

# BIODATA

**Dr. B. S. Srinath, M.Sc, Ph.D.**

**Assistant Professor**

Department of Microbiology & Biotechnology

Bangalore University

Jnanabharathi Campus

Bangalore - 560056

E.mail: [srinathbs86@gmail.com](mailto:srinathbs86@gmail.com)

Phone:+91-9743399248, +91-821701047



## Educational Qualification:

Degree	College/ University	Year of Passing	Division/ Class/ Grade	Subject(s)
B.Sc	Government Science College, Bengaluru.	2008	First	Chemistry, Zoology, Microbiology
M.Sc	JnanaBharathi Campus, Bangalore University.	2010	First	Microbiology
B.ED	Padmashree College, Bangalore.	2012	First	Chemistry Biology
Ph.D.	Mangalore University			Microbiology
<b>Examinations Qualified</b>				
KSET		2012	First Rank in state (Life Sciences)	Life Sciences
GATE		2012	1827 (All India Rank)	Microbiology, Biotechnology

**Teaching Experience:** 09 Years

**Research Experience:** 11 Years

**Research Projects:** Completed: 01

**Research Journal Publications:** 21

## Research Areas:

Microbiology, Biotechnology, Medical and Molecular biology, Agricultural and Environmental Microbiology, **Nano-Biotechnology**: Biosynthesis of Nanoparticles, Characterization studies of nanomaterials, Nanotoxicology, Drug delivery, Nanomaterials in Cancer therapy, Nano medicines, antimicrobial study of nanomaterial's, Biosensors, Nanocatalysts. **Geo-Microbiology**: Microbial studies in Gold mines, Role of Microbes in gold formation, gold mine bacteria in Nanotechnology, Bacterial diversity in Mines.

## List of Publications

1. **B.S. Srinath** and V.R. Rai, Biosynthesis of highly monodispersed, spherical gold nanoparticles of size 4–10 nm from spent cultures of *Klebsiellapneumoniae*, 3 Biotech (2014) 1–6.
2. **B.S. Srinath**, R.V. Rai, Biosynthesis of Gold Nanoparticles Using Extracellular Molecules Produced by *Enterobacteraerogenes* and their Catalytic Study, J. Clust. Sci. (2015) 1–12.
3. **B.S Srinath**, V.R.Rai, Rapid biosynthesis of gold nanoparticles by *Staphylococcus epidermidis*: Its characterisation and catalytic activity, Mater. Lett. 146 (2015).
4. Keshavamurty, **B.S.Srinath**, V. RavishankarRai, Biosynthesis and characterization of gold nanoparticles produced by *Salaciafruticosa* leaf extract, Particulate Science and Technology (2017).
5. **B. S. Srinath** and K. Byrappa, Eco-friendly synthesis of gold nanoparticles by gold mine bacteria *Brevibacillusformosus*and their antibacterial and biocompatible studies. *Journal Of Pharmacy* 7, 8 (1),.PP. 53-60 (2017).
6. **B. S. Srinath** and K. Byrappa, “Bio mineralization of gold nanoparticles by indigenous gold mine bacteria *Bacillus firmus*and their antibacterial activity”, RTGMCE-2017.
7. **B. S. Srinath** and K. Byrappa, Eco-friendly synthesis of gold nanoparticles by *Bacillus subtilis*and their environmental applications”, Adv. Sci. Lett. 24, 5942–5946 (2018).
8. **B. S. Srinath**, K. Namratha and K. Byrappa, Green synthesis of biocompatible gold nanoparticles from gold mine bacteria *Bacillus oceanisediminis* and their antileukemic activity, International Journal of Pharmacy and Biological Sciences,8,2 (2018).
9. K Ranjith, PM Abishad, K Namratha, K Byrappa, **B. S Srinath\***, Green synthesis of less toxic Selenium nanoparticles: Their antibacterial, antioxidant and catalytic activity, Biomedicine, 39, 3, 484-490.(2019).

10. **B. S Srinath**, Ganesh S Gowda, Rajesh P Shastry, K Byrappa, Mycosynthesis of biocompatible gold nanoparticles using *Penicillium* sp for bromothymol blue degradation, *Biomedicine*, 39, 2, 346-352.(2019).
11. **B. S Srinath**, Rajesh P Shastry, Sukesh B Kumar, Role of gut-lung microbiome crosstalk in COVID-19, *Research on Biomedical Engineering*, 1-11. (2020)
12. RP Shastry, **B. S Srinath**, SD Ghate, B Sukesh Kumar, V Kumar. Vanillin derivative inhibits quorum sensing and biofilm formation in *Pseudomonas aeruginosa*: a study in a *Caenorhabditiselegans* infection model. *Natural Product Research*, 1-6 (2021).
13. Avinash I.A, Shivasharana C.T ,Krishnaveni R , Abhijeeth S B , Vijaya Kumar R, **Srinath B S** and YalpiKarthik, Biotechnological Approach to Optimization and Production of Melanin by *Brevibacillus invocatus* strain IBA, under submerged fermentation, *Biomedicine*, 2021.
14. Sairam Mantri, Mallika Dondapati, Krishnaveni Ramakrishna, Amrutha V Audipudi, **Srinath B S\***, Production, characterization and applications of bacterial pigments- a decade of review *Biomedicine*, 2022.
15. Manochaya, S, Shashikant Udikeri, **Srinath BS**, Mantri Sairam and Krishnaveni Ramakrishna, *In-vivo* culturing of entomopathogenic nematodes towards biological control of insect pests – A Review, *Journal of Natural Pesticides*, 2022
16. Abishad P.M, Namratha K, **Srinath B. S**, Jayashankar M, Jess Vergis, and Byrappa K. Antibacterial efficiency enhancement of gentamicin sulfate encapsulated. CuS nanoparticles, *Songklanakarin J. Sci. Technol*, 2022.
17. Abishad P, Namratha K, Nayan MB, Jayashankar M, **Srinath B.S**, Jess V and Byrappa K, Facile Synthesis of Copper Sulphide Nanoparticles using *Trichoderma Harzianum* and Antibacterial Efficiency Enhancement by Gentamicin Sulfate, *Open Access Journal of Pharmaceutical Research*, 2022.
18. P. M. Abishad, M. Jayashankar, K. Namratha, **B. S. Srinath**, N. V. Kurkure, S. B. Barbuddhe, D. B. Rawool, J. Vergis & K. Byrappa, Synthesis of ZIF-8(Fe) Functionalized with Citral as Potent Antimicrobial Candidate against Multi-Drug Resistant Enterococcal *Escherichia coli* and Non-Typhoidal *Salmonella* spp. *Russian Journal of Bioorganic Chemistry*, 2023.

19. RP Shastry and **B. S Srinath**, Application of Microwave and Ultrasonication for Anthocyanin Extraction Process from Garcinia indica Choisy Fruit Waste and Assessment of Antioxidant Activity using Caenorhabditis elegans Model, Current Bioactive Compounds, 2023.
20. P.M. Abishad; M.Jayashankar; AbdoHezam; **B.S. Srinath**; K.Namratha; N. V Kurkure; Sukhadeo B Barbuddhe; D. B Rawool; K.Byrappa Synthesis and characterization of nano-cobalt aluminium oxide as a potential antioxidant, biocidal and photocatalytic disinfectant against multi-drug-resistant pathogens of public health significance. Nano-Structures & Nano-Objects, February 13, 2024.
21. Ramesh Babu Y, **Srinath B S** et al., Bioinspired Carbon Quantum Dots Synthesized from Leaves of Hibiscus rosa-sinensis Linn. as an Advanced Wound Healing Material, Scientific Reports, 2024.

#### **Books/ Book Chapters Published: 01**

01. Basavaraju M, Gunashree B and **Srinath B. S.** Microbiome the Power House of Health and Disease, 2022.

#### **International visits and presentations**

**Visited National University of Singapore**, June 23-28, 2019 and presented a research paper on "Biosynthesis of nanoparticles from bacteria and their health and environmental applications" 10<sup>th</sup> International Conference on Materials for Advanced Technologies, Marina Bay Sands, Singapore.

#### **Papers/ poster presentations in Conferences / Seminars / Symposia: 25**

International: 14

National: 11

#### **Paper Presentations in National and International Conferences**

1. Paper presented in National conference jeevanveshane 2013-14 on "Novel approaches in Life Science" held on 23-09-2013 January 2013.
2. Paper presented in KSTA conference on "Science and Technology for Education and Health Care" jointly organized by Karnataka Science and Technology Academy and JSS College, Mysore.
3. International Symposium on "Chemical Biology-Drug Discovery" held on 9<sup>th</sup> and 10<sup>th</sup> January 2014 by University of Mysore, Mysore.

5. Participated as as a Student Delegate in the International Conference at “7<sup>th</sup> Bangalore INDIA NANO 2014” held from 4-6<sup>th</sup> December 2014 at Bangalore.
8. Poster presentation in One day National Seminar on “Chemistry and Chemical Biology” held on 26<sup>th</sup> May, 2015, University of Mysore, Mysore.
9. Poster presentation in UGC Sponsored National Symposium - 2015 on “Microbes and Health” at DOS in Microbiology university of Mysore, Mysore.
10. Poster presentation in National conference on “Application of Nanotechnology in Environmental Remediation” held on 7<sup>th</sup> October, 2015 at Tumkur University, Tumkur.
- 11., Biomineralization of Gold nanoparticles by Indigenous gold mine bacteria, National symposium on “Geoscience Approaches for sustainable Future of Life” 2016, at University of Mysore, Mysore,19-23, December,2016.
12. Presented paper in Inter National conference on Nanoscience and Nanotechnology, at VIT University, Vellore, 19-21 October 2016.
13. Presented paper in National Seminar and Workshop on Functional Nanomaterials for Energy, Environment and Health, Mangalore University, Mangalagangothri, 21-22 March 2016.
14. Green synthesis of gold nanoparticles by *Bacillus sp.* and their environmental applications, National seminar and workshop on Functional nanomaterials for Energy, Environment and Health,Mangalore University, Mangalagangothri, 21<sup>st</sup> and 22<sup>nd</sup> March 2016.
- 15.Eco-friendly synthesis of gold nanoparticles by *Bacillus subtilis*and catalytic applications” Inter National conference on Nanoscience and Nanotechnology, VIT University, Vellore, 19<sup>th</sup> -21<sup>st</sup> October 2016.
16. Biomineralization of Gold Nanoparticles and their Antibacterial activities,” RTGMCE-2017, ATME, Mysore, Karnataka, 23<sup>rd</sup> -24<sup>th</sup> March 2017.
17. Eco-friendly synthesis of gold nanoparticles using gold mine bacteria *Bacillus toyonensis*and their biological activities, Inter National conference on Nanoscience and Nanotechnology,SRM University, Chennai, India, 9<sup>th</sup> -11<sup>th</sup> August 2017.
18. National Conference on Trends in Bioactive Natural Products and Health Care, Mangalore University P. G. Centre, Kodagu, Karnataka, India, 6-7, October 2017.

19. Eco-friendly synthesis of gold and silver nanoparticles and their antibacterial activity”International Symposium on Developing Drugs for Tomorrow: Challenges and Opportunities,AIMS, B.G. Nagara, Mandya (D), Karnataka, India, 1<sup>st</sup> -2<sup>nd</sup> January 2018.
20. Eco-friendly synthesis of gold nanoparticles by Streptomyces paradoxus and their Biological Applications”International Symposium on Recent Trends in Materials Science and Biophysics, Mangalore University, Karnataka, India, 23-25 January 2018.
21. Eco-friendly synthesis of gold nanoparticles and their Biological Applications,International conference on Nanomaterials and Their Applications, University of Mysore, Mysore, Karnataka, India, 1 -2 March 2018.
22. Biosynthesis of gold nanoparticles by indigenous gold mine bacteria and their biological activity, ISCA-2019, during January 03-07 2019, Jalandhar, Punjab.
23. Biosynthesis of gold nanoparticles by indigenous gold mine bacteriaand their biological properties” AFMEEHC, University of Mysore, Mysore, Karnataka, India, 18 -20 March 2019.
24. Biosynthesis of nanoparticles from bacteriaand their health and environmental applications” 10<sup>th</sup> International Conference on Materials for Advanced Technologies, Marina Bay Sands, Singapore, June 23-28, 2019.

### **Recognitions/Awards**

**Young Scientist Award**, Microbiologists Society, India. (2020-2021)

### **Conferences / Seminars / Workshops / Symposia organized**

1. **Organizing Secretary**: Two days Conference on “**Democracy, Justice and Social Transformation: Ambedkar’s interventions**” Organised by Mangalore University Post Graduate Centre on 13-14<sup>th</sup> October 2017.
2. **Chair, in National Conference on** Trends in Bioactive Natural Products and Health Care (BNPHC 2017), Mangalore University P. G. Centre, Kodagu, Karnataka, India, 6-7, October 2017.
3. **Convener**: International Webinar on “**COVID-19: Current Status of Vaccine Development and Immunization**” on 30<sup>th</sup> September 2020.
4. **Moderator**: National Webinar on “**COVID-19 Pandemic and its Management Strategies**”, 28<sup>th</sup>&29<sup>th</sup> October 2021.

## **Participation in the International/ National Conferences/ Workshops/ Symposia**

1. 3<sup>rd</sup> International Festival of Science, Technology, Engineering and Mathematics, University of Mysore, Mysore, Karnataka, India, 17-20 October 2016.
2. One Day International Symposium on “**Genomic Instability and Human Diseases**”, Mangalore University, Karnataka, India, 30 January 2017.
3. Participated in National Webinar on “**COVID-19 Pandemic and its Management Strategies**”, 28<sup>th</sup> & 29<sup>th</sup> October 2021.
4. Participated in International webinar on “**Emerging Challenges in the Advanced Phytochemicals against the Antibiotic Resistance**”, 3<sup>rd</sup> December 2021.

## **Training/Workshop Programs**

1. Participated in the “**Two day Brain- Storming Workshop on Successful Facing of Competitive Examinations**” Organized by University of Mysore, held on 20<sup>th</sup> and 21<sup>st</sup> February 2014.
2. Participated in one day workshop on “**Intellectual Property Training and Awareness**” University of Mysore, Mysore, Karnataka, India, 10 April 2014.
3. Participated in Three days work shop on “**Handling of Scientific Equipment- IOE**” held from 18<sup>th</sup> – 20<sup>th</sup> August 2014 at Mysore university.
4. Participated in Eight days National Training on “**Application and Trouble shooting of Scientific Equipment**” University of Mysore, Mysore, Karnataka, India, from 1-8 December 2017.
5. Participated in “3 days online Workshop on Advancement in Applied Microbiology and Biotechnology 2021”, Organised by Dept. of Microbiology, Organised by Mangalore University Post Graduate Centre on 15-17<sup>th</sup> February 2021.
6. Participated in Regional Research Symposium on PBL “**Break through AI: Multidisciplinary Trends in Engineering and Research**” Organized by Karnataka Higher Education Council and Aalborg University, June 18&19, 2021.

## **Membership of Professional Bodies**

- Life member of Indian Science Congress
- Life member of Microbiologists Society, India (MSI).
- State Coordinator, MSI, Mangalore University (Till 06/10/2023)..
- **Member Secretary**, Institutional Biosafety Committee (IBSC), Mangalore University (Till 06/10/2023).

## **Administrative Experience**

- 1. Special Officer** (07/02/2022 to 24/07/2023), Mangalore University.
- 2. Hostel Warden** (2015-2022), University Hostel for Men.
- 3. Nodal officer** (2018-2022), Chief Minister's Kaushalya Karnataka Yojane.
- 4. Guest House In-Charge** (2015-2022).
- 5. Coordinator**, NAAC Committee, DOS in Microbiology.
- 6. Member**, Sports advisory Committee, SPARSH Committee, Canteen Committee, Anti-ragging Cell, Transport Committee, Vigilance Cell, Covid-19 Taskforce, NSS Cell.