


Dr.A. Archana Professor Department of Microbiology			
Email	aarchana@ss.du.ac.in archana9194@gmail.com		
Web-Page/ Bio-data	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		
Academic Qualifications: M.Sc. (Biotechnology), Ph.D. (Microbiology), Post-Doctoral Research at Max Planck Institute, Germany			
Teaching Experience (Years)	29 years	Research Experience (Years)	08 years
Areas of Research/ Specialization	Industrial Microbiology, Recombinant DNA Technology, Immunology, Food Microbiology, Microbial Biotechnology, Biochemistry, Genetics, Instrumentation and Environmental Microbiology.		
Mission & Vision	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.		
Academic Interests	<ul style="list-style-type: none">● Educating people to fight AMR/ multiple drug resistance and other medical issues prevalent and rising in the society● Mitigating Food wastage & combating hunger at the level of society● Focus on organics to improve lifestyle, health and environment● Initiating and carrying on campaigns involving scientific community about medically important issues, particularly where microbes are involved● Understanding and exploiting bioremediation strategies for the betterment of our society.		
Publications	(h-index: 12 i10-index: 12 Citations: 686) <ul style="list-style-type: none">● Research Publications & Reviews in National and International Journals: 16● Laboratory Manual: 01● Chapters in Edited Books: 09● E-Chapters: 04● Popular Science Articles: 04● Video lectures in AYUSH website: 10		

	<ul style="list-style-type: none"> ● Papers presented in Conferences: 07
Short Courses/FDPs	<ul style="list-style-type: none"> ● Attended online Faculty Development Programme (FDP) on Entrepreneurship during 15th-27th Feb 2021 from National Institute of Food Technology Entrepreneurship and Management (NIFTEM), Sonapat, 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. ● “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. ● 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. ● 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	<ul style="list-style-type: none"> ● 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).

	<ul style="list-style-type: none"> ● 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 convener of one of the seven criteria (criterion 5) of NAAC accreditation core committee of my 27 Feth college.
Curricular and Co-curricular activities	<ul style="list-style-type: none"> ● 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). ● Convened a UGC-sponsored, 30-hour Add-on course on Food Technology and Food Safety in college during 13th-27th February 2020. ● 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

	<p>(current batches) on a regular basis for past three decades.</p> <ul style="list-style-type: none"> ● Arranged a number of educational trips of students to many institutes of repute in Delhi-NCR as well as to many other cities including Chandigarh, Shimla and Agra. ● Convened and organized various talks and events in my college, 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”, Basic Immunology etc. ● 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 a guest lecture at Daulat Ram College, University of Delhi on ‘Basics of Industrial and Environmental Microbiology’ as an invited 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. ● Worked as Coordinator for a 6 weeks 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 lectures in the same program. ● 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), Karolbagh, New
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	Delhi under the Aegis of MSME-DI in October 2012.
Awards	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 • 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). • 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). • 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

	<p>Pharmaceutical Journal. 27(3): 437-445 (Impact factor 4.562; cited by 17).</p> <ul style="list-style-type: none"> ● Safikur Rahman, ArchanaAyyagari, ArifTasleem Jan, Durgashree Dutta, Rinki Minakshi (2019). “Molecular insight into the relationship between autoimmune thyroid diseases and breast cancer”. <i>Frontiers in Immunology</i>.10:344 (Impact factor 8.786; cited by 33). doi: 10.3389/fimmu.2019.00344 ● RinkiMinakshi, Safikur Rahman, ArifTasleem Jan, AyyagariArchana, and Jihoe Kim (2018). Implications of Ageing and Endoplasmic Reticulum Unfolded Protein Response (UPR) in the Molecular Modality of Breast Cancer. <i>Nature Experimental & Molecular Medicine</i>. EMM2017173RR. (Impact Factor 12.153; cited by 32). doi: 10.1038/emm.2017.215 ● Safikur Rahman, ArchanaAyyagari, Mudseer Azam & Rinki Minakshi (2018). “Role of osmolytes and their transporter systems in pathogen survival and pathogenicity”. <i>Current Drug Metabolism</i>. 19(12):992-1001. BSP-CDM-2017-HT8-40 (Impact factor 3.408; cited by 5). ● Safikur Rahman, ArchanaAyyagari, ArifTasleem Jan and Rinki Minakshi (2017). “Dissecting Unfolded Protein Response in managing clandestine modus operandi of Alzheimer’s disease”. <i>Frontiers in Aging Neuroscience</i>. 10:30. doi: 10.3389/fnagi.2018.00030 (Impact factor 4.53). ● Safikur Rahman, ArifTasleem Jan, Ayyagari Archana, Jiwoo Kim, Jihoe Kim and Rinki Minakshi (2017). Entanglement of UPRER in Aging driven Neurodegenerative diseases. 9:341. <i>Frontiers in Aging Neuroscience</i>. Manuscript ID: 277398 doi: 10.3389/fnagi.2017.00341 (Impact Factor 4.53). ● 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. <i>Journal of Undergraduate Research and Innovation</i>. Volume 1: Paper number 2. (ISSN: 2395-2334). ● Satyanarayana T. and Archana A. (2003). Purification and characterization of cellulase-free xylanase of a moderate thermophile <i>Bacillus licheniformis</i> A99. <i>World Journal of Microbiology and Biotechnology</i> 19: 53-57. (ISSN: 0959- 3993, Impact Factor: 4.28, cited by 65).
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	<ul style="list-style-type: none"> ● Archana A. and Satyanarayana T. (1998). Cellulase-free Xylanase Production by thermophilic <i>Bacillus licheniformis</i> A99. <i>Indian Journal of Microbiology</i>, 38:135-139. (ISSN: 0046-8991, Citation: 28, Impact Factor: 3.0; cited by 30). ● Archana A. and Satyanarayana T. (1997). Xylanase Production by thermophilic <i>Bacillus licheniformis</i> A99 in solid state fermentation. <i>Enzyme and Microbial Technology</i>, 21:12-17. (ISSN: 0141-0229 (Impact Factor 3.85; cited by 307). ● Sharma A., Archana A. and Satyanarayana T. (1997). Enzymatic prebleaching of Paper Pulp. <i>The Botanica</i>, 47 : 163-167. ISSN: 0045-2629 (Impact factor 0.54; cited by ● Banerjee S., Archana A. and Satyanarayana T. (1995). Xylanolytic Activity and Xylose Utilization by Thermophilic Molds. <i>Folia Microbiologica</i>, 40 (3):279-282. (ISSN: 0015-5632, Impact Factor 2.96; cited by 12) ● Banerjee S., Archana A. and Satyanarayana T. (1994). Xylose metabolism in a thermophilic mould <i>Malbrancheapulchella</i> var. <i>sulfurea</i> TMD-8. <i>Current Microbiology</i>, 29: 349-352. (ISSN: 0343-8651 (Impact Factor 2.343; cited by 40).
<p>Articles in Edited Books / Conference Proceedings / Book Chapter</p>	<ul style="list-style-type: none"> ● ArchanaAyyagari, Durgashree Dutta, Safikur Rahman, RinkiMinakshi (2021) Glycome in Metastasis: Glycan Remodeling and Tumor Progression. In: “The Glycome”. Apple Academic Press. (eBook ISBN: 978-1003145394). ● Archana Ayyagari, Lakshna Mahajan, Safikur Rahman, R. Minakshi (2019). Invited Chapter “Post Translational Modifications In Human Therapeutics Produced In PlantExpression Systems” for book “Dar - Protein Modificomics” Elsevier Publications, pp. 145-169 (ISBN: 978-0128119136). ● 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. ● 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). ● Archana Ayyagari, A. Sharma, T. Satyanarayana (1999). Chapter on “Xylanolytic Enzymes”. In book titled, “Thermophilic Moulds in Biotechnology”. Springer

	<p>Publications. Editors: Johri, B.N., Satyanarayana, T., Olsen, J., pp. 169-190. (ISBN 978-94-007-5899-5). Citations: 5</p> <ul style="list-style-type: none"> ● 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 ● Sharma A., Archana A. and Satyanarayana T. (1997). Reduction in organochlorine pollutants in paper pulp industry using microbial xylanases. In: Proceedings of National Symposium. ● A. Archana and T. Satyanarayana (1993). Parametric optimization of xylanase production from <i>Bacillus licheniformis</i> 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 :	<ul style="list-style-type: none"> ● Archana A. (2018). Immunodeficiency. For B.Sc. (Honours) Microbiology, ILLL, University of Delhi. ISSN 2349-154X ● Archana A. (2017). An Introduction to Immunology. For B.Sc. (Honours) Microbiology, ILLL, University of Delhi. ISSN 2349-154X ● Archana A. (2016). Protozoa. For B.Sc. (Honours) Microbiology, ILLL, University of Delhi. ISSN 2349-154X ● 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:	<ul style="list-style-type: none"> ● Srivastava A., Satyanarayana T. and Sharma A. (1998). Ecofriendly Papermaking. Science Reporter, January, 24-27. ISSN : 0036-8512. ● Srivastava A. and Satyanarayana T. (1992). Microbes for Pulp. Science Reporter, September, 39-42. ISSN : 0036-8512. ● Srivastava A. and Satyanarayana T. (1992). Hot Prospects. Science Reporter, June, 38-41. ISSN : 0036-8512.
Innovation projects undertaken (DU sponsored):	<ul style="list-style-type: none"> ● Project 1 (2014-15), Assessment of Microbial & Chemical quality of drinking water samples from various localities of Delhi NCR and checking the

	<p>efficacy of various technologies available to make it potable (SSNC 205).</p> <ul style="list-style-type: none"> ● Project 2 (2015-16), 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	<ul style="list-style-type: none"> ● Microbiologists' Society, India (MBSI) ● Indian Science Congress Association (ISCA) ● Association of Microbiologists of India (AMI) ● Biotechnology Society of India (BSI)