

➤ **Research Publications (International/National Journals):**

1. Srivastava R and **Ayyagari A**. Moving towards and environmentally sustainable food sector through mitigation of food losses and wastage - A possibilarians's approach. *Invertis Journal of Renewable Energy*, 2021; 11(1): 42-50. **Online ISSN:** 2454-7611, **Print ISSN:** 2231-3419
2. Dwivedi V, **Ayyagari A**, Chandran R, Diwan P, Gupta S, Gupta V. Repurposing Potential of Diminazene Aceturate as an Inhibitor of the *E. coli* DNA Gyrase B. *Journal of Biomedical Research and Environmental Sciences*. 2020 Oct 31; 1(6): 263-270. doi: 10.37871/jbres1153, Article ID: JBRES1153 (Impact factor: 4.070).
3. Chandran R, **Ayyagari A**, Diwan P, Gupta S, Gupta V. *In silico* Screening of Approved Drugs to describe Novel *E. coli* DNA Gyrase A Antagonists. *J Biomed Res Environ Sci*. 2020 Oct 26; 6(10): 233-240. doi: 10.37871/jbres1148, Article ID: JBRES1148 (Impact factor: 4.070).
4. Safikur Rahman, **Archana Ayyagari**, Durgashree Dutta, Vijay Kumar, Jihoe Kim, Arif Tasleem Jan, Rinki Minakshi (2019). "The onus of cannabinoids in interrupting the molecular odyssey of breast cancer: A critical perspective on UPR^{ER} and beyond". *Saudi Pharmaceutical Journal*. 27(3): 437-445 (Impact factor 4.562; cited by 17).
5. Safikur Rahman, **Archana Ayyagari**, Arif Tasleem Jan, Durgashree Dutta, Rinki Minakshi (2019). "Molecular insight into the relationship between autoimmune thyroid diseases and breast cancer". *Frontiers in Immunology*. 10:344 (Impact factor 8.786; cited by 33). doi: 10.3389/fimmu.2019.00344
6. Rinki Minakshi, Safikur Rahman, Arif Tasleem Jan, **Ayyagari Archana**, and Jihoe Kim (2018). Implications of Ageing and Endoplasmic Reticulum Unfolded Protein Response (UPR) in the Molecular Modality of Breast Cancer. *Nature Experimental & Molecular Medicine*. EMM2017173RR. (Impact Factor 12.153; cited by 32). doi: 10.1038/emm.2017.215
7. Safikur Rahman, **Archana Ayyagari**, Mudseer Azam & Rinki Minakshi (2018). "Role of osmolytes and their transporter systems in pathogen survival and pathogenicity". *Current Drug Metabolism*. 19(12):992-1001. BSP-CDM-2017-HT8-40 (Impact factor 3.408; cited by 5).
8. Safikur Rahman, **Archana Ayyagari**, Arif Tasleem Jan and Rinki Minakshi (2017). "Dissecting Unfolded Protein Response in managing clandestine modus operandi of Alzheimer's disease". *Frontiers in Aging Neuroscience*. 10:30. doi: 10.3389/fnagi.2018.00030 (Impact factor 4.53).
9. Safikur Rahman, Arif Tasleem Jan, **Ayyagari Archana**, Jiwoo Kim, Jihoe Kim and Rinki Minakshi (2017). Entanglement of UPR^{ER} in Aging driven Neuro-degenerative diseases. 9:341. *Frontiers in Aging Neuroscience*. Manuscript ID: 277398 doi: 10.3389/fnagi.2017.00341 (Impact Factor 4.53).
10. **Archana A.**, Kaur, P., Kanodia, S., Gupta, S., Priyanka, Khuntia, P., Anant, K. A., Saha, M. K., Jaiswal, S., Sharma, A., Tiwari, A., Mehra, A., Panchal, A. and Kumar, S. (2015). Evaluating Microbial & Chemical Quality of Delhi-NCR Drinking Water, enhancing its

Standard and Spreading mass awareness. Journal of Undergraduate Research and Innovation. Volume 1: Paper number 2. (ISSN: 2395-2334).

11. Satyanarayana T. and **Archana A.** (2003). Purification and characterization of cellulase-free xylanase of a moderate thermophile *Bacillus licheniformis* A99. World Journal of Microbiology and Biotechnology 19: 53-57. (ISSN: 0959-3993, Impact Factor: 4.28, cited by 65).
12. **Archana A.** and Satyanarayana T. (1998). Cellulase-free Xylanase Production by thermophilic *Bacillus licheniformis* A99. Indian Journal of Microbiology, 38:135-139. (ISSN: 0046-8991, Citation: 28, Impact Factor: 3.0; cited by 30).
13. **Archana A.** and Satyanarayana T. (1997). Xylanase Production by thermophilic *Bacillus licheniformis* A99 in solid state fermentation. Enzyme and Microbial Technology, 21:12-17. (ISSN: 0141-0229 (Impact Factor 3.85; cited by 307).
14. Sharma A., **Archana A.** and Satyanarayana T. (1997). **Enzymatic prebleaching of Paper Pulp.** *The Botanica*, 47 : 163-167. ISSN: 0045-2629 (Impact factor 0.54; cited by
15. Banerjee S., **Archana A.** and Satyanarayana T. (1995). Xylanolytic Activity and Xylose Utilization by Thermophilic Molds. *Folia Microbiologica*, 40 (3):279-282. (ISSN: 0015-5632, Impact Factor 2.96; cited by 12)
16. Banerjee S., **Archana A.** and Satyanarayana T. (1994). Xylose metabolism in a thermophilic mould *Malbranchea pulchella* var. *sulfurea* TMD-8. *Current Microbiology*, 29: 349-352. (ISSN: 0343-8651 (Impact Factor 2.343; cited by 40).

➤ **Published Books :**

1. Nigam, A. and **Ayyagari, A.** (2007). Lab Manual in Biochemistry, Immunology and Biotechnology. TATA-McGraw Hill Publishing Company Limited. (ISBN 13:978-0-07-061767-4; cited by 81).

➤ **Articles in Edited Books / Conference Proceedings / Book Chapter:**

1. **Archana Ayyagari**, Durgashree Dutta, Safikur Rahman, Rinki Minakshi (2021) Glycome in Metastasis: Glycan Remodeling and Tumor Progression. In: "The Glycome". Apple Academic Press. (eBook ISBN: 978-1003145394).
2. **Archana Ayyagari**, Lakshna Mahajan, Safikur Rahman, R. Minakshi (2019). Invited Chapter "Post Translational Modifications In Human Therapeutics Produced In Plant-Expression Systems" for book "Dar - Protein Modificomics" Elsevier Publications, pp. 145-169 (ISBN: 978-0128119136).
3. Lakshna Mahajan, Santosh K. Upadhyay, **Archana Ayyagari**, Poonam Gautam (2018). Chapter on "Gut microbiota and human health" (Chapter.ID_36581). In: "Industrial Microbiology: Microbes in Action" (Book ID: 5599) Nova Publishers, USA.
4. Vikash Kumar, Digvijay Verma, **Archana Ayyagari**, Tulasi Satyanarayana (2013). Chapter on "Thermostable Bacterial Xylanases". In book titled, "Thermophilic Microbes

in Environmental and Industrial Biotechnology”, Springer Publications, pp. 813-857. (ISBN: 978-94-007-5899-5).

5. **Archana Ayyagari**, A. Sharma, T. Satyanarayana (1999). Chapter on “Xylanolytic Enzymes”. In book titled, “Thermophilic Moulds in Biotechnology”. Springer Publications. Editors: Johri, B.N., Satyanarayana, T., Olsen, J., pp. 169-190. (ISBN 978-94-007-5899-5). Citations: 5
6. **A. Archana** and T. Satyanarayana (1999). Chapter on “Potential Biotechnological Applications of Thermophilic Moulds”. In book entitled, “From Ethnomycology to Fungal Biotechnology: Exploiting Fungi from Natural Resources for Novel Products”. Springer Publications, pp. 57-74. (ISBN 978-1-4613-7182-3). Citations: 5
7. Sharma A., **Archana A.** and Satyanarayana T. (1997). Reduction in organochlorine pollutants in paper pulp industry using microbial xylanases. In: Proceedings of National Symposium.
8. **A. Archana** and T. Satyanarayana (1993). Parametric optimization of xylanase production from *Bacillus licheniformis* A99. In: Proceedings of Thermophiles-93, December 16-18, New Zealand, pp. B40-41.

➤ **Innovation projects undertaken (DU sponsored):**

1. Project 1 (2014-15)

Assessment of Microbial & Chemical quality of drinking water samples from various localities of Delhi NCR and checking the efficacy of various technologies available to make it potable (**SSNC 205**).

8 students of Microbiology and 2 students of Chemistry were guided in this project.

2. Project 2 (2015-16)

Plasmonic nanostructures in chemical and biological sensing (**SSNC 302**).

3 students of Microbiology and 7 students of Physical Sciences were guided in this project.

➤ **M.Sc. Dissertation guidance:**

Guided a student Mr. Abhishek Choudhary of Galgotia’s University for his dissertation towards fulfilment of his post graduation.

E-chapters authored for Institute of Life Long Learning (ILLL), University of Delhi :

1. **Archana A.** (2018). *Immunodeficiency*. For B.Sc. (Honours) Microbiology, ILL, University of Delhi. ISSN 2349-154X

2. **Archana A.** (2017). *An Introduction to Immunology*. For B.Sc. (Honours) Microbiology, ILL, University of Delhi. ISSN 2349-154X
3. **Archana A.** (2016). *Protozoa*. For B.Sc. (Honours) Microbiology, ILL, University of Delhi. ISSN 2349-154X
4. Garg N. and **Archana A.** (2016). *Fermented Dairy Products*. For B.Sc. (Honours) Zoology, under NME-ICT (National Mission on Education Information Communication Technology in Zoology) under MHRD Project. ISSN 2349-154X

E-chapters authored for Indira Gandhi National Open University (IGNOU):

1. Mehta P. and **Archana A.** (2010). **Immune Disorders**. For course Material for undergraduates and postgraduates.

Popular articles / Articles in Magazines /Newspapers:

1. **Srivastava A.**, Satyanarayana T. and Sharma A. (1998). *Ecofriendly Papermaking*. *Science Reporter*, January, 24-27. ISSN : 0036-8512.
2. **Srivastava A.** and Satyanarayana T. (1992). *Microbes for Pulping*. *Science Reporter*, September, 39-42. ISSN : 0036-8512.
3. **Srivastava A.** and Satyanarayana T. (1992). *Hot Prospects*. *Science Reporter*, June, 38-41. ISSN : 0036-8512.