators of carcinoma. *Annals of Phytomedicine* 12(2): 1-8, 2023

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70. Avani Gupta, Juber Akhtar\*, Kailash Chandra Rastogi, Badruddeen, Mohammad Irfan Khan and Mohammad Ahmad Stability Indicating HPLC Method for In-Vitro Determination of Pantoprazole Sodium and its Degradation Products in Simulate Gastric and Intestinal Fluids. *Current Pharmaceutical Analysis*, DOI: 10.2174/0115734129254806231127110951
71. Firoj Alam, Badruddeen\*, Anil Kumar Kharya, Juber Akhtar, Anas Islam, Mohammad Irfan Khan, Mohammad Ahmad and Asad Ahmad. Bile duct ligation in rat: Induction of cirrhotic cardiomyopathy and impact on cellular pathways of bile acid on cardiovascular risk factors. *Journal of Phytonanotechnology and Pharmaceutical Sciences* 4(1): 1-8, 2024.
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### **Books /Chapter/Patent**

<b>S. N.</b>	<b>Title</b>	<b>ISSN</b>	<b>Publisher</b>		<b>Status</b>
1.	Metformin	PISBN 978-1-83969-605-3	IntechOpen	International	Published
2.	Nanoemulgel: For Promising Topical and Systemic Delivery	ISBN978-1-80356-048-9	IntechOpen	International	Published
3.	Drug Development Life Cycle	ISBN978-1-80356-048-9	IntechOpen	International	Published
4.	Vitamin B and Vitamin E – Pleiotropic and Nutritional Benefits	ISBN: 978-1-83768-379-6 Print ISBN: 978-1-83768-378-9	IntechOpen	International	Published
5.	Introductory Chapter: Drug Development Life Cycle	ISBN 978-1-80356-048-9	IntechOpen	International	Published
6.	A comprehensive overview on immunomodulators	ISBN: 978-93-92108-62-4	Rudra Publisher & Distributor	National	Published

7.	Therapeutic Potential of Gut Microbiota in Metabolic Disorders	ISBN: 9781032702438	CRC Press/Taylor & Francis	International	Published
8.	Quality assurance framework for smart drug delivery systems in Pharmaceutical industries and its applications	ISBN: 9781003495314	CRC Press/Taylor & Francis	International	Published

**Patents:**

S. No.	Title	National / International	Date of Filing	Status: Published/Granted as on date	Patent file No.
1.	An emulsion for cardiac protection	National	22.03.2022	Granted	202211015128
2.	Curcumin loaded niosomal gel for wound healing in rats and its preparation method	National	02/12/2022	Published	202211068190
3.	Composition comprising biochanin-a and metformin against streptozotocin induced diabetes in rats	National	04/08/2023	Published	202311046393
4.	Nanoemulsion Formulation of retinol and A- tocopherol for Alzheimer disease.	National	31/03/2024	Published	202411026750
5.	Rutin and Curcumin based nanogel formulation for management of acne vulgaris and preparation method	National	01/04/2024	Published	202411026966

**Annexure III**

**LECTURES/SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA**

- AICTE sponsored National Seminar on “Emerging Trends in Pharmaceutical Sciences”, 21<sup>st</sup>-22<sup>nd</sup> March, 2009, Jamia Hamdard, New Delhi-62.
- ISTE sponsored short term training programme on “Recent trends in novel drug delivery systems” at Faculty of Pharmacy, Jamia Hamdard, New Delhi, 15<sup>th</sup>-21<sup>st</sup> May, 2008.

- IPR Awareness Seminar on Pharmaceuticals, 26<sup>th</sup> Feb, Jamia Hamdard University, New Delhi, 2005.
- National seminar on "Biotechnology and human welfare" 19<sup>th</sup>-20<sup>th</sup> March, 2007, at Jamia Hamdard New Delhi.
- National conference on "changing trends in pharmacy education and Research" 24<sup>th</sup>-25<sup>th</sup> July 2009, at Apex Institute of Pharmaceutical sciences Jaipur.
- AICTE sponsored National Seminar on "New horizons in drug discovery and development 17<sup>th</sup>-18<sup>th</sup> September 2011, at Faculty of Pharmacy, Jamia Hamdard, New Delhi.
- National Seminar on Vision 2020: "Quality Education in Pharmacy and Its Challenges" 5<sup>th</sup> February 2012, at SRMS Bareilly.
- Seminar on Pharmacist: your partner in health, 30<sup>th</sup> September 2015, at F/o Pharmacy Integral university, Lucknow.
- National Seminar on Profession of Pharmacy: Challenges & opportunities, 18 October 2015, at IPSR Unnao U.P. India.
- One day workshop on Hands on training on HPLC, 26 October 2015, at Integral University, Lucknow (U.P.) India.
- Seminar on "Pharmacist: Caring for you" 26 September 2016, at F/o Pharmacy Integral university, Lucknow (U.P.) India.
- International Congress on "Exploring Opportunities and Future Avenues in Pharmaceutical Sciences", Organized by Azad Institute of Pharmacy and Research, Lucknow, 23-25 February, 2016.
- National Conference on "Intellectual Property Right, a significant tool for Sustainable Agriculture", Organized by Integral University, Lucknow in Association with U.P. Council of Agriculture Research, 2-3 April, 2016.
- International Congress on "Post-harvesting Technology of Agricultural Produce for Sustainable Food and Nutritional Security", held at Integral University, Lucknow in Association with U.P. Council of Agriculture Research, 10-12 November, 2016.
- Seminar on theme "From Research to Healthcare: Your Pharmacist is at your service", held on 25-26 September, 2017, at F/o Pharmacy Integral university, Lucknow (U.P.) India.
- Virtual Workshop on Modeling, Simulation and Implementation using MATLAB and Simulink (MSIMS-20)" at BANSAL INSTITUTE OF ENGINEERING AND TECHNOLOGY Lucknow (U.P.) India, May 2020
- A webinar on "Role of Pharmacist for best therapeutic outcome" organized by Society of Pharmaceutical sciences and research, 29<sup>th</sup> Nov, 2020.
- A webinar on "Role of Pharmacist in preventing drug abuse" organized by Society of Pharmaceutical sciences and research, 8<sup>th</sup> Nov, 2020.
- A webinar on "national webinar on corona and humanity" organized by Society of Pharmaceutical sciences and research, 6<sup>th</sup> Sep, 2020.
- A webinar on "Pharma Career Voyage: Paving the Way Ahead" organized by Society of Pharmaceutical sciences and research, 27<sup>th</sup> Dec, 2020.

### **Additional Training Courses/FDP**

- Worked as product trainer in Deccan Healthcare Pvt Ltd and OK Lifecare Pvt Ltd
- Faculty Development workshop on “Research Methodology and Biostatistics in Medical Sciences” Organized by Department of Physiotherapy under the Aegies of Academic staff college Integral University, Lucknow. 29<sup>th</sup> June-5<sup>th</sup> July 2016.
- Short term course for training programme on ‘Academic Leadership’ under the scheme of PMMMMNMTT (MHRD, Govt. of India) in association with Academic staff college Integral University, Lucknow. 17<sup>th</sup> March 2017 to 23<sup>rd</sup> March, 2017.
- Faculty Development Programme (FDP) on “Drug patenting and Intellectual Patents Right” Sponsored by Dr. A.P.J. Abdul Kalam Technical University, Lucknow at Azad Technical Campus, Lucknow. 24<sup>th</sup> July 2017 to 28<sup>th</sup> July, 2017.
- Short term course recognized by AICTE on “Climate Change and Disaster Management through ICT” conducted by National Institute of technical teacher’s Training and Research (NITTR), Chandigarh, at Integral University, Lucknow India. 6<sup>th</sup> November 2017 to 10<sup>th</sup> November, 2017.
- Online Elementary FDP on "Multi-omics Data Science" at Indian Institute of Technology (IIT) Jodhpur 20/12/2021 to 24/12/2021.
- Role of ICT in education- organized by International School of Management, Patna. June 29th, 2020
- Virtual National PDP on Rsearch Methdology& statics at Integral institute nursing sciences and research ,Nov-2021.

### **Annexure IV**

### **Invited or guest lecture**

1. Guest lecture delivered on “**Naturaceuticals in Post Covid**”, April 17, 2021 at Kunwar Ajeet College of Pharmacy, Jaunpur, U.P.
2. Guest lecture delivered on “**Role Q enzyme Q10 in Cardiac disease**”, March 9, 2020 at Kunwar Haribansh Singh College of Pharmacy, Jaunpur, U.P.
3. Delivered a talk on ‘**Challenges in herbal formulations and its efficacy**’ May 21-23, 2017 at Rudrapur, organised by OK LIFECARE PVT LTD Rohtak Haryana

4. Paper presented on ""Neuroprotective potential of Docosahexaenoic acid against global cerebral ischemia-reperfusion injury in rats"" at Integral University, India on October 8 and 14, 2023.
5. Delivered Lecture on Reporting of suspected ADR at Hayat Unani Medical College Lucknow.

**Projects (Submitted/Sanctioned):**

<b>S. No.</b>	<b>Title of Project</b>	<b>Applied Funding Agency</b>	<b>Amount of Project</b>	<b>PI / Co-PI Name</b>	<b>Date of Application/Sanctioned</b>	<b>Current Status</b>
1.	Fabrication and invitro evaluation of essential oil based topical nanogels containing rutin and curcumin for acne	Integral University	Rs. 95,000	Dr. Mohammad Irfan Khan (Co-PI)	19.10.2021	Sanctioned

Dr. Mohammad Irfan Khan