

Dr. Mohammed Iqbal Zargar

House No.12. Lane -7, Sector- C,
Gulshan Nagar,
Srinagar-190 015,
J & K, INDIA
iqbalzargar@uok.edu.in; iqbalzargar@gmail.com

EDUCATION

Doctor of Philosophy in (Pharmaceutical Sciences) Specialization - Pharmaceutical Biotechnology, Andhra University, Visakhapatnam, (A.P), India, **(2008)**

- *Investigations on antibiotic-producing rare- actinomycetes from indigenous natural substrates*, Under the supervision of **Prof. P. Ellaiah**, Dept. of Pharma Sciences, Andhra University (A.P).

Master of Pharmacy in Pharmaceutical Biotechnology Andhra University, Visakhapatnam, (A.P), India **(1999)**

- *“Production of Fungal Lipases by Solid State Fermentation”*

Bachelor of Pharmacy, University of Kashmir, Srinagar, India, **(1996)**

Bachelor of Science, University of Kashmir, Srinagar, India, **(1989)**

RESEARCH INTERESTS / RESEARCH PROFILE/ RESEARCH EXPERIENCE: 25YEARS

- **Research Areas:** Bacterial Pathogens, Eukaryotic Pathogens, Innate Immunity. Adaptive Immunity. Bacterial Physiology, Cell Biology of Infection. Microbiome. Evolution of a novel bacterial development system. Cancer Drug Delivery Systems. Nanotechnology

RESEARCH PLATFORMS

ORCID: <https://orcid.org/0000-0002-5979-7646>

Scopus ID: <https://www.scopus.com/authid/detail.uri?authorId=51162224400>

Research Gate: <https://www.researchgate.net/profile/Mohammed-Zargar>

Google Scholar: <https://scholar.google.co.in/citations?user=k3ShZwoAAAAJ&hl=en>

AREAS OF TEACHING EXPERTISE

For 19 years ago, I have been teaching students in microbiology, biotechnology, and pharmacy.

TEACHING EXPERIENCE

I have 19 years of teaching experience and am an experienced Microbiology tutor. I have strong enthusiasm for encouraging academic excellence in my student's. I tutored graduate and postgraduate students. I have mentored six Ph.D. candidates.

Teaching Experience: 19 Years

Presently working as **Sr. Assistant Professor** at the **Department of Pharmaceutical Sciences, University of Kashmir, Hazratbal, Srinagar – 190 006, J& K, INDIA**

GRANTS

UGC support for a minor research projects sanctioned for **2010 –2011**

Title Of the Project: *“Isolation and characterization of antimicrobial principle from a newly isolated Microtetraspora species”*

PROFESSIONAL MEMBERSHIPS / ORGANIZATIONS

Nodal Officer DIQA, Department of Pharmaceutical Sciences, University of Kashmir, Srinagar.

Member Secretary / Scientist Incharge Institutional Animal Ethics Committee, (IAEC), University of Kashmir, Department of Pharmaceutical Sciences.

Member of “The European Association of Pharmaceutical Biotechnology” (EAPB).

Life Member of the **Association of Pharmaceutical Teachers of India (APTI)** under membership No. JK/LM-006

Life Member of the **Society of Pharmaceutical Education & Research (SPER)** under membership No. SPER /LM/JK/005

COMMUNITY INVOLVEMENT / ADMINISTRATIVE ACTIVITY / SERVICE

Member:

- Departmental Research Committee.
- Departmental Purchase Committee.
- Departmental Technical Committee.

Incharge:

- Microbiology Laboratory
- AICTE/ approval and related affairs
- PCI approval
- E-awards

PUBLICATIONS / BOOK CHAPTERS/ PRESENTATIONS / ABSTRACTS

PapersPublished:

1. Shahid Ud Din Wani, Mohammad Ali, Seema Mehdi, Mubashir Hussain Masoodi, **Mohammed Iqbal Zargar**, Faiyaz Shakeel. "A review on chitosan and alginate-based microcapsules: Mechanism and applications in drug delivery systems" *International Journal of Biological Macromolecules*, 2023, 248, 125875. <https://doi.org/10.1016/j.ijbiomac.2023.125875>. [**ImpactFactor:8.2**, Scopus, PubMed, SCIE]
2. Umar Nabi Tak, Showkat Rashid, Pawandeep Kour, Nighat Nazir, **Mohammed Iqbal Zargar**, Aijaz Ahmad Dar, *Bergeria stracheyi* extract-based hybrid hydrogels of biocompatible polymers with good adhesive, stretching, swelling, self-healing, antibacterial, and antioxidant properties, **International Journal of Biological Macromolecules**, 2023;234,123718.[**ImpactFactor:8.2**,SCIE,Scopus,WoS]
3. Mohammad Ali, Shahid Ud Din Wani, Md Salahuddin, Manjula Sn, K Mruthunjaya, Tathagata Dey, **Mohammed Iqbal Zargar**, Jagadeesh Singh,Recent advance of herbal medicines in cancer-a molecular approach, **Heliyon**,2023;9,e13684.[**ImpactFactor:4.00**,SCIE,Scopus,WoS]
4. Pawandeep Kour, Saima Afzal, Adil Gani, **Mohammed Iqbal Zargar**, Umar Nabi Tak, Showkat Rashid, Aijaz Ahmad Dar,Effect of nanoemulsion-loaded hybrid biopolymeric hydrogel beads on the release kinetics, antioxidant potential and antibacterial activity of encapsulated curcumin,**Food Chemistry**,2022; 376,131925.[**ImpactFactor:8.8**,SCIE,Scopus,WoS]
5. Ansar Ahmad Sabha Shafi, Mudasir Khazir, Afsahul Kalam, **Mohammad Iqbal Zargar**,Antimicrobial activity of ‘Sharbat-unnab’a classical Unani elixir, **International Journal of Herbal Medicine**, 2021; 9(6): 67-72.

6. **M Iqbal Zargar** Nasrin Ansari, Evaluation of total flavonoid and phenolic amount, antioxidant, antimicrobial and cytotoxic potential of safoof-e-tabkheer, **International Journal of Health Sciences**,2022,6 (S1), 13712 – 13723.
7. Wani SUD, **Zargar MI**, Masoodi MH, Alshehri S, Alam P, Ghoneim MM, Alshlowi A, Shivakumar HG, Ali M, Shakeel F. Silk Fibroin as an Efficient Biomaterial for Drug Delivery, Gene Therapy, and Wound Healing. **International Journal of Molecular Sciences**. 2022; 23(22):14421. <https://doi.org/10.3390/ijms232214421>. [ImpactFactor:6.208, SCIE, Scopus, WoS]
8. Shahid Ud Din Wani, Mohammad Ali, Mubashir Hussain Masoodi, Nisar Ahmad Khan, **Mohammed Iqbal Zargar**, Reyaz Hassan, Suhail Ahmad Mir, Surya Prakash Gautam, HV Gangadharappa, Riyaz M Ali Osmani, A review on nanoparticles categorization, characterization and applications in drug delivery systems, **Vibrational Spectroscopy**,2022, 103407. [ImpactFactor:2.5, SCIE, Scopus, WoS].
9. Wajaht A. Shaha, Mohd Yousuf Dar, **M. Iqbal Zargar**, Vijai K. Agnihotri, M.A. Qurishi and Bikram Singh, Chemical composition and antimicrobial activity of the leaf essential oil of *Skimmia laureola* growing wild in Jammu and Kashmir, India, **Natural Product Research**, 1-5, 2012
10. Mohiuddin I, Kumar TR, **Zargar MI**, Wani SUD, Mahdi WA, Alshehri S, Alam P, Shakeel F. GC-MS Analysis, Phytochemical Screening, and Antibacterial Activity of *Cerana indica* Propolis from Kashmir Region. **Separations**. 2022; 9(11):363. <https://doi.org/10.3390/separations9110363>. [ImpactFactor:3.3, SCIE, Scopus, WoS]
11. Ansar Ahmad Sabha Shafi, Mudasir Khazir, Afsahul Kalam, **Mohammad Iqbal Zargar**, Antimicrobial activity of ‘Qurs-afsanteen’: A classical Unani tablet formulation prepared from *Artemisia absinthium*, **International Journal of Applied Research**,2021, 10(7), 240-246.

12. Nasrin Ansari, Reyaz Hassan, **Mohd. Iqbal Zargar**, Wajaht Amin Shah, D.P. Pathak, Physico-chemical standardization of safooff-e-Tabkheer; A polyherbal unani formulation with modern tools, **International Research Journal of Pharmay**, 2018, 9(10), 131-136
13. Altaf H Satari, **M. Iqbal Zargar**, Wajahat Amin Shah, Isolation, molecular identification, phytochemical screening and in-vitro antioxidant activity of endophytic fungus from *Achillea millefolium* Linn, **Journal of Pharmacognosy and Phytochemistry** 2018, 7 (4), 87-92
14. Z. A. Bhat, Riehana Gani* and **M. Iqbal Zargar**, Analysis, Antibacterial and antifungal activity of essential oil of *Bunium Persicum* From Kashmir. INDIA **International Journal of Research in Pharmacy and Chemistry** 2017, 7(1) 39- 44 GC-MS
15. AH Satari, **MI Zargar**, M Dharne, R Bansal, **Imperial Journal of Interdisciplinary Research** 2016, 2 (9) 498-502 Isolation and screening of Endophytic Fungi From *Achillea millefolium* L - A Medicinal Plant of Western Himalayas
16. R. Gani, ZABhat, M. Ahmed, **MI Zargar**, GC-MS Analysis, Antibacterial and Antifungal activity of essential oil of *Plectranthus rugosus* from Kashmir, India. **International Journal of Bioassays** 2015, 4 (12), 4692-4695.
17. Sofi Mubashir, Mohd. Yousuf Dar, Bashir. A. Lone, **M. Iqbal Zargar**, Wajaht A. Shah "Anthelmintic, antimicrobial, antioxidant and cytotoxic activity of ***Caltha palustris*** var Alba Kashmir, India" **Chinese Journal of Natural Medicines**, 2014, 12(8):0567-0572.
18. Wajaht A. Shah, Kuratull Ain, Mohd Yousuf Dar, **M.I. Zargar**, Phyto-chemical analysis, radical scavenging, cytotoxic and antibacterial activities of *Viola indica* from Kashmir, **Natural products, An Indian journal**, pp 2012
19. Dinesh Kumar, Zulfiqar Ali Bhat, Vijender Kumar, N.A. Khan, I.A. Chashoo, **M.I. Zargar**, M.Y. Shah, Effects of *Stachys tibetica* essential oil in anxiety, **European Journal of Integrative Medicine**, pp 2012

20. Dinesh Kumar, Z.A. Bhat, Vijender Kumar. **M.I. Zargar**, A short review on *Artemisia maritima* Linn, **International journal of Phytochemistry and Pharmacology**, 1(4), 2011, 201-206
21. Abid H. Banday, **M. Iqbal Zargar**, Bashir A. Ganaie, Synthesis and antimicrobial studies of chalconyl pregnenolones, **Steroids**, 76 (2011) 1358-1362.
22. Nighat Nazir, Surrinder Koul, Mushtaq Ahmad Qurishi, Muzaffar Hussain Najar **Mohammed Iqbal Zargar**, Evaluation of antioxidant and antimicrobial activities of Bergenin and its derivatives obtained by chemoenzymatic synthesis, **European Journal of Medicinal chemistry**, 46 (2011), pp 2415-2420
23. Mubashir H. Masoodi, **M. Iqbal Zargar**, Bahar Ahmed, Saroor A. Khan, Shamshir Khan and P. Sing, Evaluation of Antibacterial activity of Aqueous Extract of *Marrubium vulgare* L., **Journal of Research and Development**, Volume -9 (2009), pp 53-56.
24. **M. Iqbal Zargar**, **DAK Voice**, Sep. 2003, Vol. 1, No. 1, Environmental challenges, and health care.
25. Mubashir H. Masoodi, Bahar Ahmed, **Iqbal M. Zargar**, Saroor A. Khan, Antibacterial activity of whole plant extract of *Marrubium vulgare*, **African Journal of Biotechnology** Vol. 7 (2), pp. 086–087, January 2008.
26. K Adinarayana, K V V S N Bapi Raju, **M Iqbal Zargar**, R Bhavani Devi, Optimization of process parameters for production of lipase in solid-state fermentation by newly isolated *Aspergillus* species, **Indian Journal of Biotechnology**. Vol 3, January 2004, pp 65-6

BOOK CHAPTERS

1. S Bashir, A Noor, **MI Zargar**, NA Siddiqui - Edible Plants in Health and Diseases, 2022, Ethnopharmacology, Phytochemistry, and Biological Activities : A Comprehensive Review.
2. Qadir, I. *et al.* (2022). *Cichorium intybus*: A Comprehensive Review on Its Pharmacological Activity and Phytochemistry. In: Masoodi, M.H., Rehman, M.U.

(eds) Edible Plants in Health and Diseases. Springer, Singapore.
https://doi.org/10.1007/978-981-16-4959-2_12

PAPERSPRESENTED

- Production of fungal lipase by SSF using a strain of *Aspergillus niger*.: Paper presented in National Seminar on Recent Advances in Plant Science Research, 12- 14 Oct. 2003, at University of Kashmir, Srinagar.
- Isolation of antibiotic producing actinomycetes from soil samples of Jammu and Kashmir State. Paper presented in National Seminar on Recent Advances in Plant Science Research, 12-14 Oct. 2003, at University of Kashmir, Srinagar.
- Study on antibacterial activity of *Swertia petiolata* and *Swertia tetragona*.: Paper presented in National Seminar on Recent Advances in Plant Science Research, 12- 14 Oct. 2003, at University of Kashmir, Srinagar.
- *Kitasatospora kashmirensis* sp. nov., A novel rare actinomycete from a garden soil sample.; Paper presented in 2nd J and K Science Congress, 2006 at University of Kashmir, Srinagar.
- Screening of actinomycete isolates for antimicrobial activity. Paper presented in 2nd J and K Science Congress, 2006 at University of Kashmir, Srinagar.
- Exploitation of Microorganisms for Commercial Purposes.: Paper presented in All India Students Seminar on Current Concepts in Pharmaceutical Sciences, Nov. 1998, at Siddhartha College of Pharmaceutical Sciences, Vijayawada, (A.P) India.
- “Studies on antagonistic actinomycetes from Farm soils of Chinore, Jammu”. Paper presented in 4th J and K Science Congress, 2008 at University of Kashmir, Srinagar.
- “Medicine From Dirt”, paper presented in general orientation course at academic staff college, University of Kashmir, Srinagar, Feb., 2009.
- Paper presented in 6th J&K Science Congress, 2011 at University of Kashmir, Srinagar
- Attended **13th International Congress of the Society for**

Ethnopharmacology on 02 – 06 Sep.,2012 at the University of Graz, Austria, organized by International Society for Ethnopharmacology

- Presented a paper in UGC sponsored **National Symposium on Interdisciplinary Sciences** on 02-03 March,2012 at G.G.M Science College, Jammu.
- Paper presented in 9th J and K Science Congress, 1-3 October, 2013 & Regional Science Congress, at University of Kashmir, Srinagar.
- Paper presented in 2nd National Symposium on Interdisciplinary Sciences, organized by G.G.M.Science College, Jammu on 27-28 Feb., 2015.
- Presented a paper in the 11th International Symposium on the Chemistry of Natural Compounds held at Antalya,Turkey on 1-4,October,2015.
- Presented a paper in 11th JK Science Congress at University of Kashmir on 12-14 October,2015.
- Presented a paper in Two days National Inter-disciplinary Conference SSD-2016 on 25-26 Feb., 2017 held at Sri Pratap College,Srinagar.
- Presented a paper in 12th JK Science Congress held at University of Jammu on 2- 4, March,2020

CONFERENCES/SEMINARS ATTENDED:

1. **MIDCON-CM,2004**,Oct 1st to 3rd, National Level Multidisciplinary Infection Control and Clinical Microbiology Conference, at SKICC, Srinagar.
2. **National Seminar on Recent Advances in Plant Science Research**, 12-14 Oct. 2003, at University of Kashmir, Srinagar.
3. **All India Students Seminar** on Current Concepts in Pharmaceutical Sciences, Nov. 1998,at Siddhartha College of Pharmaceutical Sciences, Vijayawada,(A.P) India.
4. **National Seminar on Contemporary Trends in Biotechnology Research,2005**, at University College of Pharmaceutical Sciences, Andhra University, Visakhapatnam,(A.P) India.
5. **International Symposium on Genomic Instability and Cancer** at SKICC, Srinagar, Kashmir,July-2007.

6. **Tobacco Free Kashmir**: bringing the dream to reality. Nov, 2007 at University of Kashmir, Srinagar.
7. **4th JandK Science Congress**, 2008 at University of Kashmir, Srinagar.
8. **National seminar on "Recent Advances in Pharmaceutical Education and Research"** 15-16 July 2009, organized by the department of Pharmaceutical Sciences, University of Kashmir, Srinagar.
9. **North Zone Meet & National Symposium** on "Microbial Diversity and Bio-Propecting". 29-30 October, 2010 Organized by Department of Botany, University of Jammu, Jammu
10. **6th JandK Science Congress**, 2011 at University of Kashmir, Srinagar.
11. Attended **13th International Congress of the Society for Ethnopharmacology** on 02 – 06 Sep., 2012 at the University of Graz, Austria, organized by International Society for Ethnopharmacology.
12. Attended **one day seminar on Open Access Resources** on 18-12-2012 at Allama Iqbal Library, University of Kashmir, Srinagar.
13. Attended UGC sponsored **National Symposium on Interdisciplinary Sciences** on 02-03 March, 2012 at G.G.M Science College, Jammu and presented a paper.
14. Attended two-day **National Workshop** from 8 to 9 November, 2013 on Regulations and Ethics for Animal Experimentation held at Regional Research Institute of Unani Medicine, University of Kashmir, Srinagar.
15. Attended two-day **National Level Conference** from 28 to 29 October, 2013 on "Microbiology/Endocrinology Update 2013" held at SKICC, Srinagar.
16. Attended three-day **Ninth JK Science Congress 2013 & Regional Science Congress** from 1 to 3 October, 2013 at University of Kashmir, Srinagar
17. Attended a **workshop on Regulations and Ethics for Animal Experimentation** on 08-09, Nov., 2013 at Regional Research Institute of Unani Medicine, Srinagar in collaboration with CPCSEA, Animal Welfare Division, Ministry of Environment and Forests, Govt. of India.
18. Attended three week **Refresher Course in Applied Sciences (ID)** organized

by UGC-ASC, University of Kashmir, Srinagar from 21st May to 13th June, 2014 and obtained grade A.

19. Attended **one day seminar on Book Reading and Plagiarism** on 23rd April, 2014 at Allama Iqbal Library, University of Kashmir, Srinagar.
20. Attended Science Academies' **Lecture Workshop on Himalayan Biodiversity and Bioresources: Mapping, Utilization and Conservation**, on 08-10 May, 2014 at the Department of Botany, University of Kashmir.
21. Attended International Open Data Day (OPEN CON 2017) at Allama Iqbal Library, University of Kashmir, on 4th March, 2017.
22. Attended National Workshop at Allama Iqbal Library, University of Kashmir on 22-23 March, 2017.
23. Attended National Conference on Recent Advances in Understanding the Role of Phytochemicals in Human Health on 25-26 July, 2018, organized by The Department of Food Science and Technology, University of Kashmir, Srinagar.
24. Attended an online webinar on Systematic Reviews and Meta-Analysis: A Viable Alternative to Experimental Research in Times of COVID-19 on June, 28, 2020, organized by The Department of Pharmaceutical Sciences, University of Kashmir.
25. Attended online 7th Convention Society for Ethnopharmacology, India & International Symposium on "Combating COVID-19-Ethnopharmacology & Traditional Food and Medicine", on 17-19 December, 2020, organized by Institute of Bioresources & Sustainable Development, Imphal, India.
26. Attended online international webinar series lecture-I on "**Systematic reviews and meta-analysis**" organized by the Department of Pharmaceutical Sciences, in collaboration with UGC-Human Resource Development Centre, University of Kashmir, on June 28th, 2020 that was delivered by Prof. Zaheer-Ud-Din Babar, Professor of Medicines and Healthcare, Director, Centre of Pharmaceutical Policy and Research, University of Huddersfield, UK.

27. Attended online international webinar series lecture-II on "**Pharmacy Profession in India: present status and future challenges**" that was delivered by Prof. B. Suresh, President, Pharmacy Council of India and Pro-Chancellor, JSS Academy of Higher Education and Research, Mysuru on July 14th, 2020 on Zoom platform that was attended by more than 1000 participants.

REFERENCES

1. **Prof. (Dr.) Nahida Tabassum**, Head Department. of Pharmaceutical Sciences, University of Kashmir, Srinagar-190006, (J&K) Cell No: +919419906868, Fax: 0194-2426976; E-mail: n.tabassum.uk@gmail.com, nahidat@kashmiruniversity.ac.in
2. **Prof. P. Ellaiah**, University College of Pharmaceutical Sciences, Visakhapatnam – 530 003 (A.P), Ph: 09440138116, E-Mail: ellaiah2@rediffmail.com
3. **Prof. V. Verma**, Director School of Biotechnology & Dean College of Sciences, Shri Mata Vaishno Devi University, Katra, Jammu (SMVDU). Tel. (Direct) 01991 285691 (PABX) 01991 285524, 285535, 285699 ext.2129, E-Mail: v.verma@smvdu.ac.in

DECLARATION

I do hereby declare the above statements are true to the best of my knowledge.

Dated: 01-01-2024

Mohammed Iqbal Zargar