

FACULTY PROFILE

Name : Dr. Jayachandra S. Yaradoddi



Designation : Assistant Professor
Department : Biotechnology
Employee ID :
E mail ID : jsybiotech@gmail.com
(College official ID), (Personal mail ID)

Contact details : Near Post office, Konapurpet Manvi-584123, Dist:Raichur

Orcid ID : 0000-0003-3098-1754
Scopus ID : [Scopus Author ID: 57208106868](#)
Vidwan Id : 153699
Researcher ID : [K-6092-2012](#)
(Web of Science)
Google Scholar ID : <https://scholar.google.com/citations?user=Gqg7uLQAAAAJ&hl=en>
Qualification : M.Sc., Ph.D. in Biotechnology
Professional Experience : 12 Years
Teaching experience : 8 Years
Industry experience :
Administrative Responsibilities : 5 Years (Served as a Founder and Director of Biotech Startup)

Teaching :
No. of Projects :
Guided :
 UG : **10 projects**
 PG :
 Research :
 Interest Area : Industrial Biotechnology, Biomaterials, Bionanotechnology, Microbial taxonomy

No. of Research
 Scholars :
 Pursuing :
 Awarded :
Patents : -

Research Grants : -

Publications :
 Books/Chapters

1. Yaradoddi J.S. et al. (2021) Extremophilic Actinobacteria. In: Yaradoddi J.S., Kontro M.H., Ganachari S.V. (eds) Actinobacteria. Rhizosphere Biology. Springer, Singapore. https://doi.org/10.1007/978-981-16-3353-9_4.
2. Yaradoddi J.S., Kontro M.H. (2021) Actinobacteria: Basic Adaptation to Harsh Environments. In: Yaradoddi J.S., Kontro M.H., Ganachari S.V. (eds) Actinobacteria. Rhizosphere Biology. Springer, Singapore. https://doi.org/10.1007/978-981-16-3353-9_5.
3. Yaradoddi J.S., Kontro M.H., Ganachari S.V., Banapurmath N.R., Soudagar M.E.M., Divatar M. (2021) Scope of *Actinobacteria* in Bioengineering. In: Yaradoddi J.S., Kontro M.H., Ganachari S.V. (eds) Actinobacteria. Rhizosphere Biology. Springer, Singapore. https://doi.org/10.1007/978-981-16-3353-9_10.
4. Kontro M.H., Yaradoddi J.S. (2021) Microbial Ecology. In: Yaradoddi J.S., Kontro M.H., Ganachari S.V. (eds) Actinobacteria. Rhizosphere Biology. Springer, Singapore. https://doi.org/10.1007/978-981-16-3353-9_1.
5. Yaradoddi J.S. et al. (2021). Actinobacteria in Marine Environments. In: Yaradoddi J.S., Kontro M.H., Ganachari S.V. (eds) Actinobacteria. Rhizosphere

Biology. Springer, Singapore. https://doi.org/10.1007/978-981-16-3353-9_2

6. Yaradoddi J.S., Kontro M.H., Banapurmath N.R., Ganachari S.V., Umesh M.K. (2021). Identification of Novel Actinomycetes. In: Yaradoddi J.S., Kontro M.H., Ganachari S.V.(eds) Actinobacteria. Rhizosphere Biology. Springer, Singapore. https://doi.org/10.1007/978-981-16-3353-9_8

7. Yaradoddi J.S. et al. (2021). Recent Trends of Actinomycetes in Nanotechnology. In: Yaradoddi J.S., Kontro M.H., Ganachari S.V. (eds) Actinobacteria. Rhizosphere Biology. Springer, Singapore. https://doi.org/10.1007/978-981-16-3353-9_11

8. Kontro M.H., Yaradoddi J.S., Ganachari S.V., Banapurmath N.R., Umesh M.K. (2021) Actinomycetes in Agriculture and Forestry. In: Yaradoddi J.S., Kontro M.H., Ganachari S.V. (eds) Actinobacteria. Rhizosphere Biology. Springer, Singapore. https://doi.org/10.1007/978-981-16-3353-9_12.

9. Kontro M.H., Yaradoddi J.S. (2021) Actinomycetes in Environmental Applications. In: Yaradoddi J.S., Kontro M.H., Ganachari S.V. (eds) Actinobacteria. Rhizosphere Biology. Springer, Singapore. https://doi.org/10.1007/978-981-16-3353-9_14

10. Kontro M.H., Yaradoddi J.S., Banapurmath N.R., Ganachari S.V., Hungund B.S. (2021). Biotechnological Importance of Actinomycetes. In: Yaradoddi J.S., Kontro M.H., Ganachari S.V. (eds) Actinobacteria. Rhizosphere Biology. Springer, Singapore. https://doi.org/10.1007/978-981-16-3353-9_15

11. Jayachandra Yaradoddi, Shoba, H., Banapurmath, N., Hunashyal, A., Sulochana, M., Shettar, A., Ganachari, S. "Alternative and Renewable Bio-based and Biodegradable Plastics" Springer International Publishing AG 2018 L.M.T. Martínez et al. (eds.), Handbook of Ecomaterials, https://doi.org/10.1007/978-3-319-68255-6_150

12. Ganachari, S., Banapurmath, N., Salimath, B., Yaradoddi, J., Shettar, A., Hunashyal, A., Venkataraman, A., Patil, P., Shoba, H., Hiremath, G. "Synthesis techniques for the preparation of nanomaterials" Springer International Publishing AG 2018 L.M.T. Martínez et al. (eds.), Handbook of Ecomaterials, https://doi.org/10.1007/978-3-319-68255-6_149

13. Ganachari, S., Yaradoddi, J., Somappa, S., Mogre, P., Tapaskar, R., Salimath, B., Venkataraman, A., Viswanath, V. Green Nanotechnology for Biomedical, Food and

Agricultural Applications, Springer International Publishing AG 2018 L.M.T. Martínez et al. (eds.), Handbook of Ecomaterials. https://doi.org/10.1007/978-3-319-68255-6_184

14. Ganachari, S., Mogre, P., Tapaskar, R., Yaradoddi, J., Banapurmath, N. Polyaniline Synthesis and Its Wide Range Sensor and Electronics Applications, Springer International Publishing AG 2018 L.M.T. Martínez et al. (eds.), Handbook of Ecomaterials, https://doi.org/10.1007/978-3-319-68255-6_186

15. Ganachari, S., Viannie, L., Mogre, P., Tapaskar, R., Yaradoddi, J. Conducting polymer composite based sensors for Flexible Electronics, Springer International Publishing AG 2018 L.M.T. Martínez et al. (eds.), Handbook of Ecomaterials, https://doi.org/10.1007/978-3-319-68255-6_188

16. Tapaskar, R., Revankar, P., Ganachari, S., Yaradoddi, J. Biomass Energy and Bio-Solar Hybrid Energy Systems, Springer International Publishing AG 2018 L.M.T. Martínez et al. (eds.), Handbook of Ecomaterials,

https://doi.org/10.1007/978-3-319-68255-6_187

17. Tapaskar, R., Revankar, P., Ganachari, S., Yaradoddi, J. Conventional and Renewable Energy Based Hydrogen Production, Springer International Publishing AG 2018 L.M.T. Martínez et al. (eds.), Handbook of Ecomaterials, https://doi.org/10.1007/978-3-319-68255-6_185

18. Yaradoddi, J., Kontro, M., Ganachari, S., Sulochana, M., Agsar, D., Tapaskar, R., Shettar, A. Protein Nanotechnology, Springer International Publishing AG 2018, Dr. B. I. Kharisov(Editor-in-Chief), Handbook of Ecomaterials. https://doi.org/10.1007/978-3-319-68255-6_192

19. Yaradoddi, J., Kontro, M., Ganachari, S., Sulochana, M., Agsar, D. RNA Nanotechnology, Springer International Publishing AG 2018, Dr. B. I. Kharisov (Editor-in-Chief), Handbook of Ecomaterials. https://doi.org/10.1007/978-3-319-68255-6_193

20. Yaradoddi, J., Kontro, M., Ganachari, S., Sulochana, M., Agsar, D., Tapaskar, R., Shettar, A. DNA Nanotechnology, Springer International Publishing AG 2018, Dr. B. I. Kharisov (Editor-in-Chief), Handbook of Ecomaterials. https://doi.org/10.1007/978-3-319-68255-6_191

21. Sharanabasava V. Ganachari, Leena Hublikar, Jayachandra S. Yaradoddi, and Shivalingayya S. Math. Metal Oxide Nanomaterials for Environmental Applications.

22. Leena Hublikar, Sharanabasava V. Ganachari, and Jayachandra S. Yaradoddi. Green Energy Generation from Microbial Fuel Cells. Dr. B. I. Kharisov (Editor-in-Chief), Handbook of Ecomaterials. https://doi.org/10.1007/978-3-319-68255-6_195.

**Journals
citations)** (with :

1. Kazi Zareenkousar, Hungund Basavaraj S., Dessai Diksha, Banapurmath Nagaraj R. and **Jayachandra S. Yaradoddi** (2022). Potential Biomedical implications of bioactive pigment and silver nanoparticles produced by the actinobacteria *Rhodococcus* sp. NCIM 5126. Research Journal of Biotechnology (**IF: 0.21**). Vol. 17 (5). Pages 160-169.
2. Zareenkousar Kazi, Basavaraj S. Hungund, Jayachandra S. Yaradoddi et al., (2022). Production, Characterization, and Antimicrobial Activity of Pigment from Streptomyces Species. Journal of Nanomaterials (**IF: 2.8**). Volume 2022, Article ID 3962301, 8 pages <https://doi.org/10.1155/2022/3962301>.
3. Jayachandra S. Yaradoddi, Nagaraj R. Banapurmath, Sharanabasava V. Ganachari, et al., (2021). Bio-based Material from Fruit Waste of Orange Peel for Industrial Applications. Journal of Materials Research and Technology. Volume 17, March–April 2022, Pages 3186-3197 [**Impact Factor (IF): 5.027**]. DOI: 10.1016/j.jmrt.2021.09.016
4. Kazi Zareenkousar, Hungund Basavaraj S., Dessai Diksha, Banapurmath Nagaraj R. and Yaradoddi Jayachandra S. Potential Biomedical implications of bioactive pigment and silver nanoparticles produced by the actinobacteria *Rhodococcus* sp. NCIM 5126 (2022). Res. J. Biotech. Vol. 17 (5). PP 160-169
5. **Jayachandra S. Yaradoddi**, Banapurmath, N.R., Ganachari, S.V. *et al.* (2020). Biodegradable carboxymethyl cellulose-based material for sustainable packaging application. Scientific Reports (Nature Publishers). 10, 21960 [Q1 Journal, IF: 4.4]. <https://doi.org/10.1038/s41598-020-78912-z>
6. **Jayachandra S. Yaradoddi**, Sulochana M.B., KontroMerja H, ParameshwarA.B.and Agsar Dayanand (2020). The Occurrence of potential and novel isolates of *Oceanobacillus* sp. JAS12 and *Salinicoccus* sp. JS20 recovered from West Coast of Arabian Sea, India. Res. J. Biotech.. 15 (9). 133-140 [Q4

Journal, IF: 0.49].

7. **Jayachandra S. Yaradoddi**, and Sulochana M.B. (2020). Screening and characterization of bioactive compounds produced by the moderate halophile *Halobacillus* sp. JS6. Res. J. Biotech. 15 (12) [Q4 Journal, IF: 0.49].
8. Arun Y. Patil, N. R. Banapurmath, **Jayachandra S. Yaradoddi**, B. B. Kotturshettar, Ashok S. Shettar, G. D. Basavaraj, R. Keshavamurthy, T. M. Yunus Khan, Shridhar N. Mathad. Experimental and Simulation Studies on Waste Vegetable Peels as Bio-composite Fillers for Light Duty Applications. Arabian Journal for Science and Engineering. 44:7895–7907. <https://doi.org/10.1007/s13369-019-03951-2> [Q2 Journal, Impact Factor: 2.34].
9. Sulochana M. B., **Jayachandra S. Y.**, Anil Kumar S and Dayanand A. Siderophore as a potential plant growth-promoting agent produced by *Pseudomonas aeruginosa* JAS-25. [Appl Biochem Biotechnol.](#); 174(1):297-308, Sep 2014. [Impact Factor: 2.9]
10. Sulochana, M. B., **Jayachandra, S.Y.**, Anil Kumar, S.K. and Dayanand, A. Antifungal attributes of siderophore produced by the *Pseudomonas aeruginosa* JAS-25. [J Basic Microbiol.](#) 54(5):418-24, 2014 May; [Impact Factor: 2.2].
11. **Jayachandra Yaradoddi**, Vinay Patil, Sharanabasava Ganachari, Nagaraj Banapurmath, Anand Hunashyal, Ashok Shettar (2016). Biodegradable Plastic Production from Fruit Waste Material and its Sustainable Use for Green Applications. International Journal of Pharmaceutical Research and Allied Science, 5(4): 56-66. (Indexed: Web of Science).
12. **Jayachandra S. Y.**, Anil Kumar S., Yogesh S. Shouche and M. B. Sulochana "Culturable Diversity of Extremely Halotolerant Bacteria from Arabian Sea Karnataka, India" International Journal of Biology, Pharmacy and Allied Sciences. 2(2), 2013 (Indexed in web of Science).
13. Merly D. P, **Jayachandra S.Y.**, K. Mohan Reddy, Anil Kumar S., Darley S.P. and M.B. Sulochana. Structural analysis of PknA protein in *Mycobacterium tuberculosis*. International journal of Biology, Pharmacy and Allied Sciences, 2(7), 1513-1525, 2013.
14. **Jayachandra S. Y.**, Parameshwar A. B., Mohan Reddy, K., and Sulochana. M. B., "Characterization of extracellular hydrolytic enzymes producing extremely halophilic bacterium *Virgibacillus* sp. JS5". World Journal of Science and Technology, 2(2):23-26, 2012.

15. **Jayachandra. S. Y.**, Anil Kumar. S., Merley. D.P., and Sulochana. M. B.,
“Isolation and characterization of extreme halophilic bacterium *Salinicoccus* sp. JAS4 producing extracellular hydrolytic enzymes, Recent Research in Science and Technology **4(4)**: 46-49, 2012.
16. Anil Kumar S., Arunashri R., **Jayachandra S. Y.**, and Sulochana M. B.,
“Screening of extracellular hydrolytic enzymes from *Marinobacter hydrocarbonoclasticas* strain AK5”. Int. J. Bioscan. Volume 5(1), 2010.
17. **Jayachandra. S. Y.**, Mohanreddy K., Paramesh B., Yogesh S. Shouche and M. B. Sulochana. Screening of Halophilic Bacteria Extracellular Enzymes Production from west coast of Karnataka, India, International Journal of Universal Pharmacy and Biosciences, 3(1) 31-45, 2013.
18. K. Mohan Reddy, Merley D. Pattathil, **S. Y. Jayachandra**, A. Parameshwar, M. B. Sulochana. Docking for Drug interface residues of modelled VPS33B of human with PtpA of *Mycobacterium tuberculosis* CDC1551. International Letters of Natural Sciences 11(2). 179-196, 2014.
19. M. B. Sulochana*, Arunashree, R., Mohan Reddy K., Parameshwar, A. B. and **Jayachandra, S. Y (2015)**. Isolation, Characterization and Purification of Lipase and its gene from *Pseudomonas* sp. RAS-4. J. Chem. Bio. Phy. Sci. Sec. B; Vol.5, No.1; 301-310
20. Mohan Reddy K., Siva Deepthi S., Parameshwar A. B., **Jayachandra S. Y.** and MB Sulochana (2015). Thermo and Alkali Tolerant Exo-Inulinase Produced by *Streptomyces* sp. Isolated from Unexplored Terrestrial Habitat. International Journal of Current Research and Academic Review, 3(10), page No. 354-363.
21. K. Mohan Reddy, Siva Deepthi S., **Jayachandra S. Y.**, Parameshwar A. B, Dayanand Agsar, Bikshapathi E. and M. B. Sulochana (2015). In *Silico* Structural Analysis for Exo- Inulinases in Proteomes of *Streptomyces* sp. using PDB Structures as Templates, Int.J.Curr.Microbiol.App.Sci (2015) **4(11): 858-867**
22. Parameshwar A. B., **Jayachandra S. Y.**, Anil, K. S., Mohan Reddy and M. B. Sulochana (2015). Molecular Insight of Halophilic Isolates for the Production of Potential Biomolecules under Stress Condition. Int.J.Curr.Microbiol.App.Sci (2015) **4(11): 849-857**.
21. Parameshwar A. B., Anil S. K., **Jayachandra S. Y.**, Mohan Reddy and M.B.Sulochana (2015). Influence of Heavy Metals Tolerance and Antibiotic Resistance in Pattern in *Halomonas organivorans*. Int.J.Curr.Res.Aca.Rev.2015; **3(10): 364-372**.
23. Sharanabasava V. Ganachari, Anjali A Bevinakatti, **Jayachandra S Yaradoddi**,

Nagaraj R Banapurmath, Anand M Hunashyal, Ashok S. Shettar, Rapid synthesis, characterization, and studies of hydroxyapatite nanoparticles”. Adv. Mater. Sci. Res. 2016;1(1):9-13.

Conferences

- :**
1. Participated in National Conference on “Biotechnology in Industrial and Rural Development” (NCBIRD) at Department of P.G. studies and Research in Biotechnology, Gulbarga University - Jan 2007.
 2. Participated in conference “Science and Technology for human welfare” Conducted by the Gulbarga university, Gulbarga.
 3. Participated in seminar on Nano Science and Technology – Curriculum Development.
 4. Participated in the conference “Association of Microbiologist of India” in NCL Pune, On December 2009.
 5. Attended the conference on “Fusion of Advanced Research and Teaching” in Madurai on January 2010.
 6. Participated in National Symposium on “Microbes; Molecular Ecology and systematics” jointly organized by MCC (NCCS) and AMI Pune Unit on 6th-7th September 2012.
 7. Participated in the International Conference on “Bio Molecular Forms and Functions” on 8th-11th January 2013 organized by Molecular Biophysics Unit IISC, Bangalore.
 8. Participated Two Day’s Seminar on “Bioremediation of Environmental Pollutants” on 22-23 March, 2013. Organized by Dept. of Biochemistry, Gulbarga University, Gulbarga
 9. Participated in Regional Conference organized by Karnataka Science and Technology Academy (KSTA) on “Science and Technology for Harnessing Natural Resources Towards Sustainable Development” on 4-5th January, 2014 at University of Agricultural Sciences, Raichur, Karnataka.
 10. Participated in two days (13-14th March 2014) lecture series on “To celebrate international year of crystallography (IYCr-2014) Looking to the future and learning from the past” jointly organized by Centre for Material Science and Dept. of Physics, BVB-CET, Vidyanagar Hubballi.

11. Ashwini Shellikeri, Vinita Kaulgud, Jayachandra Yaradoddi, Sharanabasava Ganachari, Nagaraj Banapurmath and Ashok Shettar. Development of Neem Based Bioplastic for Food Packaging Application. 2018IOP Conf. Ser.: Mater. Sci. Eng. **376**. 012052. doi.org/10.1088/1757899X/376/1/012052.
12. Arvind Binod, Sharanabasava V. Ganachari, Jayachandra S. Yaradoddi, Rakesh P. Tapaskar, Nagaraj R. Banapurmath, and Ashok S. Shettar. Biological synthesis and characterization of tri- metallic alloy (Au Ag, Sr) nanoparticles and its sensing studies. 2018 *IOP Conf. Ser.: Mater. Sci. Eng.* **376**. 012054. doi.org/10.1088/1757-899X/376/1/012054.
13. Aasim U. Mokashi, Sharanabasava V. Ganachari, Jayachandra S. Yaradoddi, Rakesh P. Tapaskar, Nagaraj R. Banapurmath, and Ashok S. Shettar. Synthesis and Characterization of Nano Strontium Ferrite and its gas sensing studies. 2018 *IOP Conf. Ser.: Mater. Sci. Eng.* **376** 012055. doi.org/10.1088/1757-899X/376/1/012055.
14. Naveen Gadad, Nagaraj Shivayyanavar, Leema Rose Viannie, S Y Jayachandra, Nagaraj R Banapurmath, Ashok S. Shettar, Ashwini Shellikeri, and Vinita Kaulgud. Fabrication and development of *magnetically actuated* PDMS micropump for drug delivery. 2009 *Environ. Res. Lett.* **4** 014013. doi.org/10.1088/1748-9326/4/1/014013.

Invited Talks :

- 1) Participated and presented Invited Talk in International Conference on “Polymer processing and Characterization-2019” at Mahatma Gandhi University, Kottayam, Kerala-India on 11-13th October 2019.
- 2) Delivered Invited talk in the International conference on Polymer Science and Composite Materials, 14-15th April 2022.

Awards and Honors :

- ❖ Awarded “Hargobind Khorana Best Young Scientist Award-2015” by Bose Science Society (TNSRO) Tamilnadu, India.
- ❖ University Meritorious Studentship, Gulbarga University, Gulbarga from 23 June 2009- May 2010.
- ❖ UGC- JRF and SRF- Dept. of Biotechnology, GUG, from 01-02-2010 to 31-01- 2013.
- ❖ Honored in Regional District Science Centre, Raichur, during the

celebration of National Science Day-28th Feb-2015

- ❖ Received Second best oral presentation award in the “National Conference on Science and Technology for Indigenous Development in India” organized by M. S. Ramaiah College of Arts, Science and Commerce, Bengaluru on 5-7th October 2015.