

## CURRICULUMVITAE

**Name:** ALI MOHD LONE  
**Sex:** Male  
**Marital Status:** Married



**Address:** Govt. College for Women Baramulla, Jammu & Kashmir-193101, India  
(Affiliated college of **University of Kashmir, Srinagar**)  
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Researchgate link: <https://www.researchgate.net/profile/Ali-Mohd-Lone/research>

Google scholar link: <https://scholar.google.com/citations?user=O-vJLQ8AAAAJ&hl=en&authuser=5>

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### **Area of specialization:**

1. Drug discovery and development
2. Neurological disorders and Cancer biology
3. Protein-drug interaction
4. Total synthesis of bioactive natural products
5. Development of new synthetic strategies for total synthesis of bioactive natural products
6. C-C, C-S, C-N bond forming reactions
7. Structural modifications of natural products for lead development

**Current Position:** Professor, Department of Medicinal Chemistry, Higher Education, Jammu & Kashmir, India, since 2017.

**Qualifying Degree:** Ph.D. in Chemistry

*Title of Thesis:* Studies directed towards the synthesis of bioactive natural products

### **Fellowships/ Awards:**

1. Qualified National Eligibility Test (NET) for Lecturership in June 2012. NET is conducted at national level jointly by University Grants Commission (UGC) and Centre for Scientific and Industrial Research (CSIR), Govt. of India, New Delhi. Those who qualify NET are eligible for lecturership.
2. Qualified Junior Research Fellowship (JRF) conducted by CSIR, India in December 2014. JRF is conducted at national level jointly by University Grants Commission (UGC) and Centre for Scientific and Industrial Research (CSIR), Govt. of India, New Delhi. Those who are toppers are provided fellowship for pursuing research.
3. Awarded Senior Research Fellowship (SRF) of UGC, (2014).
4. Awarded best poster presentation award at "International Conference on Current challenges in Drug Discovery Research-2015" at Jaipur-India.
5. National Postdoctoral Fellowship (N-PDF) by Science and Engineering Research Board (SERB), India for perusing research in medicinal Chemistry in 2016.
6. Awarded Travel Grant {**F.No.6-374/2018(TG)**} by UGC for presenting a paper entitled, **Divergent Approaches to the Synthesis of Fused[3,2-b]Furanone Scaffold Embodied in Bioactive Natural Products** in 24<sup>th</sup> Global Organic & Inorganic Chemistry Conference on July 18-19, 2018 at **Atlanta, United States of America**.
7. Awarded **Young Scientist Award** in 2<sup>nd</sup> International Award Conference on Research, Analyze, Communicate and Evaluate on 14<sup>th</sup> of April 2019 at International Centre Goa, Panjim, Goa, India.
8. Awarded Teachers Association for Research Excellence (TARE) FileNo.[TAR/2020/000288](#)} by Science and Engineering Research Board (SERB), India for perusing research in medicinal Chemistry in 2019.
9. Awarded international travel grant ([ITS/2023/001147](#)) for attending "23rd Tetrahedron

Symposium at Sweden from 27 June, 2023 to 30 June, 2023 by Science and Engineering Research Board (SERB), India.

**Education: timeline**

2016-17	National Post doctorate	Indian Institute of Integrative Medicine, Jammu	Medicinal Chemistry
2016	Ph.D. in Chemistry	University of Kashmir, Srinagar, Jammu and Kashmir, India.	During my Ph.D., I got opportunity to work in three best institutions of India. 1. School of Chemistry, University of Hyderabad, Hyderabad, India. 2. Indian Institute of Integrative Medicine (IIIM) Jammu, India. 3. Department of Chemistry, University of Kashmir, Srinagar, Jammu and Kashmir, India.
2007	M.Sc. in Chemistry	HCU	During M.Sc. my major subjects/ specialization was Organic Chemistry that included the courses on Retro-synthesis, Medicinal Chemistry, Organic reagents, Name reactions, Spectroscopy, Biomolecules and Reaction mechanism.
2006	B.Ed (Bachelor of Education)	University of Kashmir, Srinagar, Jammu and Kashmir, India.	During B.Ed. my subjects were Teaching methodology, Philosophy, English language, General science and
2005	B.Sc.	University of Kashmir, Srinagar, Jammu and Kashmir, India.	Studied subjects-Botany, Zoology, Chemistry and English Language

**Professional Experience:** 1. Professor, Department of Chemistry, Govt. Degree College for Women, Baramulla, Kashmir (J&K)-193101, India. (April, 2017 – till date)

**Teaching Experience:** I have been working as Assistant Professor in Department of Chemistry Govt. Degree College for Women Baramulla J&K since 2017. The main assignments include teaching the courses pertaining to general chemistry.

**Research Experience:** 2 years and 04 months as faculty member excluding the period of acquiring Ph.D.

**B. Research experience through Ph.D. work:** My Ph.D. project involved Studies directed towards the synthesis of bioactive natural products, with them to achieve synthesis of molecule with possible role as chemotherapeutic agents. The project focused on synthesis of natural products containing furo[3,2-b]furanone scaffolds since such molecules are of immense significance for the treatment of neurological diseases. The molecular scaffolds synthesized were that of neovibsanins, rubriflordilactone, plumericin and plakartone. In addition, the total synthesis of natural product Haggen's gland lactone was also completed. Moreover, retinoic acid was subjected to structural modification to synthesize a library of alaoogs which were screened for possible role in promoting neurite outgrowth formation. Novel compounds were synthesized among which three displayed excellent bacteriostatic and bactericidal activities against *Mycobacterium tuberculosis* H37RV. Its *M.tuberculosis* kill curve is driven by concentration and time equally. The compound exhibited synergism with INH and RIF, along PAE and highly significant MPC /MIC value reflect its relevance for widely spaced antibiotic dosing in combination regimens.

*I achieved the experience of characterizing the molecules using NMR, IR, UV and Mass spectral techniques. Meanwhile I gained experience in various analytical and spectral techniques.*

**C. Research Collaborations:** In the capacity of being permanent faculty member in the Department of Chemistry at Govt. Degree College for Women, Baramulla of Kashmir I am personally involved with various research collaborative projects to extend/diversify the domain of what I achieved in my Ph.D work:

1. "Total Synthesis of furo[3,2-b]furanone containing natural products through RCM strategy" with Prof. Goverdhan Mehta, School of Chemistry, University of Hyderabad, Hyderabad, India.
2. Collaborative research work with Prof. Islam Khan, Department of Biochemistry, Faculty of Medicine, Kuwait University, for *in vivo* screening of compounds in animal model.

**D. Independent Research work:** Presently I have an independent research group, started since 2017, comprising of one Ph.D. scholars working on the broader area of "synthesis of 2-((2-hydroxyphenyl)amino)methylene)-5,5-dimethylcyclohexane-1,3-dione: as anti-tuberculosis agents".

**Paper presentations at Conferences/ Seminar attended:**

1. Attended Seventh National Convention of Chemistry Teachers (NCCT-2007) "**National Conference on Chemistry Vision-2020 (CHEM VISION 2020)**" on 27 & 28<sup>th</sup> of October, 2007 organized by Hislop College Nagpur, Maharashtra-India.
2. Participated in **national seminar** conducted by Chemical Society on 18<sup>th</sup> of December, 2006 organized by Hislop College Nagpur, Maharashtra-India.
3. Attended a training programme conducted by MSME-development institute Jammu on "**Entrepreneurship Skill Development Programme on Biotechnology**" in collaboration with IIM Srinagar from Sept.3 to Oct. 8, 2011 at IIM Srinagar.
4. 11<sup>th</sup> JK science congress 2014, "**Scientific, Social and Economic dimensions of Climate Change**" organized by University of Kashmir during Oct. 20-22, 2014.
5. Oral presentation at Two-day national interdisciplinary science conference (NISCON-2015), "**Recent Trends in Chemical and Environmental Sciences**" organized by Sri Pratap College, Srinagar.
6. Presented Poster in "**International Conference on Current challenges in Drug Discovery Research-2015**" at Jaipur-India.
7. 11<sup>th</sup> JK science congress 2015, "**Scientific, Social and Economic dimensions of Climate Change**" organized by University of Kashmir during Oct.12-14, 2015.
8. Attended National Seminar on "**Science and Technology for National Development**" from February11-13, 2017 at University of Allahabad, India.
9. Oral presentation at two-day national seminar, "**National Development Through Science and Technology**" on 25<sup>th</sup> and 26<sup>th</sup> of September-2017 organized by Indian Science Congress Association (ISCA), Srinagar Chapter at University of Kashmir.
10. Participated in two-day **National Workshop** on "**Teaching, Learning & Evaluation in Higher Education: Emerging Trends**" held at Amar Singh College, Cluster University, Srinagar on 20<sup>th</sup> & 21<sup>st</sup> December-2017.
11. Oral Presentation in the 24<sup>th</sup> **ISCB International Conference (ISCBC-2018)** "**Frontier Research in Chemistry and Biology Interface**" held from 11-13<sup>th</sup> January-2018 organized jointly by the Department of Chemistry, Manipal University Jaipur, India & Indian Society of Chemists and Biologists, Lucknow, India.
12. Oral presentation in 2<sup>nd</sup> Meghnad Saha Memorial **International Symposium-Cum-Workshop** on "**Laser Induced Breakdown Spectroscopy**" held at Department of Physics, University Allahabad from 19<sup>th</sup> to 21<sup>st</sup> February-2018.
13. Presented paper entitled, "Synthesis of Rubrifloradilactone C scaffold using ring closing metathesis (RCM) and oxy-Michael addition-based strategy" in **1<sup>st</sup> International conference on recent developments in Sciences, Humanities and Management-2018** held on April 7-18, 2018 at Amar Singh College Cluster University, Srinagar.
14. Presented paper in international conference entitled, **Emerging Tides in Organic and Inorganic Chemistry** held on July 18-19, 2018 at Atlanta, United States of America.

15. Attended 2<sup>nd</sup> **International Award Conference on Research, Analyze, Communicate and Evaluate** on 14<sup>th</sup> of April 2019 at International Centre Goa, Panjim, Goa, India.
16. Attended **National Level One Week Faculty Training and Development Program** with Hands on Training organized by Makk Skills from 28<sup>th</sup> May-2020 to 3<sup>rd</sup> June-2020.
17. Organized one week faculty development programme on “**Use of ICT with special emphasis on LMS in Teaching Learning Process**” from March 07-15, 2022.
18. Participated in One Day **International Multidisciplinary E-conference** on “**Recent Innovations in Science and Technology (RIST-2022)**” organized by Department of Science & IQAC, Late Rajkamalji Bharti Arts, Commerce and Smt. Sushilabai R. Bharti Science College Arni, Dist-Yavatmal Maharashtra on 12<sup>th</sup> April, 2022.
19. Participated in One Day National E-conference on “**Role of Chemical Sciences in Sustainable Development**” organized by Department of Chemistry & IQAC, Indira Gandhi Kala Mahavidyalaya Ralegaon Dist-Yavatmal on 28<sup>th</sup> April, 2022.
20. Attended UGC-sponsored workshop on “**National Skill Qualification Framework (NSQF) in the context of NEP-2020**” organized by the HRDC University of Kashmir on June 27, 2022.
21. Attended UGC-sponsored workshop “**Internalization of Higher Education in the context of NEP-2020**” organized by the HRDC University of Kashmir on June 07, 2022.
22. Attended UGC-sponsored workshop “**Good Academic Research Practices/ Academic Research Integrity in context of NEP-2020**” organized by the HRDC University of Kashmir on June 20, 2022.
23. Participated in 2-day National Conference on “**National Education Policy-2020: preparedness and implementation**” organized by the Department of Higher Education June 27 and 28, 2022.
24. Participated in one day International webinar on “Current Perspectives in Chemical Sciences” on 21<sup>st</sup> November 2022 organized by Department of Chemistry, Industrial Chemistry and IQAC, **ShramjiviShikshan Prasarak Mandal's** Adarsh Mahavidhyalaya, Omerga Tq. Omerga Dist.Osmanabad Maharashtra (India).
25. Participated in two-day NAAC awareness workshop on 12<sup>th</sup> and 13<sup>th</sup> of January 2023 organized by the Govt. Degree College for Women Parade Jammu.
26. Attended **International Webinar on Publishing Journal Articles** on 2<sup>nd</sup> February 2023 organized by UGC HRDC, University of Kashmir.

#### **Orientation/ Refresher courses attended:**

1. Attended Three-Week Orientation Programme from 26<sup>th</sup> of April, 2017 organized by Institute of Advanced Studies in Education, Government College of Education, M.A. Road, Srinagar.
2. Attended TEQQIP-III sponsored Short-Term Course on “Recent Advances in Chemical Sciences (RACS-2019)” organized by the Department of Chemistry, National Institute of Technology, Srinagar during 8<sup>th</sup>-12<sup>th</sup> July-2019.
3. Participated in 2-week Refresher Course on Chemistry held during 19 February–3<sup>rd</sup> March-2020 organized by Human Resource Development Centre, University of Hyderabad, Hyderabad, India.
4. Attended TEQQIP-III sponsored One Week Online Short-Term Course on “Chemistry of Advanced Functional Materials (CAFAM-2020)” organized by the Department of Chemistry, National Institute of Technology, Srinagar during 21<sup>st</sup>- 25<sup>th</sup> September-2020.
5. Successfully completed Online Two-Week refresher course in chemistry organized by Teaching Learning Centre, Ramanujan College, University of Delhi from 29<sup>th</sup> of November to 13<sup>th</sup> of December 2022.
6. Successfully completed Online One-Week Faculty Development Programme On E-content Development organized by Teaching Learning Centre, Ramanujan College, University of Delhi from 19<sup>th</sup> of December to 25<sup>th</sup> of December 2022.
7. Participated in seven days National Level FDP on “NAAC Institutional Accreditation” held from 2<sup>nd</sup> to 10<sup>th</sup> January 2024 organized by IOT Academy Coimbatore, Tamilnadu, India

#### **Editorial Board Member:**

1. Journal of Microbial Pathogenesis (an open access peer-reviewed Journal aimed at exploring cutting-edge research in cellular and molecular mechanisms).
2. Advances in Biomedicine and Pharmacy (an international, bimonthly, peer-reviewed, multidisciplinary open access journal which publishes outstanding and innovative research work).
3. Editorial board member for Evidence-Based Complementary and Alternative Medicine.

**Publications:**

S.No.	Publication
1	<b>A general, flexible, ring closing metathesis (RCM) based strategy for accessing the fused furo[3,2-b]furanone moiety present in diverse bioactive natural products</b> Ali Mohd Lone, Bilal Ahmad Bhat and Goverdhan Mehta Tetrahedron Letters 2013, 54, 5619–5623.
2	<b>Metal free stereoselective synthesis of functionalized enamides</b> Ali Mohd Lone and Bilal Ahmad Bhat Organic and Biomolecular Chemistry 2014, 12, 242–246.
3	<b>Cytotoxicactivity and GC-MS analysis of the constituents of essential oil of <i>Nepeta govaniiana</i> (Wall. Ex Benth) from Jammu and Kashmir, India</b> Bilal Ahmad Dar, Ali Mohd Lone and Mushtaq A. Qurish International Journal of Herbal Medicine 2014, 2, 58-60.
4	<b>Synthesis and biological evaluation of new triazolyl analogues derived from 1-oxaspiro[4.4]nona-3,6-dien-6-ylmethanol</b> Ali Mohd Lone and Wajaht A. Shah Journal of Applicable Chemistry 2014, 3, 513-520.
5	<b>A concise synthesis of Hagen’s gland lactones</b> Ali Mohd Lone, Bilal Ahmad Bhat, Wajaht Amin Shah and Goverdhan Mehta Tetrahedron Letters 2014, 55, 3610-3612.
6	<b>Time efficient Baylis-Hillman reaction on steroidal nucleus of withaferin-A to synthesize anticancer agents</b> Bilal Ahmad Dar, Ali Mohd Lone and Mushtaq Ahmad Qurishi International Journal of Technical Research and Applications 2015, 3, 2320.
7	<b>Studies on structure elucidation of Aconitum alkaloids using LC-ESI-MS technique</b> Bilal Ahmad Dar, Ali Mohd Lone, Rafiq Ahmad Khan and Mushtaq Ahmad Qurishi American Journal of Ethnomedicine 2015, 2, 110-112.
8	<b>Promise of retinoic acid-triazolyl derivatives in promoting differentiation of neuroblastoma cells</b> Ali Mohd Lone, Nawab John Dar, Abid Hamid, Wajaht Amin Shah, Muzamil Ahmad and Bilal A. Bhat ACS Chemical Neuroscience 2016, 7, 82–89.
9	<b>Synthesis and screening of ursolic acid-benzylidene derivatives as potential anti-cancer agents</b> Bilal Ahmad Dar, Ali Mohd Lone*, Wajaht Amin Shah and Mushtaq Ahmad Qurishi European Journal of Medicinal Chemistry 2016, 111, 26-32.
10	<b>Double Hydroamination of alkynes via PTC and Microwave activated Diastereoselective Synthesis of 2,3-dihydroimidazo[1,2-a]pyridine in an Aqueous Media</b> Malik A. Waseem, Ali Mohd Lone, Farah Ibad, Afshan Ibad, Vijay B. Yadav, Khursheed Ansari, Bashir Ahmad Shairjogrey, Geeta Watal and I. R. Siddiqui Journal of Heterocyclic Chemistry 2017, 54, 2733-2739.
11	<b>A green access to tetrahydro-1H-pyrano[2,3-d]pyrimidines: Visible light triggered and ethyleneglycol mediated multi component one pot process</b> Afshan Ibad, Malik A. Waseem, Farah Ibad, Khursheed Ansari, Ali Mohd Lone, Geeta Watal and I. R. Siddiqui Chemistryselect 2017, 17, 4587–4592.

12	<p><b>Synthesis, biological evaluation and structural-activity relationship of 2-phenylaminomethylene-cyclohexane-1,3-diones as specific antituberculosis agents</b></p> <p>Ali Mohd Lone, Muzafar Ahmad Rather, BismaTeli, Zubair Shanib Bhat, Paramjeet Singh, Mubashir Maqbool, Bashir Ahmad Shairgojray, Mohd Jamal Dar, Shajrul Amin, Syed Khalid Yousuf, Shajrul Amin, Bilal Ahmad Bhat and Zahoor Ahmad Parry MedChemComm20 17, 8, 2133-2141.</p>
13	<p><b>Synthesis and evaluation of 2-(((2-hydroxyphenyl)amino)methylene)-5,5-dimethylcyclohexane-1,3-dione derivatives as antimicrobial agents</b></p> <p>Ali Mohd Lone*, Muzafar Ahmad Rather, Irfan Ahmad Qadiri Microbial pathogenesis 2018, 114, 431-435.</p>
14	<p><b>Siteselective [bmIm]OH catalyzed C-C bond functionalization under green conditions</b></p> <p>Malik A. Waseem, Ali Mohd Lone*, Khurshed Ansari and I. R. Siddiqui Tetrahedron Letters 2018, 59, 654-657.</p>
15	<p><b>Catalyst free selective monobenzylation of diols with benzoyl cyanide: A robust and regioselective strategy</b></p> <p>Malik A. Waseem, Ali Mohd Lone, BismaTeli and Bilal Ahmad Bhat Chemistryselect 2018, 3, 828-831.</p>
16	<p><b>Preparation and evaluation of antibacterial potential of Pithecellobium dulce root extract against Gram positive and Gram-negative bacteria</b></p> <p>Muneer Ahmad Bhat, Rayees Ahmad Malik, Poonam Prakash and Ali Mohd Lone* Microbial Pathogenesis 2018, 116, 49-53.</p>
17	<p><b>In vitro antimycobacterial activity of 2-(((2-hydroxyphenyl)amino)methylene)-5,5-dimethylcyclohexane-1,3-dione: A new chemical entity against Mycobacterium tuberculosis</b></p> <p>Muzafar Ahmad Rather, Zubair Shanib Bhat, Ali Mohd Lone, Mubashir Maqbool, Shajrul Amin, Bilal Ahmad Bhat, Zahoor Ahmad International Journal of Antimicrobial Agents 2018 ,52(2), 265-268.</p>
18	<p><b>Oscimum sanctum extract inhibits growth of Gram positive and Gram-negative bacterial strains</b></p> <p>Tahirah Khaliq, Malik A Waseem, Ali Mohd Lone*, Qazi Parvaiz Hassan Microbial Pathogenesis 2018, 118, 211-213.</p>
19	<p><b>Dimedone as the Source for Antimicrobial Agents; Synthesis and Anti-Microbial Property of Compounds Obtained Using Dimedone as the Precursor</b></p> <p>Ali Mohd Lone*, Muneer Ahmad Bhat 2020, 9(4), 514-530</p>
20	<p><b>In vitro potency of 2-(((2-hydroxyphenyl)amino)methylene)-5,5-dimethylcyclohexane-1,3-dione against drug-resistant and non-replicating persisters of Mycobacterium tuberculosis</b></p> <p>Muzafar Ahmad Rather, Zubair Shanib Bhat, Ali Mohd Lone, Mubashir Maqbool, Bilal Ahmad Bhat, Zahoor Ahmad Journal of Global Antimicrobial Resistance 2021 ; 25:202-208.</p>
21	<p><b>Role of Triazoles in the Field of Tuberculosis Treatment: Synthetic Approaches and Biological Investigation</b></p> <p>Rukhsana Ahad, Prachi Saxena, Ali Mohd Lone* Journal of Applicable Chemistry 2022, 11(5):790-824</p>
22	<p><b>Synthesis and anti-tuberculosis activity of hexahydro-benzo[d][1,3]thiazin-5(6H)-one/hexahydro-benzo[d][1,3]thiazin-5-ylideneamino)-methanethiols</b></p> <p>Muneer Ahmad Bhat, Saad H. Alotaibi, Ponam Prakash, Ali Mohd Lone* Latin American Journal of Pharmacy 2023, 42(1), 162-168</p>

23	<p><b>Preventive effect of 3,3'-dimethoxy-4,4'-dihydroxy-stilbene triazole against Alzheimer's disease by inhibition of neuronal apoptosis</b>  <a href="#">Qi Li</a>, <a href="#">Saad H. Alotaibi</a>, <a href="#">Yan Wei</a>, <b>Ali Mohd Lone*</b>            ChemistrySelect            2023, 8(1), <a href="https://doi.org/10.1002/slct.202204087">https://doi.org/10.1002/slct.202204087</a></p>
24	<p><b>Synthesis and evaluation of antibacterial potential of 2-[(5-Bromo-4-fluoro-2-hydroxy-phenylamino)-methylene]-5,5-dimethyl-cyclohexane-1,3-dione against Gram positive and Gram negative bacteria</b>            Nisar Ahmad Lone, <b>Ali Mohd Lone*</b>            Journal of Applicable Chemistry            2023, 12(2), 85-91.</p>
25	<p><b>Synthesis and anti-tuberculosis activity of 2-[(2-Hydroxy-4-trifluoromethyl-phenylamino)-methylene]-cyclohexane-1,3-dione</b>            RukhsanaAhad , Nisar Ahmad Lone, Arshid Iqbal Bhat, <b>Ali Mohd Lone*</b>            Journal of Applicable Chemistry            2023, 12(2), 67-72.</p>

#### Books/Chapters:

S.No.	Publication
1	<p><b>Enamides: Occurrence, importance, methods for synthesis and applications</b>  <b>Ali Mohd Lone</b>            Lambert/Germany; ISBN:978-3-659-85094-3,2015.</p>
2	<p><b>Art and Science used for synthesis of Hagen's gland lactones</b>  <b>Ali Mohd Lone</b>            Lambert/Germany; ISBN:978-3-330-32122-9,2017.</p>
3	<p><b>Quality Evaluation of Foods</b>  <b>Ali Mohd Lone</b>            Aleema International Publishers            ISBN: 978-93-93590-15-2</p>

#### Other Experience

1. Coordinator of Internal Quality Assurance Cell (IQAC), National Assessment and Accreditation Council (NAAC) Steering committee
2. Co-Convener of College Development Committee
3. Coordinator Online teaching
4. Coordinator of Institutional Website
5. Member of College Advisory Committee
6. Member Scholarship and Financial Aid Committee
7. Member of printing /publication and magazine committee
8. Convener college transport committee
9. Health care committee
10. Internal Audit/ Income Tax and Physical verification committee.

