<table>
<tr><td colspan="3">Dr. A. Archana
Professor
Department of Microbiology</td><td>  </td></tr>
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archana9194@gmail.com</td></tr>
<tr><td>Web-Page/
Bio-data</td><td colspan="3">Scholar ID - Prof. Archana Ayyagari - Google Scholar
LinkedIn ID -Prof. Archana Ayyagari | LinkedIn
Vidwan ID - https://vidwan.inflibnet.ac.in/profile/467041
ORCiD -https://orcid.org/my-orcid?orcid=0009-0009-9245-5507
YouTube - https://www.youtube.com/@mentorshipmagic</td></tr>
<tr><td colspan="4">Academic Qualifications: M.Sc. (Biotechnology), Ph.D. (Microbiology), Post-Doctoral Research at Max Planck Institute, Germany</td></tr>
<tr><td>Teaching Experience (Years)</td><td>29 years</td><td>Research Experience (Years)</td><td>10+ years</td></tr>
<tr><td>Areas of Research/ Specialization</td><td colspan="3">Industrial Microbiology, Recombinant DNA Technology, Immunology, Food Microbiology, Microbial Biotechnology, Biochemistry, Genetics, Instrumentation and Environmental Microbiology.</td></tr>
<tr><td>Mission & Vision</td><td colspan="3">My passion and zeal are to motivate the young generation to scale great heights in their careers, and it is the main driving force in my professional life. I take keen interest in shaping the academic and overall development of students at large.</td></tr>
<tr><td>Academic Interests</td><td colspan="3">● AMR and ‘One Health’ concept
● Use of probiotics for a healthier human microbiome
● Surveys and campaigns on contemporary medically important issues
● Utilizing microorganisms to enhance societal well being
● Rejuvenation towards Pristine Environment
● Dedicated to advancing sustainable developmental goals (SDGs) through quality education, gender equality, decent work and economic growth, reducing inequalities, responsible consumption, climate action, peace, justice and strong institutions and partnerships.</td></tr>
<tr><td>Publications</td><td colspan="3">(h-index: 12 || i10-index: 12 || Citations: 686)
● Research Publications & Reviews in National and International Journals: 17
● Laboratory Manual: 01
● Chapters in Edited Books: 08
● E-Chapters: 05
● Popular Science Articles: 03
● Video lectures in AYUSH website: 10
● Papers presented in Conferences: 07</td></tr>
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Organized events	● Convened a UGC-sponsored, 30-hour **Add-on course** on **Food Technology and Food Safety** in college during 13th-27th February 2020. Also delivered a lecture in the same. ● As Delhi State President of **Microbiologists Society, India (MBSI)**, convened more than 30 educative and motivating online sessions for students nationwide during 2020-2022. ● Convened a 6-weeks (30 lectures) workshop on **Entrepreneurship Skill Development Program (ESDP)** for undergraduate students at Swami Shraddhanand College in affiliation with the **Ministry of Micro, Small and Medium Enterprises (MSME)** during August to September 2012. Also delivered 6 lectures in the same program. ● Convened and organized various **seminars, symposia and workshops** in my college from time to time, such as a health talk on cancer awareness, heart health, IPR, Biotech Industry Startup/ Entrepreneurship prospects in India. Arranged a Hands-on training on "Biological applications of Nanoparticles: Isolation of DNA using Nanoparticles", and recently on Basic Immunology etc.
Short Courses/FDPs	● Attended online **Faculty Development Programme (FDP) on Entrepreneurship** during 15th -27th Feb 2021 from National Institute of Food Technology Entrepreneurship and Management (NIFTEM), Sonipat, Haryana, India, and was adjudged as the **best participant** in the same. ● Attended offline Faculty Development Programme entitled "**Writing Research Proposals and Addressing IPR related issues**" during 29th -30th March, 2019, organized by Research and IPR Cell, Ram Lal Anand College, University of Delhi. ● Attended Workshop on "**Biosafety preparedness for handling potential biohazardous material in laboratory setting" organized by National Institute of Virology (NIV), Pune, at Amity Institute of Virology and Immunology,** Amity University, U.P., Noida, 7th -8th November, 2016. ● Participated in "**National Symposium and Workshop on Crime Scene Management**" at Sri Guru Tegh Bahadur Khalsa College, University of Delhi, sponsored by UGC on 3rd – 4th March, 2016. ● Attended Add-on course – cum - training on "**Technology & Leadership in Disaster Management**" during January 20th to April 20th, 2016 as a delegate, organized by Department of Geography, Swami Shraddhanand College, University of Delhi.

	● Attended **Hands-on workshop on Immunology** during 14th -18th May, 2012 organized by Department of Biochemistry, Sri Venkateswara College, University of Delhi.
Administrative Responsibilities taken up at SSNC	● **Convenor of Alumni Committee** of Swami Shraddhanand College (SSNC) since 2012 and continuing. ● Currently a member of the **Committee of Courses (COC) for Microbiology, University of Delhi** South Campus. ● **Have contributed consistently in the capacity of a member** of various committees for the **undergraduate curricula restructuring** of **B.Sc. (Hons.) Microbiology** 5 times in past 29 years. ● **Head of the Department (HOD)** of Microbiology department (**9 times** for one academic session each). ● Carried out **two research projects** (one as Principal investigator and the other as co-investigator) under the innovative project scheme of Delhi University. ● **Deputy Superintendent** of DU Examinations in SSN College (many times). ● **Convener / member** of many Staff council Committees: Proctorial Board, Academic Advisory, Teaching Post, Cultural, Purchase, Verification, Women Development Centre, Canteen, Sports committees from time to time. ● Working as the **convenor** of one of the seven criteria (criterion 5) of **NAAC accredition core committee** of my 27 Feth college.
Curricular and Co-curricular activities	● Have been working in the capacity of **Executive Committee member** and National **Vice-President** of a national body Microbiologists' Society, India (MBSI) since 2022 till date. ● Served for two Academic Sessions 2020-2021 and 2021-2022 as the **State President** of 'Microbiologists' Society India' (MBSI), Delhi Chapter. ● Contributed **10 illustrated video lectures on 'Basic Microbiology'** for BAMS students (studying Ayurveda Medicine) via the **MINISTRY OF AYUSH** in 2023. ● **Chairperson of Nationwide Scientific Rangoli Competition** (Theme: Microbial Diseases) for schools, colleges and university students via MBSI platform in 2023. ● Organized Annual **'National Microbiology Calendar making competition'** and editing, printing and release of the national winning entry to all reputed institutions nationwide thrice in 2021, 2022 and 2023 through the platform of **Microbiologists' Society, India (MBSI)**.

	● Running an educational & motivational **YouTube channel specifically for students' needs**, containing approx.. 400 videos (including shorts). ● Published as well as reviewed significant **e-content for Institute of Lifelong Learning (ILLL)** for the benefit of microbiology enthusiasts. ● **Formed Swami Shraddhanand College Microbiology Society** of all the students and ex-students who pursue(d) their graduation in Microbiology in Swami Shraddhanand College, and **named it SOOKSHMA** in 1998. ● Organized a number of Inter-college Microbiology fests during the past years. ● Made active efforts to keep a track of our departmental **alumni**, and have been proactively arranging for their homecoming, as much as encouraging them to impart adequate motivation and guidance for their juniors (current batches) on a regular basis for past three decades. ● Arranged a number of **educational trips** of current batches of students to many institutes of repute in Delhi-NCR as well as to many other cities including Chandigarh, Shimla and Agra in 2001, 2002 and 2005 respectively. ● Trained aspiring entrepreneurs the various aspects of Food Microbiology & Food Technology in **Entrepreneurship programs** conducted by the Ministry of Small & Medium Enterprises (MSME) for 6 years (2012 to 2018). ● Taught practical classes in **Life Sciences** at Swami Shraddhanand College Centre for **IGNOU** on a regular basis during 2016-2020. ● Delivered an invited lecture at Daulat Ram College, University of Delhi on 'Basics of Industrial and Environmental Microbiology' as a **Resource Person in Botany Department, Daulat Ram College** on March 19-20, 2018. ● Worked for Environmental cause: Initiated 'Microbial Composting of segregated organic kitchen wastes and other biowaste' at departmental level, in specially designated pits provided by our college in the college premises. ● Served as a jury member thrice during 2012 to 2014 in the annual **INSPIRE exhibition** organized to judge and motivate All India school children towards developing a scientific temper and analytical mind at Pragati Maidan, New Delhi. ● Taught various aspects of Food Microbiology and Food Technology at **Ministry of Micro, Small and Medium Enterprises - Development Institute (MSME-DI)** at Okhla, New Delhi for 4 years consistently (2012-2015).

	● Delivered Guest Lectures on Immunodiagnostics at TIBBIA College (Unani Medicine), Karol Bagh, New Delhi under the Aegis of MSME-DI in October 2012.
Awards	● Awarded as **'Best Teacher' by the Delhi Government** in 2020. ● Recipient of the prestigious **German DAAD fellowship**, and pursued my postdoctoral research at **Max Planck Institute of Biochemistry**, Munich, Germany during 1999-2000. ● Recipient of the **'Young Scientist Award'** in 1997 in the 38th AMI Conference (Association of Microbiologists of India), held at Jamia Millia Islamia, New Delhi. ● **AMI Best Poster Award** in 33rd AMI annual conference at Goa in 1992. ● Qualified **UGC National Eligibility Test (NET):** Junior Research Fellowship, Senior Research Fellowship and Lecturership in 1990.
Lab Manual	Authored a student-friendly '**Lab Manual in Biochemistry, Immunology and Biotechnology**' published from the reputed **TATA McGraw** publication in 2007 (Co-author: Prof. Arti Nigam).
Publications	1. Rinki Minakshi, Safikur Rahman, **Ayyagari Archana**, Durg Dutta and Abhishek Shankar (**2022**). Understanding the tra Menstrual Irregularity after Covid Vaccination: A Bird's Ey of Female Immunology, Frontier's in Immunology, Jun 13 3224. doi: 10.3389/fimmu.2022.906091. eCollection 2022. 35769462; PMCID: PMC9234113. (Impact factor 8.787). 2. Srivastava R and **Ayyagari A.** (**2021**). Moving towards and environmentally sustainable food sector through mitigation of food losses and wastage - A possibilitarians's approach. Invertis Journal of Renewable Energy, 11(1): 42-50. Online ISSN: 2454-7611, Print ISSN: 2231-3419 3. Dwivedi V, **Ayyagari A**, Chandran R, Diwan P, Gupta S, Gupta V. (**2020**). Repurposing Potential of Diminazene Aceturate as an Inhibitor of the *E. coli* DNA Gyrase B. Journal of Biomedical Research and Environmental Sciences. Oct 31; 1(6): 263-270. doi: 10.37871/jbres1153, Article ID: JBRES1153 (Impact factor: 4.070).

	4. Chandran R, **Ayyagari A**, Diwan P, Gupta S, Gupta V. (**2020**). *In silico* Screening of Approved Drugs to describe Novel *E. coli* DNA Gyrase A Antagonists. J. Biomed. Res. Environ. Sci. Oct 26; 6(10): 233-240. doi: 10.37871/jbres1148, Article ID: JBRES1148 (Impact factor: 4.070). 5. 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 UPRER and beyond". Saudi Pharmaceutical Journal. 27(3): 437-445 (Impact factor 4.562; cited by 17). 6. 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 7. 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 8. 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). 9. 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). 10. Safikur Rahman, Arif Tasleem Jan, **Ayyagari Archana**, Jiwoo Kim, Jihoe Kim and Rinki Minakshi (**2017**). Entanglement of UPRER in Aging driven Neurodegenerative diseases. 9:341. Frontiers in Aging Neuroscience. Manuscript ID: 277398 doi: 10.3389/fnagi.2017.00341 (Impact Factor 4.53).

	11. **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). 12. 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). 13. **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). 14. **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). 15. 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 16. 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) 17. 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).
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.
E-chapters authored for Institute of Life Long Learning (ILLL), University of Delhi :	1. **Archana A.** (**2018**). Immunodeficiency. For B.Sc. (Honours) Microbiology, ILLL, University of Delhi. ISSN 2349-154X 2. **Archana A.** (**2017**). An Introduction to Immunology. For B.Sc. (Honours) Microbiology, ILLL, University of Delhi. ISSN 2349-154X 3. **Archana A.** (**2016**). Protozoa. For B.Sc. (Honours) Microbiology, ILLL, 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):	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.
E-chapters reviewed for Institute of Life Long Learning (ILLL), University of Delhi	**Six chapters For B.Sc. (Honours) Zoology**, under NME-ICT (National Mission on Education Information Communication Technology in Zoology) under MHRD Project. ISSN 2349-154X
Innovation projects undertaken (DU sponsored):	1. Academic Session 2014-2015: **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). 2. Academic Session 2015-2016: **Plasmonic Nanostructures in Chemical and Biological Sensing** (SSNC 302).
Guided M.Sc. Dissertation student	Guided a student Mr. Abhishek Choudhary of Galgotia's University for his **dissertation** towards fulfilment of his post graduation.
Life Memberships	● Microbiologists' Society, India (**MBSI**) ● Indian Science Congress Association (**ISCA**) ● Association of Microbiologists of India (**AMI**) ● Biotechnology Society of India (**BSI**)