

# Dr. AHMAD ALI

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https://mu.ac.in/wp-content/uploads/2022/09/Dr-Ahmad-Ali-MolBiochemLab-UDLSc.pdf

#### **EMPLOYMENNT HISTORY AND EXPERIENCE**

- Presently working as Associate Professor in the University Department of Life Sciences, University of Mumbai, Mumbai since April 2025
- Worked as **Assistant Professor** in the University Department of Life Sciences, University of Mumbai, Mumbai from September 2012 to April 2025
- Worked as **Lecturer** in the Department of Biotechnology, National Institute of Pharmaceutical Education and Research **(NIPER)**, Hajipur, Bihar from June 2010 to August 2012.
- Worked as **Lecturer** in the Department of Biotechnology, Thakur College of Science & Commerce (University of Mumbai) from June 2007 to June 2010.
- Worked as **Research-cum-Teaching Assistant** in the Department of Life Sciences, University of Mumbai, Mumbai, India from November 2005 to February 2007.
- Worked as **Project Associate** for three years on a University Grants Commission, Government of India major research project titled "**Molecular Biology of Nitrogen Metabolism in Crop Plants**" under Dr. N. Raghuram, Dept. of Life Sciences, University of Mumbai, Mumbai from September 1999 to July 2002.

#### RESEARCH ACTIVITY

# Research Area

Biochemistry and Pharmacognosy

#### Research Interest

- Oxidative stress, Metabolic disorders
- Non-enzymatic Glycosylation (Glycation), DNA and protein damage
- Bioactivities of natural products from plant and cyanobacteria
- Nanoparticles and their bioactivity

#### **Research Projects**

- ONGOING
  - Title: Drug proving studies, mechanistic insight and development of novel delivery systems of UNIM-H and UNIM-R for effective treatment of arthritis
    - Funding agency: Central Council Research in Unani Medicine (CCRUM),
       Ministry of AYUSH, Govt. of India

## COMPLETED

- Title: Antiglycating properties of Nigella sativa seed extracts
  - o Funding agency: University of Mumbai, Mumbai (2018-19)
- Title: Study of glycation of proteins by sweeteners
  - Funding Agency: Research Society for the study of Diabetes in India (RSSDI)
- Title: Studies on Non-enzymatic Glycosylation of DNA and Proteins by sugars and dicarbonyls (Start-up grant)
  - o Funding Agency: University Grants Commission (UGC), New Delhi
- Title: "In vitro study on the glycation of DNA by sweeteners"
  - o Funding agency: University of Mumbai, Mumbai (2015-16)
- Title: In vitro study on non-enzymatic glycosylation of protein and DNA
  - o Funding Agency: University of Mumbai, Mumbai (2013-14)

#### **Research Students**

- Ph. D. student Completed 03; Enrolled 04
- Junior Research Fellows 02
- Guided 62 students of MSc Part II Life Sciences for their Project work and presently guiding four students of M. Sc. for their Project work.
- Guided two M. S. Pharm. Biotechnology project students at NIPER

# **PUBLICATIONS**

- 1. Balyan, P., Farah, M. A., Al-Anazi, K. M., Kumar, C. S., Spinu, M., **Ali, A.** 2025. Methylglyoxal Trapping Action of *Nigella sativa* L. Seed Extract and its Bioactive Constituent Thymoquinone. **Natural Product Communications.** 20(7). http://dx.doi.org/10.1177/1934578X251339353
- 2. Paramanya, A., Ola, M. S., & **Ali, A.** 2025. Biophysical Insights into Phycocyanin Binding and Antiglycation Activity with Bovine Serum Albumin. **Natural Product Communications**, 20(4), <a href="http://dx.doi.org/10.1177/1934578X251333966">http://dx.doi.org/10.1177/1934578X251333966</a>
- 3. Abid, A., Mekhadmi, N., Mlik, R., Bentahar, A., Bireche, K., Frih, B., Boussebaa, W., Mouane, A., Cherrada, N., Sanches Silva, A., Dekmouche, M., Bechki, L, Al-Anazi, K. M., Farah, M. A., **Ali, A.** 2025. Unveiling the Therapeutic Potential of *Atractylis aristata* Batt. Aqueous Extract: Anti-inflammatory, Antioxidant, Antibacterial, Sedative Activities & Phytochemical Profiling. **ChemistryOpen**, e202500056. https://doi.org/10.1002/open.202500056
- 4. Kumar, D., Al-Anazi, K. M., Farah, M. A., & **Ali, A.** 2025. Role of Ascorbic Acid and Pyridoxal-5-Phosphate in the Prevention of Glucose-Induced Damage of Protein and

- Khan, S., Kumar, D., Ali, A., & Sachar, S. 2025. Influence of surfactants on association of cadmium sulfide nanoparticles with biomolecules. Journal of Molecular Liquids, 422:127148. https://doi.org/10.1016/j.mollig.2025.127148
- Touahria, T., Zahnit, W., D'Urso, G., Khattabi, L., Lauro, G., Chini, M.G., Bifulco, G., Casapullo, A., Al-Anazi, K.M., Farah, M.A. Ali, A. 2025. Unveiling the potential biological mechanism of Pergularia tomentosa extracts chemical by chromatography-electrospray ionisation-high-resolution Tandem Mass Spectrometry, in-Vitro and in-Vivo pharmacological studies. Chemistry & Biodiversity. e202403006. https://doi.org/10.1002/cbdv.202403006
- Djilali, K., Maachi, R., Danish, M., Lekmine, S., Hadjadj, M., Ait Mesbah, Z., Benslama, O., Tahraoui, H., Ola, M. S., Ali, A., Zhang, J., & Amrane, A. 2025. A Novel Mobile Phase for Green Chromatographic Determination of Haloperidol: Application to Commercial Pharmaceutical Products and Forced Degradation Studies. Processes, 13(1), 260. https://doi.org/10.3390/pr13010260
- Paramanya, A., Abdoul-latif, F. M., & Ali, A. 2024. Analysis of antioxidant, antityrosinase and antiglycating properties of a blue-green algae based skin cream. Annals of Phytomedicine, 13(2), 621-630. http://dx.doi.org/10.54085/ap.2024.13.2.63
- Goudiil, S., Boussekine, S., Goudiil, S., Goudiil, H., Yilmaz, M. A., Ola, M. S., Ali, A., & Cakir, O. 2024. Investigation of Algerian Crataegus monogyna Jacq Phenolic Compounds (Using LC-ESI-MS/MS Analysis, Antioxidant Activity, and Enzyme Inhibition) and Their Potential Implications for Food and Nutraceutical Applications. Antioxidants, 13(11), 1350. https://doi.org/10.3390/antiox13111350
- Bensaci, C., Belguidoum, M., Khattabi, L., Abid, A., Touahria, T., Zahnit, W., Harchaoui, L., Rahmani, Z., Boussebaa, W., Laichi, Y., Belfar, A., Farah, M., Al-Anazi, K. & Ali, A. 2024. Drimia maritima flowers as a source of biologically potent components: Optimization of bioactive compound extractions, isolation, UPLC-ESI-MS/MS, and pharmacological properties. Chemistry, 22(1), Open 20240087. https://doi.org/10.1515/chem-2024-0087
- Balyan, P., Farah, M. A., Al-Anazi, K. M., & Ali, A. 2024. Monosaccharide-11. Mediated Glycoxidation of Bovine Serum Albumin and Its Prevention by Nigella sativa. ACS omega, 9(40), 41722-41731. https://doi.org/10.1021/acsomega.4c05913
- Chafaa, N., Mosbah, C., Khattabi, L., Malaoui, K., Zahnit, W., Smaali, M. E. A., 12. Houri, F., Medfouni, Y., Al-Anazi, K. M., & Ali, A. 2024. Algerian Prickly Pear Seed By-Products: Fatty Acids Composition, Antioxidant, Enzyme Inhibitory Activities towards Tyrosinase, Urease, a-Amylase, and Cholinesterase, along with the Ability to Protect from Thermal Protein Denaturation. Pharmaceuticals, 17(9), 1145. https://doi.org/10.3390/ph17091145
- Gherdaoui, D., Yahoum, M. M., Toumi, S., Lekmine, S., Lefnaoui, S., Benslama, O., Bouallouche, R., Tahraoui, H., Ola, M. S., Ali, A., Zhang, J., & Amrane, A. 2024. Elucidating Chiral Resolution of Aromatic Amino Acids Using Glycopeptide Selectors: A Combined Molecular Docking and Chromatographic Study. International Journal of Molecular Sciences, 25(16), 9120. <a href="https://doi.org/10.3390/ijms25169120">https://doi.org/10.3390/ijms25169120</a>
- Abdoul-Latif, F. M., Ainane, A., Achenani, L., Ali, A. M., Mohamed, H., Ali, A., Jutur, P. J., Ainane, T. 2024. Optimization of fucoxanthin production from Isochrysis galbana microalgae from Djibouti: correlation of antioxidant potential and in silico study. Marine Drugs. 22(8), 358. https://doi.org/10.3390/md22080358

- 15. Lekmine, S., Benslama, O., Kadi, K., Brik, A., Djeffali, O., Ounissi, M., Slimani, M., Ola, M.S., Eldahshan, O.A., Martín-García, A.I., **Ali, A.** 2024. Preliminary Investigation of Astragalus arpilobus subsp. hauarensis: LC-MS/MS Chemical Profiling, In Vitro Evaluation of Antioxidant, Anti-Inflammatory Properties, Cytotoxicity, and In Silico Analysis against COX-2. **Antioxidants**, 13(6), 654. https://doi.org/10.3390/antiox13060654
- 16. Paramanya, A., Abiodun, A. O., Ola, M. S., **Ali, A**. 2024. Antiglycating Effects of *Spirulina platensis* Aqueous Extract on Glucose-Induced Glycation of Bovine Serum Albumin. **Chemistry & Biodiversity**, e202400281. <a href="https://doi.org/10.1002/cbdv.202400281">https://doi.org/10.1002/cbdv.202400281</a>
- 17. Pradhan, Y., Devkota, H. P., **Ali, A.** 2024. Potential Role of Medicinal Plants and their Phytochemicals Against Plaque Forming Oral Microbiota. Biosciences **Biotechnology Research Asia**, 21(2): 371-389. <a href="http://dx.doi.org/10.13005/bbra/3232">http://dx.doi.org/10.13005/bbra/3232</a>
- 18. Lefter, R., Balyan, P., Balmus, I.-M., Ech-Chahad, A., **Ali, A.**, Ciobica, A., Petroaie, A.D., Halitchi, G., Novac, B., Ionescu, C., Kamal, F. Z. 2024. Polysaccharides and Lectins: A Natural Complementary Approach against the SARS-CoV-2 Pandemic. **Microbiology Research**. 15:525-549. https://doi.org/10.3390/microbiolres15020035
- 19. Lekmine, S., Benslama, O., Tahraoui, H., Ola, M. S., Laouani, A., Kadi, K., Martín-García, A.I., **Ali, A.** 2024. Anti-Cholinergic Effects of the Phenolic Extract from the Astragalus crenatus Plant: A Computational and Network Pharmacology Study" **Pharmaceuticals** 17(3): 348. <a href="https://doi.org/10.3390/ph17030348">https://doi.org/10.3390/ph17030348</a>
- 20. Paramanya, A., Abiodun, A. O., Ola, M. S., & **Ali, A.** 2024. Enhancing the quality and antioxidant capacity of phycocyanin extracted from *Spirulina platensis* PCC 7345: A quality-by-design approach. **Arabian Journal of Chemistry**, 17(3), 105653. <a href="https://doi.org/10.1016/j.arabjc.2024.105653">https://doi.org/10.1016/j.arabjc.2024.105653</a>
- 21. Lekmine, S., Benslama, O., Kadi, K., Martín-García, A. I., Ola, M. S., Yilmaz, M. A., & **Ali, A.** 2024. The therapeutic potential of *Hyoscyamus niger*-derived compounds: Targeting ovarian cancer through antioxidant activity and EGFR tyrosine kinase inhibition. **Journal of King Saud University-Science**, 36(3), 103103. http://dx.doi.org/10.1016/j.jksus.2024.103103
- 22. Arif, R., Akrema, Pulaganti, M., Rubab, U., **Ali, A.,** Khan, M. S., Rahis Uddin. 2024. Evaluation of in vitro antibacterial, DNA binding, DNA damage, DFT and antioxidant studies of aminobenzaldehyde-based heterocyclic Schiff base derivatives. **Chemical Papers.** 78, 2867–2883. https://doi.org/10.1007/s11696-023-03277-2
- 23. Bamne, F., Shaikh, N., Momin, M., Khan, T., **Ali, A.** 2023. Phytochemical analysis, antioxidant and DNA nicking protection assay of some selected medicinal plants. **Annals of Phytomedicine.** 12(2):406-413. <a href="http://dx.doi.org/10.54085/ap.2023.12.2.50">http://dx.doi.org/10.54085/ap.2023.12.2.50</a>
- 24. Khan, S. M., Balyan, P. **Ali, A.,** Sharma, S., Sachar, S. 2023. Exploring the effect of surfactants on the interactions of manganese dioxide nanoparticles with biomolecules. **Journal of Biomolecular Structure and Dynamics**. (Accepted; Article ID: TBSD 2283157). <a href="https://doi.org/10.1080/07391102.2023.2283157">https://doi.org/10.1080/07391102.2023.2283157</a>
- 25. Bozorgi, M., Iranzadasl, M., Ali, A., Memariani, Z. 2023. Dermatological effects of *Pistacia species*: A systematic review. **Journal of Herbmed Pharmacology**. 13(1):28-42. <a href="http://dx.doi.org/10.34172/jhp.2024.48163">http://dx.doi.org/10.34172/jhp.2024.48163</a>
- 26. Shahu, R., Kumar, D., **Ali, A.,** Tungare, K., Al-Anazi, K.M., Farah, M.A., Jobby, R., Jha, P. 2023. Unlocking the Therapeutic Potential of Stevia rebaudiana Bertoni: A Natural Antiglycating Agent and Non-Toxic Support for HDF Cell Health. **Molecules**. 28, 6797. https://doi.org/10.3390/molecules28196797

- 27. Balyan, P., & **Ali**, **A**. 2023. Anthraquinone and coumarin as potential natural products against human coronavirus strain. **Acta Pharmaceutica Sciencia**, 62(3): 498-514. http://dx.doi.org/10.23893/1307-2080.APS6231
- 28. Lekmine, S., Benslama, O., Kadi, K., Martín-García, A.I., Yilmaz, M.A., Akkal, S., Boumegoura, A., Alhomida, A.S., Ola, M.S., **Ali, A.** 2023. LC/MS-MS Analysis of Phenolic Compounds in Hyoscyamus albus L. Extract: In Vitro Antidiabetic Activity, In Silico Molecular Docking, and In Vivo Investigation against STZ-Induced Diabetic Mice. **Pharmaceuticals**, 16, 1015. <a href="https://doi.org/10.3390/ph16071015">https://doi.org/10.3390/ph16071015</a>
- 29. Paramanya. A., Farah, M. A., Al-Anazi, M. A., Devkota, H. P., **Ali, A.** 2023. Exploring the Potential of *Spirulina (Arthrospira platensis)* Aqueous Extract in Preventing Glycation of Hemoglobin and pBR322 Plasmid. **Pharmacognosy Magazine**. 19(3):581-591 https://doi.org/10.1177/09731296231170959
- 30. Chaudhari, F. Balyan, P. **Ali, A.** 2023. Mechanisms and therapeutic opportunities in erectile dysfunction for advanced glycation end products (AGEs). **Journal of Experimental and Clinical Medicine.** 40(2):390-400. <a href="http://dx.doi.org/10.52142/omujecm.40.2.35">http://dx.doi.org/10.52142/omujecm.40.2.35</a>
- 31. **Ali, A.,** Paramanya, A., Poojari, P., Arslan-Acaroz, D., Acaroz, U., Kostić, A. Ž. 2023. The Utilization of Bee Products as a Holistic Approach to Managing Polycystic Ovarian Syndrome-Related Infertility. **Nutrients**, 15(5), 1165. http://dx.doi.org/10.3390/nu15051165
- 32. Khan, S. M., Bhatkalkar, B., Kumar, D., **Ali, A.,** Sharma, S., Sachar, S. 2023. Surfactant influences the interaction of copper sulfide nanoparticles with biomolecules, **Journal of Molecular Liquids**, 369. <a href="https://doi.org/10.1016/j.molliq.2022.120881">https://doi.org/10.1016/j.molliq.2022.120881</a>
- 33. Kumar, D., **Ali, A.** 2022. Effect of Different Artificial Sweeteners on Protein Glycation. **Acta Biologica Szegediensis**. 66 (2):132-138. <a href="http://dx.doi.org/10.14232/abs.2022.2.132-138">http://dx.doi.org/10.14232/abs.2022.2.132-138</a>
- 34. Balyan, P., Ola, M.S., Alhomida, A.S., **Ali, A.** 2022. D-Ribose-Induced Glycation and Its Attenuation by the Aqueous Extract of Nigella sativa Seeds. **Medicina**. 58, 1816. https://doi.org/10.3390/medicina58121816
- 35. Balyan, P., Akhter, J., Kumar, P., **Ali, A.** 2022. Traditional and modern usage of *Nigella sativa L*. (Black cumin). **Annals of Phytomedicine**, 11(2):255-265. http://dx.doi.org/10.54085/ap.2022.11.2.28
- 36. Kamal, F. Z., Lefter, R., Mihai, C.-T., Farah, H., Ciobica, A., **Ali, A.**, Radu, I., Mavroudis, I., Ech-Chahad, A. 2022. Chemical composition, antioxidant and antiproliferative activities of *Taraxacum officinale* essential oil. **Molecules**, 27, 6477. https://doi.org/10.3390/molecules27196477
- 37. Khan, J., Kumar, D., **Ali, A.** 2022. Molecular insight into the antiglycating and antiaggregating potential of ferulic acid with BSA. **Monatshefte fuer Chemie/Chemical Monthly.** 153:1277–1285 <a href="https://doi.org/10.1007/s00706-022-02983-z">https://doi.org/10.1007/s00706-022-02983-z</a>
- 38. Eruygur, N., Ayaz, F., Bağci, Y., Ayyildiz, H. F., Cağil, E. M., Malik, P., **Ali, A.** 2022. Investigation of phenolic compounds, in vitro antioxidant and enzyme inhibition activities of methanol and aqueous extracts of different parts of *Glaucosciadium cordifolium*. **Botanica Serbica** 46(2): 239-252. https://doi.org/10.2298/BOTSERB2202239E
- 39. Khan, J., Rasmi, Y., Kırboğa, K.K. **Ali, A.,** Rudrapal, M., Patekar, R. R. 2022. Development of gold nanoparticle-based biosensors for COVID-19 diagnosis. **Beni**-

- Suef University Journal of Basic Applied Sciences. 11, 111. https://doi.org/10.1186/s43088-022-00293-1
- 40. Mistry, K., Sardar, S. D., Alim, H., Patel, N., Thakur, M., Jabbarova, D., **Ali, A.** 2022. Plant based proteins: sustainable alternatives. **Plant Science Today.** 9(4):820-8. <a href="http://dx.doi.org/10.14719/pst.1652">http://dx.doi.org/10.14719/pst.1652</a>
- 41. Kumar, D., Shah, N., Al-Anazi, K. M., Farah, M. A., Ali, M. A., Lee, J., **Ali, A.** 2022. Potential role of *Tribulus terrestris* fruit extract in inhibition of advanced glycation end products. **Pharmacognosy Magazine**. 18:341-7. http://dx.doi.org/10.4103/pm.pm 589 21
- 42. Balyan, P., **Ali**, **A.** 2022. Comparative analysis of the biological activities of different extracts of *Nigella sativa* L. seeds. **Annals of Phytomedicine.** 11(1):577-587. <a href="http://dx.doi.org/10.54085/ap.2022.11.1.67">http://dx.doi.org/10.54085/ap.2022.11.1.67</a>.
- 43. Padgaonkar, A., Paramanya, A., Poojari, P., Ali, A. 2022. Metal tolerance of *Spirulina platensis*. **Mediterranean Agricultural Sciences**, 35 (3), 135-139. <a href="http://dx.doi.org/10.29136/mediterranean.1097816">http://dx.doi.org/10.29136/mediterranean.1097816</a>
- 44. Tiwari, A., Chaskar, J., **Ali, A.,** Arivarasan, V. K., Chaskar, A. C. 2022. Role of Sensor Technology in Detection of the Breast Cancer. **BioNanoScience.** 12:639–659 <a href="https://doi.org/10.1007/s12668-021-00921-7">https://doi.org/10.1007/s12668-021-00921-7</a>
- 45. Ahmad, F., Siddiqui, S. A., Sundari, R. S., Ahmad, J., Shah, S. M. A., Khan, M. R., Tarigan, R. A. N., Nagdalian, A., Mehdizadeh, M., Moazzem, M. S., **Ali, A.**, Fidan, H., Kasulla, S., Malik, S. J., Blinov, A., Faziili, M. A., Kiptum, C. K., Ibrahim, S. 2022. Assessing Integrated Nitrogen and Planting Density on Growth, Yield Component and Financial Analysis of Maize Crops (Zea Mays). **Journal of Hygienic Engineering and Design.** 37:125-134
- 46. Sundari, R. S., Arshad, A., Siddiqui, S. A., Khan, M. K., Heryadi, Y., Ahmad, F., Kusnandar, H. F., Tarigan, R. A. N., Nagdalian, A., Blinov, A., Mehdizadeh, M., Moazzem, M. S., **Ali, A.**, Kasulla, S., Malik, S. J., Kiptum, C. K., Ibrahim, S. 2022. Industrialization Fed Labor Migration in the Countryside: Tasikmalaya's Transition from Agriculture to The Crispy Snacks Industry. **Journal of Hygienic Engineering and Design. 37:135-143**
- 47. Poojari, P., Padgaonkar, A., Paramanya, A., **Ali, A.** 2022. Compendium of polycystic ovarian syndrome and its relevance in glycation and diabetes. **Journal of Experimental and Clinical Medicine**. 39 (1): 256-268. <a href="https://doi.org/10.52142/omujecm.39.1.49">https://doi.org/10.52142/omujecm.39.1.49</a>
- 48. Boubakeur, B., Khadem, H., Drabo, M. S., Ali, A., Meddah, A. T. 2021. Probiotic properties and exopolysaccharides production of Stretptococcus thermophilus CNRZ 447 and Enterococcus durans NCBI 53345. **Ukrainian Food Journal**. 10 (4): 853 872. <a href="http://dx.doi.org/10.24263/2304-974X-2021-10-4-17">http://dx.doi.org/10.24263/2304-974X-2021-10-4-17</a>
- 49. Yasir, M., **Ali, A.**, Ahmad. I., Khan, N., Ashraf, M. Z. 2021. Effect of herbal formulation Sharbat Ahmad Shahi on serum BDNF level in mild to moderate cases of depressive disorder. **Journal of Complementary Medicine Research.** 12 (4), 265-270. <a href="https://doi.org/10.5455/jcmr.2021.12.04.39">https://doi.org/10.5455/jcmr.2021.12.04.39</a>
- 50. Khan, J., Rudrapal, M., Bhat, E. A., **Ali, A.**, Alaidarous, M., Alshehri, B., Banwas, S., Ismail, R., Egbuna, C. 2021. Perspective Insights to Bio-Nanomaterials for the Treatment of Neurological Disorders. **Frontiers in Bioengineering Biotechnology.** 9:724158. doi: <a href="https://doi.org/10.3389/fbioe.2021.724158">https://doi.org/10.3389/fbioe.2021.724158</a>
- 51. Bhatkalkar, S. G., Kumar, D., **Ali, A.,** Sachar, S. 2021. Influence of surfactants on biomolecular conjugation of magnetic nanoparticles. **Journal of Biomolecular**

- **Structure and Dynamics**. 40(23): 12895–12907. https://doi.org/10.1080/07391102.2021.1977701
- 52. Rubab, U., Kumar, D., Farah, M. A., Al-Anazi, K. M., Ali, M. A., **Ali, A.** 2021. Inhibitory Roles of *Nigella sativa* seed extracts on in vitro glycation and aggregation. **Pharmacognosy Magazine**. 17(6): 220-224. http://doi.org/10.4103/pm.pm\_604\_20
- 53. Chougle, S., Kumar, D., Khan, A., Zehra, S., **Ali, A.** 2021. Treatment of Alzheimer's Disease by Natural Products. **Journal of Experimental and Clinical Medicine**, 38 (4), 634-644. http://doi.org/10.52142/omujecm.38.4.42
- 54. Zahra, K. F., Lefter, R., **Ali, A.,** Abdellah, E., Trus, C., Ciobica, A., Timofte, D. 2021. The Involvement of the Oxidative Stress Status in Cancer Pathology: A Double View on the Role of the Antioxidants", **Oxidative Medicine and Cellular Longevity**, vol. 2021, Article ID 9965916, 25 pages. https://doi.org/10.1155/2021/9965916
- 55. Padgaonkar, A., Paramanya, A., Poojari, P., **Ali, A.** 2021. Current insights on wastewater treatment and application of Spirulina platensis in improving the water quality. **Marine Science and Technology Bulletin**, 10(3):285-294. <a href="https://doi.org/10.33714/masteb.972128">https://doi.org/10.33714/masteb.972128</a>
- 56. **Ali, A.,** Shahu, R., Balyan, P., Kumari, S., Ghodmare, R., Jobby, R., Jha, P. 2021. Antioxidation and Antiglycation Properties of a Natural Sweetener: *Stevia rebaudiana*. **Sugar Tech**, 24: 563–575. <a href="https://doi.org/10.1007/s12355-021-01023-0">https://doi.org/10.1007/s12355-021-01023-0</a>
- 57. More, T. A., Shaikh, Z., **Ali, A.** 2021. Artificial Sweeteners and their Health Implications: A Review. **Bioscience Biotechnology Research Asia.** 18(2): 227-237. <a href="http://dx.doi.org/10.13005/bbra/2910">http://dx.doi.org/10.13005/bbra/2910</a>
- 58. Kumar, D., Desa, D., Chougle, Bhatkalkar, S. G., Sachar, S., Kumar, C. S., **Ali, A.** 2021. Evaluation of the antiglycating potential of thymoquinone and its interaction with BSA, **Journal of Biomolecular Structure and Dynamics**, 40(18): 8455–8463 <a href="https://doi.org/10.1080/07391102.2021.1912642">https://doi.org/10.1080/07391102.2021.1912642</a>
- 59. Mayekar, V., **Ali, A.**, Alim, H., Patel, N. 2021. A review: Antimicrobial activity of the medicinal spice plants to cure human disease. **Plant Science Today.** 8(3): 629–646. https://doi.org/10.14719/pst.2021.8.3.1152
- 60. Khan, A. S., Anavkar, A., **Ali, A.**, Patel, N., Alim, H. 2021. A Review on Current Status of Riverine Pollution in India. **Bioscience Biotechnology Research Asia.** 18(1):9-22. <a href="https://bit.ly/3tjwU0m">https://bit.ly/3tjwU0m</a>
- 61. Balyan, P., Shinde, S., **Ali, A.** 2021. Potential activities of nanoparticles synthesized from Nigella sativa L. and its phytoconstituents: An overview, **Journal of. Phytonanotechnology Pharmaceutical Sciences.** 1(2):1-9. <a href="http://dx.doi.org/10.21276/jpps.2021.1.2.1">http://dx.doi.org/10.21276/jpps.2021.1.2.1</a>
- 62. Shaikh, Z., Sundarrajan, P., Bhagtaney, L., Zehra, S., Zahra, F. K., Badra, B., Yigit, B. Y., Patel, N., Alim, H., Khan, J., **Ali, A.** 2021. Applicability of vitamins in the management of COVID-19: An overview. **Annals of Phytomedicine.** 10 Special Issue 1 (COVID-19): \$65-\$76. DOI: <a href="http://dx.doi.org/10.21276/ap.covid19.2021.10.1.7">http://dx.doi.org/10.21276/ap.covid19.2021.10.1.7</a>
- 63. Bhat, A. E., khan, J., Sajjad, N., **Ali, A.,** Aldakeel, F. M., Mateen, A., Alqahtani, M. S., Rabbani, S. 2021. SARS-CoV-2: Insight in genome structure, pathogenesis and viral receptor binding analysis— An Updated Review. **International Immunopharmacology**, 95:107493. https://doi.org/10.1016/j.intimp.2021.107493
- 64. Saraf, A., Padave, O., Sharma, S., Jha, P., Jobby, R., **Ali, A.**, Sachar, S. 2021. Low-frequency ultrasound responsive release and enhanced antibacterial efficacy of sulfamethoxazole decked silver nanocomposite. **Polyhedron**. 195, 114945. <a href="https://doi.org/10.1016/j.poly.2020.114945">https://doi.org/10.1016/j.poly.2020.114945</a>

- 65. Jabborova D, Enakiev Y, Sulaymanov K, Kadirova D, **Ali A**, Annapurna K. 2021. Plant growth promoting bacteria Bacillus subtilis promote growth and physiological parameters of Zingiber officinale Roscoe. **Plant Science Today**. 8(1): 66-71. https://doi.org/10.14719/pst.2021.8.1.997
- 66. Kumar, D. Bhatkalkar, S. Sachar, S., **Ali, A.** 2021. Studies on the antiglycating potential of zinc oxide nanoparticle and its interaction with BSA. **Journal of Biomolecular Structure & Dynamics.** 39:18, 6918-6925. https://doi.org/10.1080/07391102.2020.1803137
- 67. **Ali, A.** 2020. Herbs that Heal: The Philanthropic behavior of Nature. **Annals of Phytomedicine**. 9 (1): 7 17. <a href="http://dx.doi.org/10.21276/ap.2020.9.1.2">http://dx.doi.org/10.21276/ap.2020.9.1.2</a>. (Invited Article). 68. Kasmi, H., Doukani, K., **Ali, A.**, Tabak, S., Bouhenni, H. 2020. Epidemiological Profile of *Helicobacter pylori* Infection in Patients with Digestive Symptoms in Algeria.
- Journal of Epidemiology and Global Health. 10(4); 293–297. https://doi.org/10.2991/jegh.k.200527.001
- 69. **Ali, A.** 2020. Nitrate assimilation pathway in higher plants: critical role in nitrogen signalling and utilization. **Plant Science Today**. 7(2): 182-192. http://doi.org/10.14719/pst.2020.7.2.637
- 70. Bhatkalkar, S. Kumar, D. **Ali, A.** Sachar, S. 2020. Influence of surfactants on the interaction of copper oxide nanoparticles with vital proteins. **Journal of Molecular Liquids.** 304: 1-10. https://doi.org/10.1016/j.molliq.2020.112791
- 71. Paramanya, A., Jain, Y., **Ali, A**. 2020. Obesity: its complications and medications. **Journal of Health Sciences of Kocaeli University**. 6(1): 1-9. 10.30934/kusbed.615706
- 72. Paramanya, A., **Ali, A.** 2019. Role of Oxidative Stress in Biological Systems. **Middle East Journal of Science**, 5 (2), 155-162. <a href="https://doi.org/10.23884/mejs.2019.5.2.07">https://doi.org/10.23884/mejs.2019.5.2.07</a>
- 73. Jha P., Kumari S., Jobby, R., Desai, N., **Ali A**. 2019. Dietary phytonutrients in prevention of diabetes related complications. **Current Diabetes Reviews**. 16, 657-673. 10.2174/1573399815666190906151319
- 74. Kumar, D., **Ali, A.** 2019. Antiglycation and Antiaggregation potential of Thymoquinine. **Natural Volatiles and Essential Oils**. 6 (1): 25-33
- 75. Shah, S. A. Suji, G., Bhor V. M., **Ali, A.**, Sivakami, S. 2019. Methyl Glyoxal binding to bovine liver Catalase results in loss of activity and Heme dislocation. <u>Trends in Peptide and Protein Sciences</u>. 4(e5);1-8. https://doi.org/10.22037/tpps.v4i0.26261
- 76. Qazi, F., Varshney, P., and **Ali, A.** 2018. Perspective of nitrate assimilation and of bioremediation in *Spirulina platensis* (a non-nitrogen fixing cyanobacterium): an overview. **Journal of Environmental Biology**. 35: 547-557. <a href="http://doi.org/10.22438/jeb/39/5/MS-172.">http://doi.org/10.22438/jeb/39/5/MS-172.</a>
- 77. Ahire, K., Kumar, D., **Ali, A.** 2018. Differential glycation of Arginine and Lysine by Glucose and inhibition by Acesulfame potassium. **Journal of BioScience and Biotechnology**. 7 (1): 11-15
- 78. Jha, P., Momin, A. R., Kumar, D., **Ali, A**. 2018. Reversal of glycoxidative damage of DNA and protein by antioxidants. **Annals of Phytomedicine**. 7(1): 101-105. <a href="http://dx.doi.org/10.21276/ap.2018.7.1.12">http://dx.doi.org/10.21276/ap.2018.7.1.12</a>
- 79. Bhatkalkar, S. Kumar, D. **Ali, A.** Sachar, S. 2018. Surface Dynamics Associated with Zinc Oxide Nanoparticles and Biomolecules in Presence of Surfactants. **Journal of Molecular Liquids.** 268: 1-10. https://doi.org/10.1016/j.molliq.2018.07.037
- 80. Pandey, R., Kumar, D., **Ali, A.** 2018. *Nigella sativa* seed extracts prevent the glycation of protein and DNA. <u>Current Perspectives on Medicinal and Aromatic Plants</u> (<u>CUPMAP</u>). 1: 1-7.

- 81. **Ali, A.,** More, T., Hoonjan, A. K., Sivakami, S. 2017. Antiglycating potential of Acesulfame potassium: An artificial sweetener. **Applied Physiology, Nutrition and Metabolism.** 42(10):1054-1063. http://dx.doi.org/10.1139/apnm-2017-0119
- 82. **Ali, A.,** Devrukhkar, J. 2016. In vitro study on glycation of plasma proteins with artificial sweeteners (sweeteners induced glycation). **Acta Biologica Szegediensis**. 60(2):65-70.
- 83. Banan, P., **Ali, A.** 2016. Preventive effect of Phenolic Acids on in vitro Glycation. **Annals of Phytomedicine**. 5(2):1-5. http://dx.doi.org/10.21276/ap.2016.5.2.12.
- 84. **Ali, A.,** Sharma, R. 2015. A comparative study on the role of Lysine and BSA in Glycation-induced damage to DNA. **Bioscience Bioengineering. Communication.** 1: 38-43
- 85. **Ali, A.,** Sharma, R., and Sivakami, S. 2014. Role of Natural Compounds in the Prevention of DNA and Proteins damage by Glycation. **Bionano Frontiers**. 7(12). 25-30
- 86. Qazi, F., Varshney, P., **Ali, A.,** Ahmad, A. 2013. Dissecting the role of Glycine Betaine in plants under abiotic stress. **Plant Stress**. 7(1): 8-18
- 87. **Ali, A.,** Sivakami, S., Raghuram, N. 2011. Effect of light, nitrate, and tungstate on the activity of nitrate reductase in Rice. **Research Dimension.** 1(3): 47-55
- 88. **Ali, A,** Raghuram, N., Sivakami, S. 2010. Differential regulation of nitrate assimilatory enzyme by Methionine sulfoximine in rice. **Journal of Advances in Science and Technology.** 13(3): 97-101
- 89. **Ali, A.,** Jha, P., Singh, K. S., Raghuram, N. 2008. Spirulina nitrate-assimilating enzymes (NR, NiR, GS) have higher specific activities and are more stable than those of rice. **Physiology and Molecular Biology of Plants.** 14(3): 179-182. <a href="https://doi.org/10.1007/s12298-008-0017-z">https://doi.org/10.1007/s12298-008-0017-z</a>
- 90. **Ali, A.,** Sivakami, S., Raghuram, N. 2007. Effect of Nitrate, Nitrite, Ammonium, Glutamate, Glutamine and 2-oxoglutarate on the RNA Levels and Enzyme Activities of Nitrate Reductase and Nitrite Reductase in Rice. **Physiology and Molecular Biology of Plants.** 13(1): 17-25.
- 91. Jha, P., **Ali, A.**, Raghuram, N. 2007. Nitrate induction of nitrate reductase and its regulation by downstream N metabolites in *Spirulina platensis*. **Physiology and Molecular Biology of Plants**. 13(2): 163-167.
- 92. **Ali, A.,** Sivakami, S., Raghuram, N. 2007. Regulation of activity and transcript levels of NR in Rice (*Oryza sativa*): Roles of Protein Kinase and G-proteins. **Plant Science**. 172(2): 406-413. <a href="https://doi.org/10.1016/j.plantsci.2006.10.003">https://doi.org/10.1016/j.plantsci.2006.10.003</a>

#### **BOOK**

1. Khatri, S., **Ali, A.** 2019. Prevention of Glycoxidation mediated DNA damage by Phenolic compounds. LAP Lambert Academic Publishing Mauritius.

#### **BOOK CHAPTERS**

- Yiğit, B. M., Çinbilgel, İ., Gözcü, S., Tel, A. Z., & Ali, A. 2025. Catnip (Nepeta cataria L. Lamiaceae). In Comprehensive Guide to Hallucinogenic Plants (pp. 176-185). CRC Press. <a href="http://dx.doi.org/10.1201/9781003460336-27">http://dx.doi.org/10.1201/9781003460336-27</a>
- 2. Padgaonkar, A., Poojari, P., Paramanya, A., & **Ali, A.** 2025. Polysaccharides as potential inhibitors targeting SARS-CoV-2. In Traditional Medicines and Natural Products as Preventive and Therapeutic Agents Against COVID-19 (pp. 241-264). Academic Press. http://dx.doi.org/10.1016/B978-0-443-18757-5.00005-0

- 3. Pandohee, J., Ghosh, R., Balyan, P., Shaikh, Z., & **Ali, A.** 2024. Nanoremediation Associated with Microorganisms. In Sustainable Nanoremediation (pp. 109-137). Apple Academic Press. http://dx.doi.org/10.1201/9781003468950-4
- Pradhan, Y., Alim, H., Patel, N., Akhtar, J., & Ali, A. 2024. Antimalarial Response, Traditional and Other Potential Uses of Piper Genera. In Antimalarial Medicinal Plants (pp. 237-245). CRC Press. <a href="http://dx.doi.org/10.1201/9781003378396-15">http://dx.doi.org/10.1201/9781003378396-15</a>
- Patel, A., Khan, T., Patel, N., Ali, A., & Alim, H. 2024. Biology and Genetic Improvement of Antimalarial Plant Species. In Antimalarial Medicinal Plants (pp. 40-63). CRC Press. http://dx.doi.org/10.1201/9781003378396-2
- Lakhani, I., Sharma, G., Alim, H., Ali, A., & Patel, N. 2024. Antioxidants from Antimalarial Plants and Their Applications. In Antimalarial Medicinal Plants (pp. 128-140). CRC Press. http://dx.doi.org/10.1201/9781003378396-7
- Balyan, P., Alim, H., & Ali, A. 2024. Traditional Uses, Pharmacological Properties, and other Potential Uses of Black Cumin Seeds. In Medicinal Spice and Condiment Crops (pp. 155-167). CRC Press. <a href="http://dx.doi.org/10.1201/9781003387046-11">http://dx.doi.org/10.1201/9781003387046-11</a>
- 8. Shaikh, N., Bamne, F., **Ali, A.,** Momin, M., & Khan, T. (2023). Herbal Medicine: Exploring Its Scope Across Belief Systems of the Indian Medicine. In Herbal Medicine Phytochemistry: Applications and Trends (pp. 1279-1304). Cham: Springer International Publishing. <a href="http://dx.doi.org/10.1007/978-3-031-21973-3\_46-1">http://dx.doi.org/10.1007/978-3-031-21973-3\_46-1</a>
- Bamne, F., Shaikh, N., Ali, A., Momin, M., & Khan, T. (2023). Phytochemicals and Overview of the Evolving Landscape in Management of Osteoarthritis. In Herbal Medicine Phytochemistry: Applications and Trends (pp. 1-25). Cham: Springer International Publishing. http://dx.doi.org/10.1007/978-3-031-21973-3\_55-1
- 10. Paramanya, A., Siddiqui, S. A., Poojari, P., Jamkhedkar, S., Khan, J., da Silva Almeida, J. R. G., & Ali, A. 2023. Spirulina: Ethnic Food and Potential Health Applications. In Ethnic Knowledge and Perspectives of Medicinal Plants (pp. 251-269). Apple Academic Press. <a href="http://dx.doi.org/10.1201/9781003353089-12">http://dx.doi.org/10.1201/9781003353089-12</a>
- 11. Ulucan-Karnak, F., Yilmaz-Sercinoglu, Z., Sercinoglu, O., **Ali, A.** 2023. Computational Approaches Used in Anticancer Plants. In Plant-Derived Anticancer Drugs in the OMICS Era (pp. 215-250). Apple Academic Press. <a href="http://dx.doi.org/10.1201/9781003377412-9">http://dx.doi.org/10.1201/9781003377412-9</a>
- 12. Kulkarni, A., Nair, A., Hirode, K., Chavan, M., Jain, M., Majumdar, P., **Ali, A.**, Jamkhedkar, S. 2023. Indian Traditional Foods from an Ayurvedic Perspective. In Ethnic Knowledge and Perspectives of Medicinal Plants (pp. 395-424). Apple Academic Press. http://dx.doi.org/10.1201/9781003353089-19
- 13. Saha, P. U., **Ali, A.,** & Khan, J. 2023. Genetically Engineered Microorganisms. In Genetic Engineering (pp. 125-157). Apple Academic Press. <a href="http://dx.doi.org/10.1201/9781003378273-7">http://dx.doi.org/10.1201/9781003378273-7</a>
- 14. Sharma, A., Ali, A., & Khan, J. 2023. Tools Used in Genetic Engineering. In Genetic Engineering (pp. 45-76). Apple Academic Press. http://dx.doi.org/10.1201/9781003378266-3
- 15. **Ali, A.,** & Khan, J. 2023. Enzymes of Genetic Engineering. In Genetic Engineering (pp. 23-43). Apple Academic Press. <a href="http://dx.doi.org/10.1201/9781003378266-2">http://dx.doi.org/10.1201/9781003378266-2</a>
- 16. Shaikh, Z., Acaroz, U., & Ali, A. 2023. Resveratrol, 6-Gingerol, and Quercetin as a Natural Treatment for Polycystic Ovarian Syndrome. In Herbal Medicine Applications for Polycystic Ovarian Syndrome (pp. 253-280). CRC Press. http://dx.doi.org/10.1201/9781003344728-11

- 17. Bajaj, T., Alim, H., **Ali, A.,** & Patel, N. 2023. Phytochemical and Bioactive Compounds of Green Algae (Chlorophyta) and Their Applications. Aquatic Medicinal Plants. CRC Press. 24 pages. http://dx.doi.org/10.1201/9781003256830-14
- 18. Bajaj, T., Alim, H., Ali, A., & Patel, N. 2023. Phytotoxicity Responses and Defence Mechanisms of Heavy Metal and Metal-Based Nanoparticles. In Nanomaterials and Nanocomposites Exposures to Plants: Response, Interaction, Phytotoxicity and Defense Mechanisms (pp. 59-96). Singapore: Springer Nature Singapore. <a href="http://dx.doi.org/10.1007/978-981-99-2419-6-4">http://dx.doi.org/10.1007/978-981-99-2419-6-4</a>
- 19. Pradhan, Y., Farah, M. A., Al-Anazi, K. M., & Ali, A. 2023. Traditional Knowledge, Bioactive Compounds, and Antidiabetic and Other Potential Response of Holy Basil (Ocimum sanctum). In Antidiabetic Medicinal Plants and Herbal Treatments (pp. 295-307). CRC Press. <a href="http://dx.doi.org/10.1201/b23347-20">http://dx.doi.org/10.1201/b23347-20</a>
- 20. Kaur, P., Ghosh, R., Shaikh, Z., Sohal, P., Kulshreshtha, S., Pandohee, J., & Ali, A. (2023). Antioxidant, Photosynthesis, and Growth Characteristics of Plants Grown in Polluted Soils. In Environmental Pollution Impact on Plants (pp. 69-90). Apple Academic Press.
- 21. Patel, A., Patel, N., Ali, A., & Alim, H. 2023. Interaction Between Metal Oxide Nanoparticles and PGPR on Plant Growth and Development. In Nanomaterials for Environmental and Agricultural Sectors (pp. 221-238). Singapore: Springer Nature Singapore. <a href="http://dx.doi.org/10.1007/978-981-99-2874-3">http://dx.doi.org/10.1007/978-981-99-2874-3</a> 11
- 22. Patel, A., Patel, N., **Ali, A.**, Alim, H. 2023. Nanomaterials Synthesis Using Saponins and Their Applications. In: Husen, A. (eds) Secondary Metabolites Based Green Synthesis of Nanomaterials and Their Applications. Smart Nanomaterials Technology. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-99-0927-8">https://doi.org/10.1007/978-981-99-0927-8</a>
- 23. Khan, J., **Ali, A.** 2023. Haploid Mutation. In: Aftab, T., Hakeem, K. R. (eds.). Biotechnologies and Genetics in Plant Mutation Breeding, Volume 2: Revolutionizing Plant Biology. Apple Academic Press. <a href="http://dx.doi.org/10.1201/9781003305088-4">http://dx.doi.org/10.1201/9781003305088-4</a>
- 24. Khan, J., Ali, A. 2023. Molecular Genetics of Symbiotic Plant– Microbe Interactions in a Model Legume, Lotus japonicus. In: Aftab, T., Hakeem, K. R. (eds.). Biotechnologies and Genetics in Plant Mutation Breeding, Volume 2: Revolutionizing Plant Biology. Apple Academic Press. <a href="http://dx.doi.org/10.1201/9781003305088-3">http://dx.doi.org/10.1201/9781003305088-3</a>
- 25. Ali, A., Khan, J. 2023. Herbicide Tolerant Crops Developed from Mutation. In: Aftab, T., Hakeem, K. R. (eds.). Biotechnologies and Genetics in Plant Mutation Breeding, Volume 2: Revolutionizing Plant Biology. Apple Academic Press. <a href="http://dx.doi.org/10.1201/9781003305088-7">http://dx.doi.org/10.1201/9781003305088-7</a>
- 26. Khan, J., **Ali, A.,** Chodhary, R. 2023. Gamma Irradiation. In: Aftab, T., Hakeem, K. R. (eds.). Biotechnologies and Genetics in Plant Mutation Breeding, Volume 2: Revolutionizing Plant Biology. Apple Academic Press. <a href="http://dx.doi.org/10.1201/9781003305088-1">http://dx.doi.org/10.1201/9781003305088-1</a>
- 27. Yaldiz, G., Camlica, M., Pradhan, Y., Ali, A. 2023. Chemical characterization, biological activities, and some medicinal uses of different sweet basil (Ocimum basilicum L.) Genotypes. In: Arunachalam, K., Yang, X., Puthanpura Sasidharan, S. (eds) Natural Product Experiments in Drug Discovery. Springer Protocols Handbooks. Humana, New York, NY. https://doi.org/10.1007/978-1-0716-2683-2
- 28. Ali, A., Shaikh, N. 2022. Concept of Diabetes Mellitus and Antidiabetic Plant in the Unani System of Medicine. In: Antidiabetic Potential of Plants in the Era of Omics.

- Deepu Pandita, Anu Pandita and Chander Bhanu (Eds.) Apple academic Press. Pp. 101-124. http://dx.doi.org/10.1201/9781003282860-6
- 29. Vartak, A., Sonawane, S., Alim, H., Patel, N., Hamrouni, L., Khan, J., **Ali, A.** 2022. Medicinal and Aromatic Plants in the Cosmetics Industry. In: Máthé, Á., Khan, I.A. (eds) Medicinal and Aromatic Plants of India Vol. 1. Medicinal and Aromatic Plants of the World, vol 8. Springer, Cham. <a href="https://doi.org/10.1007/978-3-030-98701-5\_12">https://doi.org/10.1007/978-3-030-98701-5\_12</a>
- 30. **Ali, A.,** Khan, J., Alshehri, B. 2022. Diabetes -- a metabolic disorder: Herbal medicines on rescue. In: Herbal Medicines. Maryam Sarwat, Hifzur Siddique (Eds.). Academic Press. Pp 223-237. https://doi.org/10.1016/B978-0-323-90572-5.00013-5
- 31. Poojari, P., Paramanya A., Singh, D., **Ali, A.** 2022. Polycystic ovarian syndrome: Causes and therapies by herbal medicine, In: Herbal Medicines. Maryam Sarwat, Hifzur Siddique (Eds.). Academic Press. Pp 435-451. <a href="https://doi.org/10.1016/B978-0-323-90572-5.00028-7">https://doi.org/10.1016/B978-0-323-90572-5.00028-7</a>.
- 32. Anavkar A., Patel N., **Ali A.**, Rajan W., Alim H. 2022. Gut Microbes: Influencers of Human Brain. In: Microbiome-Gut-Brain Axis. Sayyed R.Z., Khan M. (Eds). Springer, Singapore. Pp 3-27. https://doi.org/10.1007/978-981-16-1626-6\_1
- 33. Chauhan, J., Chachad, S., Shaikh, Z., Khan, J., **Ali, A.** 2021. Nitrate in Plant Physiology. In: Nitrate Handbook: Environmental, Agricultural, and Health Effects. Christos Tsadilas (Ed.). CRC Press. Pp. 73-89. <a href="https://doi.org/10.1201/9780429326806-6">https://doi.org/10.1201/9780429326806-6</a>
- 34. Balyan, P., Khan, J., **Ali, A.** 2021. Therapeutic potential of Nigella sativa in the prevention of aggregation and glycation of proteins. In: Black Seeds (Nigella sativa) Pharmacological and Therapeutic Applications. Andleeb Khan and Muneeb Rehman (Eds.). Elsevier. Pp. 313-335. <a href="https://doi.org/10.1016/B978-0-12-824462-3.00015-9">https://doi.org/10.1016/B978-0-12-824462-3.00015-9</a>
- 35. Khan, J., **Ali, A.,** Balyan, P., Bhat, E. A. 2021. Role of Nigella sativa as immunomodulator. In: Black Seeds (Nigella sativa) Pharmacological and Therapeutic Applications. Andleeb Khan and Muneeb Rehman (Eds.). Elsevier. Pp. 337-353. <a href="https://doi.org/10.1016/B978-0-12-824462-3.00005-6">https://doi.org/10.1016/B978-0-12-824462-3.00005-6</a>
- 36. Shaikh, Z., **Ali, A.** 2021. Nitrate assimilation: cross talk between plants and soil. In: Frontiers in Plant-Soil interaction Molecular Insights into Plant Adaptation. Tariq Aftab and Khalid Rehman Hakeem (Eds.). Academic Press. Chapter 6, Pp. 135-151 <a href="http://dx.doi.org/10.1016/B978-0-323-90943-3.00002-X">http://dx.doi.org/10.1016/B978-0-323-90943-3.00002-X</a>
- 37. Paramanya A., Prairna, Şekeroğlu N., **Ali A.** 2021. Secondary Metabolites for Sustainable Plant Growth and Production Under Adverse Environment Conditions. In: Husen A. (Ed.) Harsh Environment and Plant Resilience. Springer, Cham. <a href="https://doi.org/10.1007/978-3-030-65912-7">https://doi.org/10.1007/978-3-030-65912-7</a> 18
- 38. Paramanya, A., Padgaonkar, A., **Ali, A.** 2021. Detection of Coronavirus (SARS-CoV-2) Using Antibodies. In book: Covid-19 Pandemic and Environmental Implications; Vishnu Sinha (Ed.). Red'shine Publications Pvt. Ltd. Chapter 18. Pp. 181-194
- 39. Paramanya, A., Prairna, Sharma, S., Bagdat, R. B., **Ali, A.** 2020. Recent practices of medicinal and aromatic plants in nanotechnology. In book: Nanomaterials for Agriculture and Forestry Applications; Azamal Husen and Muhammad Iqbal (Eds.). Elsevier Science Publishing Co Inc. Pp. 435-467. <a href="https://doi.org/10.1016/B978-0-12-817852-2.00018-4">https://doi.org/10.1016/B978-0-12-817852-2.00018-4</a>
- 40. Memariani, Z., Farzaei, M. H., **Ali, A.**, Momtaz, S. 2019. Nutritional and bioactive characterization of unexplored food rich in phytonutrients. In book: Phytonutrients in Food: From Traditional to Rational Usage Edition: First Publisher: Elsevier Science

- Publishing Co Inc (Imprint Woodhead Publishing). Pp. 157-175. <a href="https://doi.org/10.1016/B978-0-12-815354-3.00001-0">https://doi.org/10.1016/B978-0-12-815354-3.00001-0</a>
- 41. Khatri, S., Paramanya, A., **Ali, A.** 2019. Phenolic acids and their health promoting activity. In Plant and Human Health, Volume 2 Phytochemistry and Molecular Aspects, Munir Ozturk and Khalid Rehman Hakeem (Eds.). Springer Nature Switzerland. Pp. 661-680. https://doi.org/10.1007/978-3-030-03344-6\_27
- 42. Paramanya, A., Jha, P., **Ali, A.** 2019. Bioactive compounds in *Spirulina sp.*: Applications and potential health effects. In Next Generation research in Aquaculture, J K Sundaray and M A Rather (Eds.) Narendra Publishing House, Delhi. Pp. 197-218.
- 43. Jha, P., **Ali, A.** 2019. Bio-nanoparticles in the treatment of glycation-induced secondary complications of diabetes. In Nanomaterials and Plant Potential; Azamal Husen and Muhammad Iqbal (Eds.). Springer Nature Switzerland. Pp. 299-316. https://doi.org/10.1007/978-3-030-05569-1\_12
- 44. Ali, A., Paramanya, A., Prairna, Doukani, K., Zehra, S. 2019. Antioxidants in glycation related diseases. In Oxidative Stress and Antioxidant Defense: Biomedical Value in Health and Diseases, Md. Sahab Uddin and Aman Upaganlawar (Eds.). NOVA Science Publishers, Hauppauge, USA. Pp. 465-488
- 45. Tariq, M., **Ali, A.** 2019. Plant derived natural products as anti-glycating agents. "Pharmacological Perspectives of Low Molecular Weight Ligands" Editors: Debarshi Kar Mahapatra, Sanjay Kumar Bharti, Apple Academic Press, Ontario, Canada. Pp. 17-44
- 46. Lochab, S., **Ali, A.** Jha, P., Sharma, V., Abbey, D., and Raghuram, N. (2010). Assay methods for nitrate assimilatory enzymes in *Spirulina (Arthrospira)*. In Protocols on Algal and cyanobacterial Research, Bagchi, S.N. Kleinber, D. and Mohanty, P. (Eds). Narosa, New Delhi, Pp. 179-189.

#### **FELLOWSHIPS AND AWARDS**

- Received **Erasmus+ Training Mobility Program Funds** within ICM Project KA171-2022 to visit University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, Romania 15.10.2024 to 30.10.2024.
- Received **Registration sponsorship** by Academy of Excellence in Biosciences (AEB) to participate in the virtual global event "The Asian Conference on Science, Technology & Medicine (ACSTM)" organized by Asian Council of Science Editors (ACSE) on 20<sup>th</sup> November 2021
- **EMBO Travel Grant** to attend European Molecular Biology Organization (EMBO) Research Course: Research to Service Planning and Running a Bioinformatics Core Facility" from April 8-12, 2019, at Izmir Biomedicine and Genome Center, Izmir, Turkey
- Received Grant from DST-PURSE fund of University of Mumbai for attending EMBO Workshop
- University Grants Commission, Govt. of India, **Project Associateship** for 3 years.
- **AFMI** (American Federation of Muslims of Indian Origin) Research Fellowship for 15 months.
- First beneficiary of **BANEE Scholarship Scheme** by Bihar Anjuman for 1 year.
- Teaching-cum-Research Assistantship of University of Mumbai from November 2005 to January 2007.

#### **MEMBERSHIPS**

- Life Member of Society of Biological Chemists (SBC, India)
- Life Member of Society for Neurochemistry (SNCI)
- Member of American Chemical Society (ACS)
- Member of International Maillard Reaction Society (IMARS)
- Member of Asian Council of Science Editors (ACSE)
- Life Member of Indian Science Congress Association (ISCA)
- Life Member of Research Society for the Study of Diabetes in India (RSSDI)
- Life Member of Association of Pharmaceutical Teachers of India (APTI)
- Life Member of International Natural Product Sciences Taskforce (INPST)
- Life Member of European Federation of Biotechnology (EFB)
- Life Member of Asian Federation of Biotechnology (AFOB)

#### **EDITORIAL BOARDS**

- Editorial Review Board, Natural Product Communications, https://journals.sagepub.com/editorial-board/NPX
- <u>Coordinating Editor</u>, Annals of Phytomedicine (http://ukaazpublications.com/publications/index.php)
- <u>Executive Editorial Board</u>, Current Perspectives on Medicinal and Aromatic Plants (CUPMAP)
  - http://www.cupmap.org/?SyfNmb=2&pt=Editorial+Board
- Section Editor, Commagene Journal of Biology https://dergipark.org.tr/en/pub/commagene/board
- Disease and Research
  - https://dr.clintile.com/en/expert?id=d286112f-f028-4bd3-948e-

# <u>640ab4fdaccb&dutyld=35804acf-da5d-4288-b824-9fc6ed45a01</u>

- International Journal of Health Services Research and Policy <a href="http://dergipark.org.tr/en/pub/ijhsrp/board">http://dergipark.org.tr/en/pub/ijhsrp/board</a>
- Section Editor (Molecular Biology and Biochemistry), Journal of Health Sciences of Kocaeli University, Kocaeli Üniversitesi Sağlık Bilimleri Dergisi <a href="http://dergipark.gov.tr/kusbed/board">http://dergipark.gov.tr/kusbed/board</a>
- Biosciences Biotechnology Research Asia http://www.biotech-asia.org/editorial-board/
- International Journal of Academic Medicine and Pharmacy <a href="https://academicmed.org/editorial-board">https://academicmed.org/editorial-board</a>
- Publication and Advisory Board, Journal of Innovative Healthcare Practices <a href="https://dergipark.org.tr/en/pub/joinihp/board">https://dergipark.org.tr/en/pub/joinihp/board</a>

# **REVIEWER OF JOURNALS**

Annals of Phytomedicine, Biochemistry Journal, 3 Biotech (Springer Journal), Biological Research & Reviews, Chemosphere, Current Perspectives on Medicinal and Aromatic Plants (CUPMAP), Ecotoxicology and Environmental Safety, Frontiers in Plant Science, Frontiers in Oncology, Indian Journal of Biochemistry and Biophysics (IJBB), Indian Journal of Biotechnology (IJBT), Industrial Crops and Products, International Journal of

Biological Macromolecules (IJBM), International Journal of Diabetes in Developing Countries (IJDDC), Journal of King Saud University: Science, Journals of Scientific and Industrial Research (JSIR), Malaysian Journal of Nutrition, Nanotechnology Review, Plant Science Today, Saudi Journal of Biological Sciences.

## **ADMINSITRATIVE RESPONSIBILITIES**

- Member of the "Executive Body" of University of Mumbai's Garware Institute of Career Education and Development (UM-GICED)
- Member of Institutional Multi-Disciplinary Research Advisory Committee (IMRAC), Regional Research Institute of Unani Medicine, CCRUM, Mumbai
- Member of Working Group of experts for workshop MLT/Biochemistry/Microbiology Curriculum. Ministry of Family Health and Welfare, Government of India
- Member of Advisory Board, Biodiversity Application and Research Center (BİYOMER), Igdir University, Turkey
- **Member**, Local Inquiry Committee, University of Mumbai for recognition of Colleges for Ph. D. courses. August 2023 and 2024
- **Secretary**, International Conference on Sustainability: Integrated and Scientific Approach (ICS-2022). University of Mumbai. August 4-6, 2022
- Co-coordinator, 16<sup>th</sup> Avishkar Research Convention 2021-22, Zone X University Departments
- Member of **International Organizing Committee** for MESMAP4, 5, 6, 7, 8, & 9 Turkey.
- Subject Expert for Research Advisory Committee for evaluation of PhD students of Dept. of Life Sciences - Ramnarain Ruia College, Dept. of Life Sciences - St. Xavier's College and Dept. of Biotechnology - R. D. National College, Mumbai, NMIMS, Mumbai
- Member of **Scientific Committee** for International Congress on Biological and Health Sciences (ICBH). 2021, 2022, & 2023
- Member of International Organizing Committee for IHSC 2019 and IHSC 2020, Diyarbakir, Turkey
- Member of Organizing Committee as Associate Director, International Web Conference on Perspective on Agricultural and Applied Sciences in Covid-19 Scenario (PAAS 2020). Organized by AETDS (Uttarakhand), BARI (Bangladesh), Shobhit Institute (Meerut), SWERI and ARC (Egypt). October 4-6, 2020.
- **Co-organizing Chairman**, International Conference Global Perspective in Agricultural and Applied Sciences for Food and Environmental Security, Kumaun University, December 1st and 2nd, 2019.
- **Member** of Organizing Committee, One-day State Level Seminar on Higher Education and Research: Industrial Opportunities, Organized by the GKS College of Arts, Commerce & Science and Department of Life Sciences, University of Mumbai, August 20<sup>th</sup>, 2019
- Member of Panel of Expert on Natural Sciences, National Council for Promotion of Urdu Language (NCPUL), Ministry of Human Resource Development, Govt. of India
- Honorary Faculty Member of Novel Global Community Educational Foundation (NGCEF), Australia

- Member of International Organizing Committee for ISPBS5, April 24-28, 2019, Cappadocia – Turkey
- Convenor and Member of Organizing Committee, National Symposium on Facets of Life Sciences, Organized by the Department of Life Sciences, University of Mumbai, March 26-27, 2019
- Member of Board of Studies, Department of Bioinformatics Khalsa College (University of Mumbai), Mumbai and Dept. of Life Sciences - K. C. College, Mumbai
- Member of National Advisory Board, 5<sup>th</sup> National Asian PGPR Conference for Sustainable and Agriculture Eco-Friendly Bio-Innovations for Integrated Crop Management & Soil Health. Department of Botany and Microbiology, Acharya Nagarjuna Univ., Guntur, Andhra Pradesh & Indian Chapter of Asian PGPR Society. Feb. 23-25, 2019.
- Member of Local Advisory Committee and Resource Person of Recent Trends in Life Sciences, Poona College of Arts, Science & Commerce, Pune, India. Jan. 4<sup>th</sup> and 5<sup>th</sup>, 2019.
- 'Judge' for University Level Final Round of 13<sup>th</sup> Inter-Collegiate/Institute/Department Avishkar Research Convention: 2018-2019 and 2019-2020.
- **Scientific Program Committee Member**, 2<sup>nd</sup> International Online Conference on Biological Sciences (IOCBS 2018), July 22<sup>nd</sup>, 2018.
- Chairperson M. Sc. Life Sciences Part II (Semester III and IV) Examinations (University of Mumbai) for Academic Year 2018-19, 2019-20 and 2020-21
- External Examiner, University of Technology, Mauritius (June 2017 to June 2019).
- **Coordinator**, 123<sup>rd</sup> Orientation Programme, UGC-HRDC, University of Mumbai, May 28<sup>th</sup> June 23<sup>rd</sup> 2018.
- **Member of Biosafety Committee**, National Centre for Nanoscience and Nanotechnology, University of Mumbai (2017-18).
- **Chairman** M. Sc. Life Sciences Part I (Semester I and II) Examinations (University of Mumbai) since Academic Year 2017-18.
- Member of **Subject Board** (Board of Studies, BOS) in Life Sciences, Ramnarain Ruia College, University of Mumbai for 2 years from July 2017.
- Member of **Organizing Committee** for "National Seminar on Facets of Life Sciences". March 22<sup>nd</sup>-23<sup>rd</sup>, 2017. Organized by Department of Life Sciences, University of Mumbai.
- Member of **Organizing Committee** for "8<sup>th</sup> Indian Youth Science Congress". February 16<sup>th</sup> 18<sup>th</sup>, 2017. Co-organized by University of Mumbai and MSSRF.
- Member of National Advisory Committee for "International Conference on Health Implications of Biotechnology". Feb 12<sup>th</sup> - 14<sup>th</sup> 2016. Organized by Central University of South Bihar, Patna, Bihar.
- Member of Screening Committee of Minor Research Projects, University of Mumbai for the year 2015-16
- Member of **Project Implementation Group** DST-FIST since Nov 2014 (Term 5 years)
- Course In charge M. Sc. Life Sciences (Spl.: Biochemistry formerly Biological Macromolecules) since June 2013
- Departmental member of **Purchase Committee** since June 2013

- **Member of Organizing Committee**, one-day National Conference on "Advances in Biological Science". Organized by the Department of Biotechnology, University of Mumbai. Dec. 24<sup>th</sup>, 2014.
- Departmental Coordinator for Avishkar (Annual Research Convention) for Academic Year 2014-15
- Chairman M. Sc. Life Sciences Part I Examinations (University of Mumbai) for Academic Year 2013-14
- Worked as Resource Person for Collaborative Undergraduate Biology Education (CUBE) workshop. Organized by Homi Bhabha Center for Science Education (HBCSE), TIFR, Mumbai. June 29<sup>th</sup> and 30<sup>th</sup> 2013.
- Worked as Member, **Board of Examiner**, M. Sc. Biotechnology (2<sup>nd</sup> Semester), Central University of Bihar, 20<sup>th</sup> and 21<sup>st</sup> May 2013.
- External Examiner A. M. U., Amity University, Banasthali University, D. Y. Patil University, Integral University, MGM Medical College, Shivaji College (Akola), NMIMS.
- Thesis Evaluation Banasthali University, Integral University, University of Hyderabad

## **COURSES/WORKSHOPS ATTENDED**

- Completed Four weeks DHR, Government of India sponsored Training Course on Human Disease Models: Approaches, Advances and Applications. National Institute for Research in Reproductive and Child Health, Mumbai. May 6 31, 2024.
- ICGEB sponsored one-week Workshop and Course on "Algal Metabolomics" International Centre for Genetic Engineering and Biotechnology, New Delhi. March 25 − 31, 2024.
- Participated in one-week Faculty Development Programme on Environmental Science, Sustainable Agriculture and Human Health (ESSAHH). Centurion University of Technology and Management, Paralakhemundi, Odisha. February 6 10, 2024
- Completed one-week Government of India sponsored NEP 2020 Orientation & Sensitization Programme. UGC-MMTTC National Institute for Educational Planning and Administration, New Delhi. November 20 29, 2023
- Attended DST-STUTI, Government of India sponsored one week course on "Advanced Immunological Tools and Techniques". Central University of South Bihar, Gaya, Bihar. September, 19 25, 2022
- Scientific committee member and Invited speaker, International Congress on Bee Sciences, June, 16-18, 2022. (Online)
- Attended 3-days "European Molecular Biology Laboratory (EMBL) Course: Exploratory Analysis of Biological Data: Data Carpentry" at EMBL Heidelberg, Germany.from January 28-30, 2020
- Attended 3-weeks Refresher Course in Basic Science (Interdisciplinary) at UGC-HRDC, Jamia Millia Islamia, New Delhi. November 5-19, 2019.
- Attended one week "European Molecular Biology Organization (EMBO) Practical Course: Research to Service Planning and Running a Bioinformatics Core Facility" at Izmir Biomedicine and Genome Center, Izmir, Turkey. April 8-12, 2019
- Invited Speaker for 2nd International Conference, Advances in Agricultural, Biological and Applied Sciences for Sustainable Future (ABAS 2018), Subharti Univrsity, Meerut, U.P., India. Oct. 20-22, 2018.

- Invited Speaker and Session Chair for 4th International Mediterranean Symposium on Medicinal and Aromatic Plants (MESMAP4). Antalya, Turkey. April 18th 22nd, 2018.
- Worked as "Resource Person" for Unani Day Celebration and International Conference on Unani Medicine. Organized by CCRUM, Ministry of Ayush, Govt. of India. Feb. 10-11, 2018.
- Attended 3-weeks Refresher Course at UGC-Academic Staff College, Jamia Millia Islamia, New Delhi. November 15th to December 6th, 2017.
- Science Academics' sponsored Lecture workshop on "OMICS: Basics and Applications". Organized by Indian Women Scientists' Association (IWSA). July 8th 9th, 2017.
- Systematic Review and Meta-analysis. Sept. 19th-21st 2016. NIRRH, Mumbai.
- Participated in 2-weeks "Science Academies' Refresher Course on Developmental Biology". Organized by NIRRH, Mumbai and Sophia College for Women, Mumbai. 16th-28th November, 2015.
- Participated in 2-days workshop on "Biostatistics in Teaching and Research". Ruparel College, Mumbai. 4th and 5th September, 2015.
- Attended one-day SBC (I) Mumbai Chapter meet. NIRRH, Mumbai. August 22nd, 2015.
- Participated in 102nd Indian Science Congress at University of Mumbai. Jan 3rd-7th, 2015.
- Attended 4-weeks Orientation Programme at UGC-Academic Staff College, Jamia Millia Islamia, New Delhi. August 5th to September 3rd, 2014.
- Attended Six-day workshop on "Hands on Training for Teachers in Biology" at Khalsa College. Jointly organized by National Facility for Biopharmaceuticals (NFB) and UGC Academic Staff College, University of Mumbai. March 10th-15th, 2014.
- Three weeks Refresher Course on "Advances in Life Sciences". Academic Staff College, University of Mumbai, Mumbai. 7th- 26th October 2013.
- Delivered a Lecture on "Research Misconduct" in Orientation Course organized by Patna University, Patna, Bihar, 4th December 2011.

# PRESENTATIONS (INVITED SPEAKER/RESOURCE PERSON/ORAL – Last 10 years)

- Ali, A. 2025. (Invited Speaker). Evaluation of Anti-arthritic potential of Selected Medicinal Plants. VI International Congress of Natural Products (V COPNAT). Academic League of Medicinal Plants of the Pharmacy course at the Cesmac University Center, Brazil. 17th -20th June 2025 (Online).
- Ali, A. 2025 (Oral). Anti-Inflammatory Potential of Traditional Unani Formulations at 6<sup>th</sup> Asian Conference on Science, Technology & Medicine 25-26 February, 2025. (Online.
- Ali, A. 2025 (Resource Person). Molecular Insights into the anti-inflammatory property of Unani Formulations. Unani Day 2025 & International Conference, CCRUM, Ministry of AYUSH, Vigyan Bhawan, New Delhi. 11–12 Feb, 2025.
- Ali, A. 2024. (Invited Speaker). Glucose Induced Toxicity and its Suppression by Natural Products. 9<sup>th</sup> International Congress on Veterinary and Animal Sciences (ICVAS/Hybrid. 27-28 December 2024. (Online).
- Ali, A. 2024. (Keynote Speaker). Anti-inflammatory Potential of Some Commonly Used Plants in Unani Medicine. International Congress on Trends and Advances in Global Research and Applications (TAGRA 2024). 21-22 Dec 2024 (Online).
- Ali, A. 2024. (Invited Speaker). "Plagiarism and Its Consequences" Association of Hungarian PhD and DLA Candidates (DOSZ), Hungary. 30 Nov. 2024. (Online)

- Ali, A. 2024. (Invited Speaker). 'Scientific Conduct and Misconduct in Research' Association of Hungarian PhD and DLA Candidates (DOSZ), Hungary. 14 Nov. 2024. (Online)
- Ali, A. 2024. (Keynote Speaker). Analysis of Anti-Arthritic Potential of Selected Medicinal Plants. 2<sup>nd</sup> International Conference of SRTA - City Egypt "The Challenges and Future Prospects of Biotechnology: Bringing Scientific research with Industry". New Borg El-Arab City, Alexandria, at SRTA City, Egypt, 1-2, September 2024 (Online).
- Ali, A. 2024. (Invited Speaker). Health implications of Glycation products in Diabetes and its Secondary Complications International Conference on Engineering, Natural Sciences, and Technological Developments (ICENSTED 2024). Bayburt University (Bayburt, Türkiye), 19th 21st July, 2024. (Online).
- Ali, A. 2024. (Invited Speaker). Comparative Analysis of Phytochemicals in Suppression of Glycoxidation Toxicity. V International Congress of Natural Products (V COPNAT). Academic League of Medicinal Plants of the Pharmacy course at the Cesmac University Center, Brazil. 17th -20th June 2024,
- Ali, A. 2024. (Invited Speaker). Isolation of Phycocyanin from Spirulina and Assessment of its Antiglycation Potential International Conference on Medical Plants and Natural Drug Research (ICMPNDR-2024)". Al Farabi Kazakh National University, Almaty, Kazakhstan. 6th – 8th June 2024.
- Paramanya, A., Ali, A. (Oral). Utilizing Response Surface Methodology to Improve Consistency in Phycocyanin Extraction. The 10th International Mediterranean Symposium on Medicinal and Aromatic Plants" (MESMAP-10) istanbul University, istanbul Türkiye. 25-27 April 2024.
- Ali, A. 2024. (Invited Speaker). Bee Products in the Management of Female Health Reproductive Issues. Third International Congress on Bee Sciences. International Congress on Bee Sciences. 24th – 26th April 2024
- Ali, A. 2024. (Invited Speaker). Health promoting activities of bioactives of Nigella sativa and Spirulina platensis. Biotechnology of Natural Products and the Environment. CERD, DJIBOUTI. 22nd- 24th April 2024.
- Ali, A. 2024. (Resource Person). Advanced Glycation End Products in Diabetes and Neurodegenerative Disorders. New Research Horizons in Chemical, Physical and Life Sciences 2024 Maulana Azad College, Aurangabad. 25th Feb, 2024.
- Ali. A. 2023 (Resource Person). Glycation: Central role in Diabetes and Neurodegenerative disorders for the Refresher Course in Life Science. UGC – Malaviya Mission Teacher Training Centre, University of Calicut. 16th Dec. 2023
- Ali. A. 2023 (Plenary Talk). Phenolics Interact and Suppress the Glycation of Serum Protein. 8th Euro-Mediterranean Conference of Life Sciences, Pharma and BioMedicine (BioNat-8). Cairo, Egypt, 5th -7th Oct 2023.
- Paramanya, A., Ali, A. 2023. Evaluation of Spirulina platensis aqueous extract infused skin cream. 2nd Natural Cosmetics International Meeting. University of Information Technology and Management in Rzeszów, Poland. 20 -22 Sep 2023.
- Balyan, P., Ali, A. 2023. (Invited talk). Suppression of Toxicity of Advanced Glycation End Products by Nigella sativa Extract. International Conference on "Advancement in Physical Sciences: Promoting Societal Welfare, Sustainable Development and NEP-2020". Sridev Suman Uttarakhand University, Rishikesh, Dehradun, Uttarakhand, 15-16 Sep. 2023. Online

- Paramanya, A., Ali, A. 2023. (Keynote Speaker). Antiglycating Properties of Spirulina Platensis. International Marmara Sciences Congress, Kocaeli University. 9th and 10th, June 2023. Online
- Kumar, D., Ali, A. 2023. (Keynote Speaker). Vitamin C and B6 Suppress the Glucoseinduced Structural Alteration of Protein. 1st International Rumeli Congress on Food and Health Sciences. Istanbul Rumeli University Faculty of Health Sciences. 28-29 Aug. 2023. Online
- Ali, A. 2023. (Invited Lecture). Scientific conduct and misconduct. 'Invited Lecture Series on Biological Science. Jointly organized by Government P. G. College Bazpur U. S. Nagar Uttarakhand, S. S. College Shahjahanpur U.P. 29th May 2023. Online
- Kumar, D., Ali, A. 2023. (Oral). Analysis of interaction kinetics of ascorbic acid BSA complex and antiglycation potential. The 9th International Mediterranean
- Symposium on Medicinal and Aromatic Plants (MESMAP9). Ankara, Turkey. 3-5 May, 2023, ONLINE
- Ali, A. 2023. (Invited Oral), The Immunomodulatory properties of Bee Products. 3rd International Congress on Bee Sciences. 24-26 April 2023. Online
- Kumar, D., Ali, A. 2023. (Invited Speaker). Molecular interaction between curcumin and serum protein and its antiglycating potential. 3rd International Congress on Biological and Health Sciences (ICBH), 14-16 April 2023. ONLINE
- Invited Guest for the Weekly program "Project Talks". Iğdır University Project Development and Coordination Office, Iğdır University, 7th, April 2023.
- Resource person to deliver a lecture on "Scientific conduct and misconduct during One-week Course Work on Research Publication and Ethics. Dr. Homi Bhabha State University, Mumbai, 4th. April 2023.
- Ali, A. 2023. (Invited Speaker). Suppression of toxicity of advanced glycation end products by Nigella sativa extract. Global Conference on Pharmaceutical Sciences and Chemistry, 20-21, March 2023. ONLINE
- Resource person to deliver a lecture on "Molecular Basis of Glycation: Role in Diabetes and Cardiovascular Diseases" during the National seminar, on "Molecular Biology & Genomics: A Bullseye for future pharmacy" at VIVA College of Pharmacy, Virar, Palghar. 25th Feb. 2023.
- Resource person to deliver a lecture on "Suppression of Sugars Toxicity by fruit extract of Khar-e-khasak khurd (Tribulus terrestris)" International Conference on Unani Medicine and Unani Day 2023. Central Council of Research in Unani Medicine (CCRUM), Ministry of AYUSH, Govt. of India, New Delhi. 10th, Feb. 2023
- Ali, A. 2023. Biomarkers for glycation and aggregation. First International Congress of Biomarkers. Urmia University of Biomedical Sciences, Urmia, Iran. 22, Feb. 2023. ONLINE
- Ali, A. 2023. (Keynote Speaker). Suppression of Glucose Toxicity during Diabetes by Natural Products. International Conference of Technovation on Production and Processing of Medicinal Plants. Isfahan Chamber of Commerce, Industries, Mines and Agriculture and Islamic Azad University, Khorasgan, Iran, 11-12, Jan. 2023
- Resource person to deliver a lecture on "Sugar induced changes in biomolecular structure during Diabetes" under DST-STUTI Program, Jamia Hamdard, New Delhi, 30th Jan. 2023.
- Eminent Speaker to deliver a lecture on "Natural products as potent antiglycating and antiaggregating agent" at the Ministry of Ayush sponsored National

- Symposium on "Advances in Natural Product Research Methodology" by Sandip University, Nashik, Maharashtra. 25th- 26th, Nov. 2022
- Keynote Speaker, International Congress on New Horizons of Science (INCOHIS), Istanbul technical University and Kocaeli University, 25th- 26th, Nov. 2022. ONLINE
- Resource person to deliver a lecture on "Research and Ethics" in the Induction Program for UG and PG courses at MGM School of Biomedical Sciences and Medical College, MGM IHS, Navi Mumbai. August 18th 2022.
- Paramanya, A., Ali, A. 2022 (Invited Speaker). Antiglycating potential of Spirulina platensis, a cyanobacterium. XIIth Conclave of Indian Association for the Study of Traditional Asian Medicine, India. Organized by Jamia Hamdard University and IASTAM-India at New Delhi, India, July 29th - 30th, 2022
- Kumar, D., Ali, A. 2022. (Oral). Potential role of Ferulic acid in Glycation of Serum Albumin. 8th International Marmara Sciences Congress, Kocaeli University. 13-15, May 2022. ONLINE
- Paramanya, A., Ali, A. 2022 (Oral). Suppression of Advanced Glycation End Products (AGEs) by Phycocyanin from Spirulina platensis. 14th International Phytocosmetics and Phytotherapy Congress (IPPC) Egypt. Faculty of Pharmacy at the Fayoum University of Egypt. 10-12, May 2022. ONLINE
- Paramanya, A., Ali, A. 2022 (Oral). Analysis of antiglycation and antiaggregation properties of Phycocyanin. İstanbul International Modern Scientific Research Congress – III. Istanbul Gedik University, Istanbul, Turkey. 6-8, May 2022. ONLINE
- Paramanya, A., Ali, A. 2022 (Oral). Antiglycating properties of Spirulina platensis.
   Emerging Trends in Biotechnology and Sustainable Chemistry: (ETBSC- 2022) Jointly organized by the Department of Biotechnology and Department of Chemistry, Faculty of Sciences, Baba Farid College, Bathinda, Central University of Punjab, Bathinda and Society for Biotechnologists, India. 27-29, April, 2022. ONLINE.
- Delivered a lecture as Invited speaker on "Sugar toxicity and its consequences: Hyperglycemia and Diabetes during the 2nd International Congress on Biological and Health Sciences (ICBH) Online. 25-27 February 2022. (Online)
- Kumar, D., Ali, A. 2021. (Oral). Antiglycating potential of zinc oxide nanoparticle and its interaction with BSA. "World Congress on Applied Nanotechnology (W-CAN)", Nanoscience and Nanoengineering Application and Research Center, Atatürk University, Turkey. 24-26 Nov. 2021. ONLINE
- Kumar, D., Ali, A. 2021. (Oral). Antiglycating and Antiaggregation potential of natural products. 4th Asian Conference on Science, Technology & Medicine (ACSTM)" organized by Asian Council of Science Editors. 20 Nov. 2021. ONLINE
- Kumar, D., Shah, N., Ali, A. 2021. (Oral). Antiglycation and Antioxidant Properties of Tribulus terrestris. The 7th International Mediterranean Symposium on Medicinal and Aromatic Plants (MESMAP7). 18-20, Nov. 2021, Izmir, Turkey. ONLINE
- Keynote speaker to deliver a lecture on "Glycation: molecular mechanism and impact during Diabetes" during 'The 2nd International Pharmaceutical and Medical Sciences Conference" organized by Faculty of Pharmacy for Girls - Al-Azhar University, Egypt. 1-3 November 2021. (Online)
- Kumar, D., Ali, A. (Oral). Molecular Mechanism of Antiglycating Phytochemicals.
   XLIV All India Botanical Conference of the Indian Botanical Society on Plant Science Research in Present Scenario: Opportunities and Challenges. Organized by Jai Narain Vyas University, Jodhpur, India. 18-20, Oct. 2021.

- Invited speaker to deliver a lecture on "Anti-AGE properties of Acesulfame potassium and its interaction with BSA" during 3rd International Conference on GIAFAS-2021 organized by Agricultural & Environmental Technology Development Society (AETDS), U.S. Nagar, Uttarakhand, India at Shri Guru Ram Rai University, Dehradun, Uttarakhand, India. 17-18 October 2021.
- Invited speaker to deliver a lecture on "Plant Metabolic Pathways as Source of Natural Therapeutics" during 7th International Agriculture Congress. 16th October 2021. (Online)
- Invited to deliver a Plenary Presentation on "Acesulfame potassium prevents Glycation induced structural alterations in Biomolecules" during XIVth International Symposium on "Actual problems of Chemistry, Biology and Technology of Natural Compounds" devoted to 30-year Anniversary of the Independence of the
- Republic of Uzbekistan. Organized by "Academy of Science of the Republic of Uzbekistan" at Tashkent on 7-8 October 2021. (Online)
- Delivered a lecture as Guest Speaker on 'An overview of interaction between Ferulic acid and BSA and its antiglycating properties' during 3rd International JSPSAAE symposium. Japanese Society for the Promotion of Science Cairo Office. 24-26 September 2021. (Online)
- Invited Speaker to deliver a lecture on 'Plant derived natural products as antiglycating agents" during VIII Simpósio de Plantas Medicinais do Vale do São Francisco and 2st France-Brazil Meeting on Natural Products. Petrolina, Pernambuco, Brazil, 22-25 September 2021.
- Invited Speaker to deliver a lecture on 'Skin-Whitening Effect of Extract and Cream Prepared Using Spirulina platensis' during X National Students' Conference of the Silesian College of Medicine in Katowice, Poland on 19-21 Sep. 2021.
- Invited Speaker to deliver a lecture on 'Artificial sweeteners and their health implications' during International Congress on Food Science and Public Health. Organized by Tekmaconf, Tehran, Iran. 14-16 September 2021
- Invited Speaker to deliver a lecture on 'Traditional and Modern Usage of Nigella Sativa (Black Cumin)' during 1st Kocaeli Traditional and Complementary Medicine Congress, jointly organized by Kocaeli Metropolitan Municipality, Atatürk University, Acupuncture and Complementary Medicine Application and Research Center, and Anatolian Traditional and Complementary Medicine Association.12 June 2021
- Kumar, D., Malik, P., Ali, A. 2021. (Oral). Potential role of extract and bioactives of Nigella sativa in the prevention of Glycation and Glycoxidation. 12th International Phytocosmetics and Phytotherapy Congress (IPPC-Greece). 19-21 May 2021. ONLINE.
- Resource Person to deliver a lecture on 'Research Methodology: Key to success in Research', during International Webinar on "Basics of research Methodology and use of Statistics in Biology" organized by Rizvi College of Arts, Science and Commerce, Bandra, Mumbai on 1st April 2021
- Kumar, D., Ali, A. 2021. (Oral). Identification of Potential Antiglycating Molecules by Using Molecular Docking and in Vitro Approach. International Congress on Biological and Health Sciences (ICBH), 26-28, Feb. 2021. (Honorable mention award for oral presentation). ONLINE
- Guest Speaker to deliver a lecture on 'Research Misconduct' during National Level Virtual FDP in Prospects and Retrospects in Life Science organized by the

- Department of Biochemistry, Rathnavel Subramaniam College of Arts and Science, Coimbatore, Tamil Nadu, 22nd Feb 2021.
- Resource Person to deliver a lecture on 'Research Misconduct' FDP on Research Methodology by MGM School of Biomedical Sciences, MGMIHS, Navi Mumbai, India, 6th Jan 2021.
- Invited Speaker to deliver a lecture on 'Nutritional and Health benefits of Spirulina' during 2-days International Conference – Emerging Trends in Life Sciences (ICETLS – 2020) organized by Department of Botany, Telangana University, Nizamabad, Telangana, 16th Dec 2020.
- Kumar, D., Ali, A. 2020. (Oral). Inhibition of glucose toxicity and aggregation by thymoquinone during diabetes. 4th International Health Sciences Conference 2020 (IHSC 2020). Dicle University, Diyarbakir, Turkey. 5-6, Nov. 2020. ONLINE
- Prairna Malik, Ali, A. 2020, (Oral). Prevention of Advanced Glycation End Products by the seed extracts of Nigella sativa. The 6th International Mediterranean Symposium on Medicinal and Aromatic Plants (MESMAP6). 15-17, Oct. 2020, Izmir, Turkey. ONLINE
- Guest speaker to deliver a lecture on 'Phenolic Acids and their role in prevention
  of Glycation' during AICTE online STTP entitled "Impact of polyphenols in enzyme
  inhibition and formulation of healthcare apparels". organized by the Department
  of Biotechnology jointly with Departments of Textile and Fashion Technology,
  Kumaraguru College of Technology, Coimbatore, Tamil Nadu, 14th Oct 2020.
- Invited speaker to deliver a lecture on 'Sugar induced changes in Biomolecular Structure during Diabetes' in 'Invited Lecture Series on Biological Science, ILSBS:2020(3) jointly organized by Government P. G. College Bazpur U. S. Nagar Uttarakhand, S. S. College Shahjahanpur U.P. and Society for Research in Biological Science. 24 Aug to 28 Aug 2020.
- Invited Speaker, 2-days International e-conference on "Impact of Covid-19 on Human Health & Environment". Organized by P. G. Dept. of Botany, Tata College, Chaibasa, Jharkhand. 29-30, July 2020.
- Kumar, D., Ali, A. 2020. (Oral). Inhibition of advanced Glycation products by natural and artificial compounds. Emerging Trends in Bioscience and Technology (ETBT-2020). Organized by School of Science, Sandip University, Nasik, India & Biotechnology Society of Nepal (BSN), 1-3, June 2020. (E-conference). (Consolation Certificate for the Best Oral Presentation). ONLINE
- Invited Speaker, FDP in Life Sciences, CHRIST (Deemed to be University). 23rd, May 2020.
- Paramanya, A., Ali, A. 2019. (Oral). Assessment of skin-whitening effect of cream prepared using cyanobacteria. 1st International Aromatic Plants and Cosmetics Symposium (AROPCOS). 3-6, Oct. 2019. Igdir, Turkey. (Best Presentation Award).
- Kumar, D., Ali, A. 2019. (Oral). Glycation induced structural alteration of Biomolecules and their reversal by some artificial and natural compounds. 5th International Mediterranean Symposium on Medicinal and Aromatic Plants (MESMAP5) and The 5th International Symposium on Pharmaceutical and Biomedical Sciences JOINT MEETING. 24-28, April 2019, Cappadocia – Turkey (Best Presentation Award).
- Ali, A., Paramanya, A. 2019. (Oral). Antidiabetic and antiglycating properties of Spirulina platensis. 5th International Mediterranean Symposium on Medicinal and Aromatic Plants (MESMAP5) and The 5th International Symposium on

- Pharmaceutical and Biomedical Sciences JOINT MEETING. 24-28, April 2019, Cappadocia Turkey
- Kumar, D., Ali, A. 2018. (Oral). Artificial Sweeteners and their Preventive Role in the Process of Glycation. International Health Sciences Conference (IHSC 2018). Dicle University, Diyarbakir, Turkey. 14-17, Nov. 2018.
- Kumar, D., Ali, A. 2018. (Invited speaker). Artificial sweeteners prevent the accumulation of advanced glycation end products (AGEs). 2nd International Conference, Advances in Agricultural, Biological and Applied Sciences for Sustainable Future (ABAS 2018), Subharti Univrsity, Meerut, U.P., India. 20-22, Oct. 2018. (Received second prize).
- Shah, R., Kumar, D., Ali, A. 2018. (Oral). Assessment of Antiglycating potential of Nigella sativa (Black Cumin seeds). 4th International Mediterranean Symposium on Medicinal and Aromatic Plants (MESMAP4). 18th – 22nd, April 2018. Antalya, Turkey.
- Ali, A. 2018. (Oral). Prevention of Glycoxidative Damage of DNA and Proteins by Kalonji seeds (Nigella sativa) 2nd Unani Day Celebration & International Conference on Unani Medicine, Central Council for Research in Unani Medicine, Ministry of AYUSH, Government of India, New Delhi, India. 10th and 11th, Feb. 2018.
- Ali, A. 2017. (Oral). Acesulfame Potassium inhibits the formation of AGEs and glycation induced aggregation. National Conference on Protein Structure and Dynamics in Health and Agriculture. Department of Biosciences and Centre for Interdisciplinary Research in Basic Sciences, Jamia Millia Islamia University, Jamia Nagar, New Delhi, India. 3rd and 4th, Nov. 2017.
- Ali, A. 2017. (Oral). Acesulfame potassium: An artificial sweetener with antiglycating potential. First Indo-Russian Meet and Second International Conference on Biotechnological Advancements in Free Radical Biology and Medicine. Organized by Department of Biosciences, Integral University, Lucknow, U. P., India. 23 25, Jan 2017.
- Ali, A. 2016. (Oral). Phenolic acids prevent the process of in vitro glycation of proteins. National Conference on Oriental medicine and its role in human health (OMIRRH 2016). Dept. of Zoology, Smt. C. H. M. College, Ulhasnagar, Thane, Maharashtra, India. 2 -3, Sep. 2016.
- Delivered Lectures on Research Misconduct" and "Biochemistry of Diabetes" at Shri Shivaji College of Arts, Commerce and Science, Akola, 11th and 12th, March 2016.
- Ali, A. 2016. (Invited speaker). Artificial sweeteners induced glycation of Proteins. International Conference on Health Implications of Biotechnology (ICHIB). Central University of South Bihar, Patna, Bihar, India. 12-14, Feb. 2016.
- Ali, A., Sharma, R., and Sivakami, S. 2014. (Oral). Role of Natural Compounds in the Prevention of DNA and Proteins damage by Glycation. National Seminar on "Biotechnology for sustainable growth and development". Department of Biotechnology, CKT College, New Panvel, Mumbai, India. 3-4, Jan. 2014.

# **ACADEMIC QUALIFICATIONS**

- Ph. D. (Life Science)
   University of Mumbai, Mumbai, India
   Supervisor Dr. S. Sivakami
- 1998 Master of Science (Biochemistry)
   First Class, Jamia Hamdard, New Delhi, India
- 1996 Bachelor of Science (Hons.) Biochemistry

# **OTHER QUALIFICATIONS**

• Qualified the 'National Eligibility Test' (NET) conducted by CSIR-UGC (New Delhi, INDIA) in June 1998.