# Dr. Sinosh Skariyachan, Ph. D

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#### **Assistant Professor**

Department of Microbiology St. Pius X College Rajapuram

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**Personal webpage:** https://www.drsinoshskariya.com

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**Institute website**: http://stpius.ac.in/departments/microbiology/faculty/faculty-profile/?id=53

# **Objective**

To achieve excellence in the field of academics, research and development in life sciences and engineering with commitment towards the team and the organization and expand my horizons to the scientific community

# **Educational qualifications**

Certificate/	Board/ University	Month and	Class/ Division
Course		year of passing	Division
Ph. D	Visvesvaraya Technological University,	May 2016	First
	Belagavi, Karnataka, India		
M. Sc.	Bharathiar University	June 2008	First
<b>Bioinformatics</b>	Coimbatore, Tamilnadu, India		
M. Sc.	Bharathiar University	April 2005	First
Microbiology	Coimbatore, Tamilnadu, India		
B. Sc.	Kannur University, Kerala, India	April 2003	First
Microbiology			
Higher	Board of Higher Secondary Examinations,	May 2000	First
Secondary	Govt. of Kerala		
SSLC	Department of General Education, Govt. of Kerala	May 1998	First

- ❖ **Ph. D** Thesis: Molecular characterization of microorganisms present in Cauvery River and *in silico* analysis for probable drug targets.
- ❖ M. Sc (Bioinformatics) Dissertation: Predictive bioinformatics and *in silico* modeling of *Clostridium perfringens* delta enterotoxin.
- ❖ M. Sc (Microbiology) Dissertation: Isolation, identification and characterization of *Clostridium perfringens* from meat and poultry samples and their enterotoxin study.

# **National Eligibility Test (NET)**

Qualified the National Eligibility Test (NET) Conducted by Indian Council of Agricultural Research (ICAR) for the discipline Agricultural Microbiology

# Area of expertise

- Medical (antimicrobial resistance), Environmental and Food Microbiology
- Bioinformatics and Computational Biology, Genomics and Proteomics
- Molecular Modeling, Computational Drug Designing, Chemo-informatics and Computational Systems Biology

# **Major research contributions**

- Identified several potential natural lead molecules against prospective molecular targets of multidrug-resistant bacteria and viruses by structure-based virtual screening approaches.
- Modeled and validated novel drug targets of several pathogenic bacteria and viruses by computational biology approaches.
- Screened novel chromophoric and fluorophoric therapeutic metabolites from symbiotic bacteria associated with marine sponges towards drug-resistant bacteria.
- Isolated several thermophilic bacterial consortia from extreme environments and formulated novel microbial consortia that showed enhanced degradation to low and high-density polyethylene and polypropylene.

# **Professional experiences**

Teaching: 20 years, Research: 17 years

Duration	Institution	Position	Responsibilities	
October 2019- Till Date	St. Pius X College Rajapuram, Kasaragod, Kerala.	Assistant Professor, Department of Microbiology.	1. Handling theory and laboratory sessions for undergraduate students in B. Sc Microbiology, B. Sc Life Sciences &	
			Computational Biology	
July 2016-	Dayananda Sagar College	Associate	2. Handling theory and	
October 2019	of Engineering,	Professor,	laboratory sessions for	
	Bangalore,	Department of BE	undergraduate students	
	Affiliated to Visvesvraya	Biotechnology.	in BE Biotechnology	
	Technological University,		and post graduate	
	Karnataka.		students in M. Tech.	
Dec 2012-	Dayananda Sagar College	<b>Assistant Professor</b>	Bioinformatics	
June 2016	of Engineering,	Department of BE	3. Mentoring students for	
	Bangalore,	Biotechnology.	their project works	

	Affiliated to Visvesvraya		(both BE & M. Tech)	
	Technological University,		4. Coordinating various	
	Karnataka.		development activities	
March 2008-	Dayananda Sagar College	Lecturer	for students in the	
Nove 2012	of Engineering,	Department of BE	department.	
	Bangalore,	Biotechnology.		
	Affiliated to Visvesvraya			
	Technological University,			
	Karnataka.			
June 2005-	St. Pius X College	Lecturer (On	Handling theory and	
February 2008	Rajapuram, Kasaragod,	contact), Department	laboratory sessions for	
	Kerala.	of Microbiology.	undergraduate students in	
			B. Sc Microbiology	
2006-07	Deepa Nursing College	Guest Lecturer,	Handling theory and	
	Kanhangad, Kerala.	General nursing &	laboratory sessions for	
		midwifery.	students in general nursing	
			& midwifery.	

# **Publications summary**

# **Research papers:**

- Number of citations: 2303 (As of 12 April 2025)
- **❖** *h*-index-24
- **❖** *i10*-index-42
- ❖ Number of international publications-91
- ❖ Cumulative impact factor (SCI indexed journals): 270. 029
- ❖ Text book/ Edited book: 02
- ❖ Book chapters: 17
- ❖ Articles in scientific magazines and periodicals: 03
- ❖ Conference abstract (National & International)-91
- ❖ Patent: 01
- ❖ Number of molecular sequences deposited: 47

# Publications (International journals): SCI Indexed journals

- 1. **Skariyachan S**, Jayaprakash A, Kelambeth JJ, Suresh MR, Poochakkadanveedu V, Kumar KM, Naracham Veettil V, Kaitheri Edathil R, Suresh Kumar P, Niranjan V (2025). Unveiling the potential of Hamigeran-B from marine sponges as a probable inhibitor of Nipah virus RDRP through molecular modelling and dynamics simulation studies. *SAR QSAR Environ Res*. 35(12):1173-1197. doi: 10.1080/1062936X.2024.2446353. (**Impact factor 2.3**)
- 2. Vibha R, Granada DL, **Skariyachan S**, Ujwal P, Sandesh K (2025) *In vitro* and *In silico* investigation deciphering novel antifungal activity of endophyte *Bacillus velezensis* CBMB205 against *Fusarium oxysporum*. *Nature-Sci Rep.*15(1):684. doi: 10.1038/s41598-024-77926-1. (**Impact factor 3.8**)
- 3. Sreelekshmi PK, Pooja SK, Vidya N, **Skariyachan S**, Thejaswini V (2024). Integrative investigation of flavonoids targeting ybx1 protein–protein interaction network in breast cancer:

- from computational analysis to experimental validation. *Mol Biotechnol*. https://doi.org/10.1007/s12033-024-01311-6 (**Impact factor 2.4**)
- 4. Prasanna A, Karunakar P, Pillai A, Mukundan S, Mansi YV, Balaji R, Niranjan V, **Skariyachan S**, Narayanappa R (2024). Screening of bioactive compounds from selected mushroom species against putative drug targets in *Mycobacterium tuberculosis*: a multi-target approach. *J Biomol Struct Dyn.* doi:10.1080/07391102.2024.2335292 (Impact factor 2.7)
- 5. Hemavathi KN, **Skariyachan S**, Raju R, Keshava Prasad TS, Abhinand CS (2024). Computational screening of potential anti-inflammatory leads from Jeevaneeya Rasayana plants targeting COX-2 and 5- LOX by molecular docking and dynamic simulation approaches. *Comput Biol Med.* 171:108164. doi:10.1016/j.compbiomed.2024.108164 (**Impact factor 7.0**)
- 6. **Skariyachan S**, Murugan KK, Parikesit AA (2023). Editorial: Computational drug discovery for emerging viral infections. *Front. Microbiol.* 14: https://doi.org/10.3389/fmicb.2023.1326731 (**Impact Factor 4.0**)
- 7. Kumar KM, Karthik Y, Ramakrishna D, Balaji S, **Skariyachan S**, Krishna Murthy TP, Sakthivel KM, Alotaibi BS, Shukry S, Sayed SM, Mushtaq M (2023). Immunoinformatic exploration of a multi-epitope-based peptide vaccine candidate targeting emerging variants of SARS-CoV-2. *Front. Microbiol.* https://doi.org/10.3389/fmicb.2023.1251716 (**Impact Factor 4.0**)
- 8. Aloor LJ, **Skariyachan S\***, Raghavamenon AC, Kumar KM, Narayanappa R, Uttarkar A, Niranjan V, Cherian T (2023). BRCA1/TP53 tumor proteins inhibited by novel analogues of curcumin Insight from computational modelling, dynamic simulation and experimental validation. *Int J Biol Macromol*. 20:126989. doi: 10.1016/j.ijbiomac.2023.126989. (**Impact factor 7.7**) \*Joint first author, equal contribution
- 9. Jayan N, **Skariyachan S**, Sebastian D (2023). The escalated potential of the novel isolate Bacillus cereus NJD1 for effective biodegradation of LDPE films without pre-treatment. *J Hazard Mater*. 455: 2023.131623. doi.org/10.1016/j.jhazmat.2023.131623. (**Impact Factor 12.2**)
- 10. Rana S, **Skariyachan S\***, Uttarkar A, Niranjan V (2023). Carboxymuconolactone decarboxylase is a prospective molecular target for multi-drug resistant *Acinetobacter baumannii* computational modeling, molecular docking and dynamic simulation studies. *Comput Biol Med.* 157. 2023, 106793. https://doi.org/10.1016/j.compbiomed.2023.106793 (**Impact factor 7.0**). \*Joint first author, equal contribution
- 11. **Skariyachan S**, Praveen PKU, Uttarkar A, Niranjan V (2023). Computational design of prospective molecular targets for *Burkholderia cepacia* complex by molecular docking and dynamic simulation studies. *Proteins*. doi: 10.1002/prot.26462. (**Impact Factor: 3.2**)
- 12. Niranjan V, Setlur AS, Karunakaran C, Uttarkar A, Kumar KM, **Skariyachan S** (2022). Scope of repurposed drugs against the potential targets of the latest variants of SARS-CoV-2. *Struct Chem.* 33: 1585–1608; https://doi.org/10.1007/s11224-022-02020-z (**Impact Factor 2.1**)

- 13. **Skariyachan S** (2022). Scope of computational biology and bioinformatics towards the discovery of potential therapeutic agents against viral diseases. *Future Virology*. https://doi.org/10.2217/fvl-2021-0281 (**Impact Factor 2.1**)
- 14. **Skariyachan S,** Taskeen N, Kishore AP, Krishna BV (2022). Recent advances in plastic degradation From microbial consortia-based methods to data sciences and computational biology driven approaches. *J Hazard Mater*. 426:128086. doi: 10.1016/j.jhazmat.2021.128086. (**Impact Factor 12.2**)
- 15. **Skariyachan S**, Gopal D, Deshpande D, Joshi A, Uttarkar A, Niranjan V (2021). Carbon fullerene and nanotube are probable binders to multiple targets of SARS-CoV-2: Insights from computational modeling and molecular dynamic simulation studies. *Infect Genet Evol.* 96:105155. doi: 10.1016/j.meegid.2021.105155. (**Impact Factor 2.6**)
- 16. **Skariyachan S**, Deshpande D, Joshi A, Subramanya N, Kale S, Narayanappa R (2021). Physicochemical and microbial pollution of a reservoir in South India and role of bacteriophage treatment to curtail drug-resistant bacterial pollution in water. *Environmental Technology & Innovation*. 24: 10, https://doi.org/10.1016/j.eti.2021.102012. (**Impact factor: 6.7**)
- 17. Khangwal I, **Skariyachan S**, Uttarkar A, Muddebihalkar AG, Niranjan V, Shukla P (2021). Understanding the xylooligosaccharides utilization mechanism of *Lactobacillus brevis* and *Bifidobacterium adolescentis*: Proteins involved and their conformational stabilities for effectual binding. *Mol Biotechnol*. doi: 10.1007/s12033-021-00392-x. (**Impact Factor 2.4**)
- 18. Liji P, **Skariyachan S**, Thamp HBS (2021). Cytotoxic effects of butyric acid derivatives through GPR109A receptor in Colorectal Carcinoma cells by *in silico* and *in vitro* methods. *J. Mol. Struct.* . (**Impact Factor 2.7**)
- 19. **Skariyachan S**, Gopal D, Muddebihalkar AG, Uttarkar A, Niranjan V. (2021). Structural insights on the interaction potential of natural leads against major protein targets of SARS-CoV-2: Molecular modelling, docking and dynamic simulation studies. *Comput Biol Med.* 132:104325. doi: 10.1016/j.compbiomed.2021.104325. (**Impact Factor 7.0**)
- 20. **Skariyachan S**, Taskeen N, Kishore AP, Venkata Krishna B, Naidu G (2021). Novel consortia of *Enterobacter* and *Pseudomonas* formulated from cow dung exhibited enhanced biodegradation of polyethylene and polypropylene. *Journal of Environmental Management*. 284, 112030. doi.org/10.1016/j.jenvman.2021.112030 (**Impact Factor 8.0**)
- 21. Sennappan M, **Skariyachan S**, Managutti PB, Gunaga SS (2020). C-demethylation and 1, 2-amino shift in (E)-2-(1-(3-aminophenyl) ethylidene) hydrazinecarboxamide to (E)-2-(2-aminobenzylidene) hydrazinecarboxamide and their applications. *Sci Rep.* 10(1): 21913. doi: 10.1038/s41598-020-79027-1. (**Impact Factor 3.8**)1243: 130832. doi.org/10.1016/j.molstruc.2021.130832
- 22. **Skariyachan S,** Gopal D, Chakrabarti S, Kempanna P, Uttarkar A, Muddebihalkar AG, Niranjan V (2020). Structural and molecular basis of the interaction mechanism of selected

- drugs towards multiple targets of SARS-CoV-2 by molecular docking and dynamic simulation studies- deciphering the scope of repurposed drugs. *Comput Biol Med.* 126:104054. doi: 10.1016/j.compbiomed.2020.104054. (**Impact Factor 7.0**)
- 23. **Skariyachan S**, Ravi Shankar R, Gopal D, Muddebihalkar AG, Uttarkar A, Uluvangada Praveen PK, Niranjan V (2020). Response regulator GacA and transcriptional activator RhlR proteins involved in biofilm formation of *Pseudomonas aeruginosa* are prospective targets for natural lead molecules: Computational modelling, molecular docking and dynamic simulation studies. *Infection, Genetics and Evolution*, 85 (2020): 104448. https://doi.org/10.1016/j.meegid.2020.104448 (**Impact Factor 2.6**)
- 24. **Skariyachan S**, Khangwal I, Niranjan V, Kango N, Shukla P (2020). Deciphering effectual binding potential of xylo-substrates towards xylose isomerase and xylokinase through molecular docking and molecular dynamic simulation. *J Biomol Struct Dyn.* 2020 1-10. doi: 10.1080/07391102.2020.1772882. (**Impact factor 2.7**)
- 25. **Skariyachan S,** Muddebihalkar AG, Badrinath V, Umashankar B, Eram D, Uttarkar A, NiranjanV. (2020). Natural epiestriol-16 act as potential lead molecule against prospective molecular targets of multidrug-resistant *Acinetobacter baumannii* -Insight from *in silico* modelling and *in vitro* investigations. *Infect Genet Evol*. 5:104314. doi: 10.1016/j.meegid.2020.104314. (**Impact factor 2.6**)
- 26. **Skariyachan S**, Challapilli SB, Packirisamy S, Sridhar VS, Kumargowda ST (2020). Monitoring and assessment of the therapeutic impact of metabolites extracted from sponge-associated bacteria screened from Gulf of Mannar, southeast coast of India. *Environ Monit Assess.* 192(4): 241. doi: 10.1007/s10661-020-8201-x. (**Impact factor 2.9**)
- 27. Suresh M, **Skariyachan S**, Narayanan N, Pullampara Rajamma J, Panickassery Ramakrishnan MK (2020). Mutational Variation Analysis of oprD Porin Gene in Multidrug-Resistant Clinical Isolates of *Pseudomonas aeruginosa*. *Microb Drug Resist*. doi: 10.1089/mdr.2019.0147. (**Impact factor 2.3**)
- 28. **Skariyachan S**, Gopal D, Kadam SP, Muddebihalkar AG, Uttarkar A, Niranjan V (2020). Carbon fullerene act as potential lead molecule against prospective molecular targets of biofilm-producing multi-drug resistant *Acinetobacter baumanni* and *Pseudomonas aerugenosa*: Computational modeling and MD simulation studies. *J Biomol Struct Dyn.* doi.org/10.1080/07391102.2020.1726821 (**Impact factor 2.7**)
- 29. Gopal D, Muddebihalkar AG, **Skariyachan S**, C AU, Kaveramma P, Praveen U, Shankar RR, Venkatesan T, Niranjan V. (2019). Mitogen activated protein kinase-1 and cell division control protein-42 are putative targets for the binding of novel natural lead molecules: a therapeutic intervention against *Candida albicans*. *J Biomol Struct Dyn*. 29:1-16. doi: 10.1080/07391102.2019.1682053. (**Impact factor 2.7**)
- 30. **Skariyachan S**, Taskeen N, Ganta M, Venkata Krishna B (2019). Recent perspectives on the virulent factors and treatment options for multidrug-resistant *Acinetobacter baumannii*. *Crit Rev Microbiol*. 45(3): 315-333. (**Impact Factor: 6.0**)

- 31. **Skariyachan S**, Challapilli SB, Packirisamy S, Kumargowda ST and Sridhar VS (2019). Recent aspects on the pathogenesis mechanism, animal models and novel therapeutic interventions for Middle East Respiratory Syndrome Coronavirus Infections. *Front. Microbiol.* 10: 569. doi: 10.3389/fmicb.2019.00569 (**Impact Factor: 4.0**)
- 32. Manjunath M, **Skariyachan S** (2019). Screening of natural lead molecules against putative molecular targets of drug resistant *Cryptococcus* spp: an insight from computer aided molecular design. *Curr Top Med Chem.* 18: 31, 2681-2701. (**Impact factor 2.9**)
- 33. **Skariyachan S**, Govindarajan S (2019). Biopreservation potential of antimicrobial protein producing *Pediococcus* spp. towards selected food samples in comparison with chemical preservatives. *Int J Food Microbiol*. 291 (16): 189-196. (**Impact Factor 5.0**)
- 34. Keramagi AR, **Skariyachan S** (2018). Prediction of binding potential of natural leads against the prioritized drug targets of chikungunya and dengue viruses by computational screening. *3 Biotech.* 8:274. doi: 10.1007/s13205-018-1303-2 (**Impact Factor 2.6**)
- 35. **Skariyachan S**, Manjunath M, Bachappanavar N (2018). Screening of potential lead molecules against prioritized targets of multi-drug-resistant-*Acinetobacter baumannii* insights from molecular docking, molecular dynamic simulations and *in vitro* assays. *J Biomol Struct Dyn.* 37(5):1146-1169. (Impact Factor 2.7)
- 36. **Skariyachan S**, Patil AA, Shankar A, Manjunath M, Bachappanavar N, Kiran S (2018). Enhanced polymer degradation of polyethylene and polypropylene by novel thermophilic consortia of *Brevibacillus* sps. and *Aneurinibacillus* sp. screened from waste management landfills and sewage treatment plants. *Polym. Degrad. Stab.* 149:52-68 (**Impact Factor 6.3**)
- 37. **Skariyachan S**, Sridhar VS, Packirisamy S, Kumargowda ST, Challapilli SB (2018). Recent perspectives on the molecular basis of biofilm formation by *Pseudomonas aeruginosa* and approaches for treatment and biofilm dispersal. *Folia Microbiol*. 63(4):413-432. (**Impact factor 2.4**)
- 38. Shankar A, Patil AA, **Skariyachan S** (2017). Recent perspectives on genome, transmission, clinical manifestation, diagnosis, therapeutic strategies, vaccine developments, and challenges of Zika virus research. *Front. Microbiol.* 8:1761.doi: 10.3389/fmicb.2017.01761(**Impact factor 4.0**)
- 39. **Skariyachan S**, Garka S, Puttaswamy S, Shanbhogue S, Devaraju R, Narayanappa R (2017). Environmental monitoring and assessment of antibacterial metabolite producing actinobacteria screened from marine sediments in south coastal regions of Karnataka, India. *Environ Monit Assess.* 189(6):283. doi: 10.1007/s10661-017-5999-y. (**Impact factor 2.9**)
- 40. **Skariyachan S**, Setlur AS, Naik SY, Naik AA, Usharani M, Vaisist KS (2017). Enhanced biodegradation of low- and high-density polyethylene by novel bacterial consortia formulated from plastic contaminated cow dung under thermophilic conditions. *Environ Sci Pollut Res Int.* 24 (9): 8443–8457 (Impact factor 5.190).

- 41. Kamath S, **Skariyachan S** (2017). Novel insight from computational virtual screening depicts the binding potential of selected phytotherapeutics against probable drug targets of *Clostridium difficile*. *Interdiscip Sci.* doi:10.1007/s12539-017-0215-x (**Impact factor 3.9**)
- 42. **Skariyachan S**, Parveen A, Garka S (2016). Nanoparticle Fullerene (C60) demonstrated stable binding with antibacterial potential towards probable targets of drug resistant *Salmonella typhi* A computational perspective and in vitro investigation. *J Biomol Struct Dyn.* 6:1-53. (**Impact factor 2.7**).
- 43. **Skariyachan S,** Manjunatha V, Sultana S, Jois C, Bai V, Vasist KS (2016). Novel bacterial consortia isolated from plastic garbage processing areas demonstrated enhanced degradation for low density polyethylene. *Environ Sci Pollut Res Int.* 23(18):18307-18319. (**Impact factor 5.190**).
- 44. **Skariyachan S**, Prasanna A, Manjunath SP, Karanth SK, Nazre A (2016). Exploring the Medicinal Potential of the Fruit Bodies of Oyster Mushroom, *Pleurotus ostreatus* (Agaricomycetes), against Multidrug-Resistant Bacterial Isolates *Int J Med Mushrooms*. 18(3): 245–252. (**Impact factor 1.4**).
- 45. **Skariyachan S** (2016). Assessment of antibiotic resistance patterns of the fecal coliforms isolated from Cauvery River and screening of novel herbal lead molecules against probable drug targets of MDR pathogens by computational virtual screening. *Int J Infect Dis.* 45 (S1): 116 doi:10.1016/j.ijid.2016.02.294 (**Impact factor 4.8**).
- 46. Setlur AS, Naik SY, **Skariyachan S** (2016). Herbal lead as ideal bioactive compounds against probable drug targets of Ebola virus in comparison with known chemical analogue: A computational drug discovery perspective. *Interdiscip Sci.* doi 10.1007/s12539-016-0149-8. (**Impact factor 3.9**)
- 47. **Skariyachan S**, Prasanna A, Manjunath SP, Karanth SS, Nazre A (2016). Environmental assessment of the degradation potential of mushroom fruit bodies of *Pleurotus ostreatus* (Jacq.: Fr.) P. Kumm. towards synthetic azo dyes and contaminating effluents collected from textile industries in Karnataka, India. *Environ Monit Assess*. 188(2):121. doi: 10.1007/s10661-016-5125-6. (**Impact factor 2.9**)
- 48. **Skariyachan S**, Acharya A, Subramaniyan S, Babu S, Kulkarni S, Narayanappa R (2015). Secondary metabolites extracted from marine sponge associated *Comamonas testosteroni* and *Citrobacter freundii* as potential antimicrobials against MDR pathogens and hypothetical leads for VP40 matrix protein of Ebola virus: An *in vitro* and *in silico* investigation. *J Biomol Struct Dyn.* 34(9):1865-1883. (**Impact factor 2.7**).
- 49. **Skariyachan S**, Mahajanakatti AB, Grandhi NJ, Prasanna A, Sen B, Sharma N, Vasist KS, Narayanappa R (2015). Environmental monitoring of bacterial contamination and antibiotic resistance patterns of the fecal coliforms isolated from Cauvery River, a major drinking water source in Karnataka, India. *Environ Monit Assess.* 187(5):279. doi: 10.1007/s10661-015-4488-4(**Impact factor 2.9**)

- 50. **Skariyachan S**, Pachiappan A, Joy J, Bhaduri R, Aier I, Vasist KS (2015). Investigating the therapeutic potential of herbal leads against drug resistant *Listeria monocytogenes* by computational virtual screening and *in-vitro* assays. *J Biomol Struct Dyn.* 33(12):2682-94. (**Impact factor 2.7**).
- 51. Patil P, **Skariyachan S**, Mutt E, Kaushik S (2015). Computational analysis of the domain architecture and substrate-gating mechanism of prolyl oligopeptidases from *Shewanella woodyi* and identification probable lead molecules. *Interdiscip Sci Comput Life Sci*. (doi: 10.1007/s12539-014-0244-7). (**Impact factor 3.9**).
- 52. **Skariyachan S**, Megha M, Kini MN, Mukund MK, Rizvi A, Vasist K (2014). Selection and screening of microbial consortia for efficient and ecofriendly degradation of plastic garbage collected from urban and rural areas of Bangalore, India. *Environ Monit Assess*. 187 (1): 4174. (**Impact factor 3.9**)
- 53. **Skariyachan S**, Narayan NS, Aggimath TS, Nagaraj S, Reddy MS, Narayanappa R (2014). Molecular modeling on streptolysin-O of multidrug resistant *Streptococcus pyogenes* and computer aided screening and in vitro assay for novel herbal inhibitors. *Curr Comput Aided Drug Des.* 10 (1): 59-74. (**Impact factor 1.5**)
- 54. **Skariyachan S**, Rao AG, Patil MR, Saikia B, Bharadwaj KNV, Rao GSJ (2014). Antimicrobial potential of metabolites extracted from bacterial symbionts associated with marine sponges in coastal area of Gulf of Mannar Biosphere, India. *Lett Appl Microbiol.* 58(3): 231-241. (**Impact factor 2.0**).
- 55. Mahajanakatti AB, Murthy G, Sharma N, **Skariyachan** S (2014). Exploring inhibitory potential of curcumin against various cancer targets by *in silico* virtual screening, *Interdiscip*. *Sci*. 6(1): 13-24. (**Impact factor 3.9**).
- 56. **Skariyachan S**, Lokesh P, Rao R, Kumar AU, Vasist K, Narayanappa R (2013). A pilot study on water pollution and characterization of multidrug resistant superbugs from Byramangala tank, Ramanagara district, Karnataka, India. *Environ Monit Assess*. 185(7): 5483-5495. (**Impact factor 2.9**).
- 57. **Skariyachan S**, Jayaprakash N, Bharadwaj N, Narayanappa R (2013). Exploring insights for virulent gene inhibition of multidrug resistant *Salmonella typhi*, *Vibrio cholerae*, and *Staphylococcus areus* by potential phytoligands via *in silico* screening. *J Biomol Struct Dyn*. 32(9): 1379-1395. (**Impact factor 2.7**).
- 58. **Skariyachan S**, Prakash N, Bharadwaj N (2012). *In silico* exploration of novel phytoligands against probable drug target of *Clostridium tetani*. *Interdiscip Sci Comput Life Sci* (2012) 4: 1-10. (**Impact factor 3.9**).
- 59. Shrinivasan M, **Skariyachan S**, Aparna V & Kolte VR (2012). Homology modelling of CB1 receptor and selection of potential inhibitor against Obesity. *Bioinformation* 8 (11): 523-528.

- 60. **Skariyachan S**, Mahajanakatti AB, Sharma N, Karanth S, Rao S and Rajeswari N (2012). Structure based virtual screening of novel inhibitors against multidrug resistant superbugs, *Bioinformation* 8(9): 420-425.
- 61. **Skariyachan S**, Krishnan RS, Siddapa SB, Salian C, Bora P and Sebastian D (2011). Computer aided screening and evaluation of herbal therapeutics against MRSA infections. *Bioinformation* 7(5): 222-233.
- 62. **Skariyachan S**, Mahajanakatti AB, Sharma N, Sevanan M (2011). Selection of herbal therapeutics against deltatoxin mediated clostridial infections. *Bioinformation* 6(10): 375-379.

# Publications in other peer reviewed journals

- 1. Tidke S, Pooja B, Manjula BV, Singh R, Shoran R, Arush HA, **Sinosh S**, Geethanath S, Kiran S, Ravishankar GA (2024). Enhancement of nutraceutical components of mushroom by uv exposure and extension of their shelf-life using edible coating material adopting online assessment of keeping quality by Magnetic Resonance Imaging (MRI) technique. *Applied Chemical Engineering*. 7: 1. doi: 10.24294/ace.v7i1.2312
- 2. Satyanarayan V, Mohan D, **Skariyachan S**, Narayanappa R (2015). Computational virtual screening and preliminary cytotoxicity assay of novel herbal therapeutics on MCF-7 cell lines (2015). *International Journal of Applied Sciences & Engineering (IJASE)*. 1 (1): 65-71.
- 3. Showmy KS, **Skariyachan S**, Yusuf A (2014). Comparative modelling of pathogenesis related 4b protein (Q6T5J8) of *Oryza sativa* subsp. *indica* with the three-dimensional structure of barley1BW3. *International Journal of Plant, Animal and Environmental Sciences*. 4(4): 41-50
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- major drinking water source in Karnataka, India and screening of novel herbal lead molecules against probable drug targets of MDR pathogens by computational virtual screening. 56<sup>th</sup> Annual Conference of Association of Microbiologists of India (AMI-2015) & International Symposium on "Emerging Discoveries in Microbiology". School of Life Science, Jawaharlal Nehru University, New Delhi, 7-10 December 2015.
- 43. Sujay Y Naik, Anagha S Setlur, **Sinosh Skariyachan** (2015). Computational virtual screening of herbal leads from *Syzygium aromaticum* and *Murraya koenigii* as probable lead molecules against the major drug targets of Ebola virus. One-Day seminar on management of lifestyle disorders through herbal products, Organized by Department of Biotechnology, Sir. M. Visvesvaraya Institute of Technology 10 October 2015.
- 44. Sanjana Govindaraja, Vijayashree Narasimha Kumar, Keerthana Narayanan, Meghashri Kuruba Lakshminarayan, **Sinosh Skariyachan**, Kiran S (2015). Exploring the potential of Bacteriocin producing Pediococcus spp. as bio preservative in food industry. National Conference on "Utilization of Bio-diversity for Value Added Products: Food, Pharma, Nutraceuticals and Biofuels (NCUBD 2015)". Organized by Dept. of Biotechnology, Chemical Engineering & Chemistry, Dayananda Sagar College of Engg., 25 & 26 September 2015.
- 45. Anagha Sletur, Sujay Y Naik and **Sinosh Skariyachan** (2015). National conference on utilization of biodiversity for value added products: food, pharma, nutracuetical sand biofuels. Jointly Organized by Department of Biotechnology, Chemical Engineering, Chemistry, Dayananda Sagar College of Engineering, Bangalore, 25-26 September 2015.
- 46. Anagha Sletur, Sujay Y Naik and **Sinosh Skariyachan** (2015). Exploring the Biodegradation Potential of Nickel and Chromium Degrading Bacteria Isolated from Selected Electroplating Industries in Bangalore city. 2<sup>nd</sup> National Conference on Emerging trends in Science and Technology 2015, Organized by Saptagiri College of Engineering, Bangalore, 12 May, 2015.
- 47. Archana Acharya, Sumangala Babu, Vikram Bharadwaj KN, Mamatha R Patil, Aditya G Rao, Bagmita Saikia, **Sinosh Skariyachan**, Rajeswari Narayanappa (2015). Elucidation of Novel Therapeutic Metabolites from the Bacteria Associated with Marine Sponges Collected from Coastal Areas of South India. UGC Sponsored National Symposium on Microbe and Human Welfare. Jointly organized by Postgraduate Department of Biotechnology and Association of Microbiologists of India (Mysore Chapter), 23-24 March 2015.
- 48. Subiya Sulthana, Vishal Manjunath, Megha M, Meghna N Kini, Kamath Manali Mukund, Alya Rizvi, **Sinosh Skariyachan**, Kiran S Vasist (2015). Prioritizing the Bio degradation Potential of Novel Microbial Consortia Isolated from the Plastic Polluted Environments in Urban and Rural areas of Bangalore, Karnataka, UGC Sponsored National Symposium on Microbe and Human Welfare. Jointly organized by Postgraduate Department of Biotechnology and Association of Microbiologists of India (Mysore Chapter), 23-24 March 2015.
- 49. Shruthi Kulkarni, Saumya Subramaniyan, Vikram Bharadwaj KN, Mamatha R Patil, Aditya G Rao, Bagmita Saiki, Sinosh Skariyachan, Rajeswari Narayanappa (2015). Prioritizing the therapeutic potential of novel chromophoric and fluorophoric metabolites extracted from the bacteria associated with marine sponges collected from coastal areas of South India. UGC sponsored National conference on enzyme research in agriculture, food and Industrial Biotechnology (NCERAFIB-2015). Jointly organized by Karnataka Science and Technology Academy, Department of Science and technology, Govt. of Karnataka and Department of Chemistry & Biochemistry, Maharani's Science College for women, Bangalore, 12-13 March 2015.
- 50. Chandana Jois, Vidya Bai, Megha M, Meghna N Kini, Kamath Manali Mukund, Alya Rizvi, **Sinosh Skariyachan**, Kiran S Vasist (2015). Exploring the biodegradation potential of

- microbial consortia screened from the plastic contaminated soil samples in Urban and Rural areas of Bangalore, Karnataka. UGC sponsored National conference on enzyme research in agriculture, food and Industrial Biotechnology (NCERAFIB-2015). Jointly organized by Karnataka Science and Technology Academy, Department of Science and technology, Govt. of Karnataka and Department of Chemistry & Biochemistry, Maharani's Science College for women, Bangalore, 12-13 March 2015.
- 51. Apoorva Prasanna, Sirisha P Manjunath, Soujanya S Karanth, Ambika Nazre, **Sinosh Skariyachan**, Rajeswari Narayanappa (2015). Exploring the potential of cultivated *Pleurotus ostreatus var. florida* in mycorestoration and its application as novel therapeutics. Bangalore INDIA BIO 2015: Crystallizing India's Biotech future. Jointly organized by the Department of Information Technology, Biotechnology and Science & Technology, Government of Karnataka, Vision Group on Biotechnology, MM Activ Sci-Tech Communications, Bangalore, 9-11 February 2015.
- 52. Showmy K.S, **Sinosh Skariyachan**, Yusuf A (2015). Structural Elucidation of pathogenesis related 4b protein (Q6T5J8) of *Oryza sativa* subsp. *Indica* for crop improvement. 27<sup>th</sup> Kerala Science Congress. Alapuzha, Kerala. 27-29 January 2015.
- 53. Nisha Jayaprakash, Arpitha BM, **Sinosh Skariyachan**, Kiran S Vasist, Narayanappa Rajeswari (2015). Exploring the inhibitory potential of herbal ligands towards the drug resistant gene products of MDR isolates from Cauvery River, Karnataka, India. Metabolomics-2015.Organised by Department of Biochemistry, Indian Institute of Science, Bangalore, 12-13 January 2015.
- 54. Sinosh Skariyachan (2015). Molecular modeling and its emerging dimensions in agriculture, ICAR Winter School-2015 on Bioinformatics and its emerging dimensions in agriculture. Organized by Bioinformatics centre (DIC), Kerala Agricultural University, Thrissur, Kerala, 15 January 2015.
- 55. Anitha Pachiappan, Rupam Bhaduri, Jeenu Joy, Imlimaong Aier, **Sinosh Skariyachan**, Kiran Vasist (2014). Selection and screening of novel herbal inhibitors against multidrug resistant *Listeria monocytogenes* by structure based virtual screening and in vitro assay. 55<sup>th</sup> Annual conference of Association of Microbiologists of India, National conference on empowering mankind with microbial technologies (AMI-EMMT-2014). Organized by Tamil Nadu Agricultural University, Coimbatore India, 12-16 November 2014.
- 56. Sinosh Skariyachan (2014). Phyolgenetic analysis and primer design. UGC Sponsored national workshop on recent trends in Bioinformatics. Organized by Department of Microbiology and Biochemistry, Pazhassiraja College Pulpally, Wayanad, Kerala.15-17 December 2014.
- 57. **Sinosh Skariyachan**, Megha M, Meghna N Kini, Kamath Manali Mukund, Alya Rzvi, Kiran S Vasist (2014). Selection and screening of microbial consortia for efficient and eco-friendly degradation of plastic wastes in Urban and Rural areas of Bangalore, Karnataka State Council for Science and Technology-37<sup>th</sup> Annual meeting and 37<sup>th</sup> series of Student Projects Programme Seminar and Exhibition: 2013 2014, 28-29 July 2014, B.V. Bhoomaraddi College of Engineering and Technology, Hubli.
- 58. Megha M, Meghna N Kini, Kamath Manali Mukund, Usha BN, Divya, **Sinosh Skariyachan** (2014). Screening of nickel and chromium degrading bacteria from selected electroplating industries in urban areas of Bangalore and study of their biodegradation efficiency. National conference on recent advances, carrier prospects & entrepreneurial opportunities in Bioengineering and Biotechnology, Sir MVIT, Bangalore, Sponsored by AICTE, New Delhi. 24-28 March 2014,
- 59. Apoorva Prasanna, Sirisha PM, Jyothsna S, Savitri SN, **Sinosh Skariyachan**, Rajeswari Narayanappa (2014). Prioritizing the bio-preservation efficiency of *Lactobacillus sps.* over

- chemical preservatives and study of their inhibitory potential against food-borne pathogens, National conference on recent advances, carrier prospects & entrepreneurial opportunities in Bioengineering and Biotechnology, Sir MVIT, Bangalore, Sponsored by AICTE, New Delhi.24-28 March 2014.
- 60. **Sinosh Skariyachan**, Kiran S Vasist, Rajeswari Narayanappa (2013). Prevalence of multidrug resistant bacteria in River Cauvery and computational virtual screening for natural inhibitors against MDR genes. 54<sup>th</sup> Annual conference of Association of Microbiologists of India (AMI-2013). Platinum Jubilee Celebrations for Association of Microbiologists of India (AMI) & International Symposium on 'Frontier discoveries and innovations in Microbiology and its interdisciplinary relevance' (FDMIR-2013), Maharshi Dayanand University Rohtak, Haryana, INDIA. November 17-20, 2013.
- 61. **Sinosh Skariyachan** (2013). Computer aided virtual screening and designing of novel therapeutic leads against virulent targets of multi-drug resistant bacteria isolates. Organized by GD Target Meeting: A leading online life science conference organizer, USA. October 15-17, 2013.
- 62. **Sinosh Skariyachan** (2013). Structure Prediction: Exploration of Structural insights towards functional studies of biomolecules-Emerging trends and future perspectives. UGC sponsored national seminar on Bioinformatics: Applications in modern Science. Jointly organized by Department of Zoology, Mercy College, Palakkad, Kerala & Bioinformatics centre, Kerala Agricultural University, Kerala. 26 September 2013.
- 63. Arpitha BM, Narasimha Sharma, **Sinosh Skariyachan** (2013). Prioritizing the anticancer properties of curcumin by computer aided virtual screening and molecular docking. International symposium on "recent advances in computational drug design". Jointly organized by Schrodinger & Indian Institute of Science. 16-17 September 2013.
- 64. Vikram Bharadwaj KN, Bagmita Saikia, Mamatha R Patil, Aditya G Rao, **Sinosh Skariyachan**, Jagannatha Rao GS (2013). Screening and characterization of potential therapeutic metabolites from symbiotic bacteria associated with marine sponges. International conference on convergence of science & management in education and research-A global perspectives, II edition, Organized by Centre for post graduate studies, Dayananda Sagar Institutions. 26-27 September 2013.
- 65. Jyothsna S, Savitri SN, Suchetha Pathalam, Aishwarya Gogate, **Sinosh Skariyachan**, Rajeswari Narayanappa (2013). *Lactobacillus sps* as biopreservative: Comparative analysis and optimization of preservation efficiency with chemical preservatives. International conference on convergence of science & management in education and research-A global perspectives, II edition, Organized by Centre for post graduate studies, Dayananda Sagar Institutions. 26-27 September 2013.
- 66. **Sinosh Skariyachan,** Kiran S, Rajeswari Narayanappa (2013). Selection of potential inhibitors against multidrug resistant pathogens by structure based virtual screening, 38<sup>th</sup> Annual conference of environmental mutagen society of India (EMSI), National conference on current perspectives on environmental mutagenesis and human health. Radiation Biology & Health Sciences Division, Bhabha Atomic Research Centre, Trombay, Mumbai, 26-30 January 2013
- 67. Nisha GJ, **Sinosh Skariyachan**, Narasimha Sharma, Arpitha BM, Navya CP, Reshma Rao, Priyanka L, Kiran S, Rajeswari Narayanappa (2013). Structure based rational design of novel herbal inhibitors towards multidrug resistant pathogenic bacteria present in River Cauvery, Biotech for a better tomorrow". 13<sup>th</sup> Bangalore India Bio: International conference cum trade show: Organized by Vision Group on Biotechnology, Govt of Karnataka, 4-6 February, 2013.
- 68. Reshma Rao, **Sinosh Skariyachan**, Arpitha BM, Narasimha Sharma, Shruthi Rao, Shraddha Karanth, Nisha GJ, Navya CP, Priyanka L, Sagar Goyal, Akshatha Prasanna, Ballari Sen,

- Lamiya Ali, Kiran S, Rajeswari Narayanappa (2013). Cauvery River has become cesspool of multidrug resistant Pathogenic Coli forms: A major health concern in Karnataka State. Biotech for a better tomorrow". 13<sup>th</sup> Bangalore India Bio: International conference cum Trade show: Organized By Vision Group on Biotechnology, Govt of Karnataka, 4-6 February, 2013.
- 69. **Sinosh Skariyachan**, Kiran S, Rajeswari Narayanappa (2012). A study on the prevalence of multidrug resistant pathogens in River Cauvery: a major health concern in Karnataka, South India. 53<sup>rd</sup> Annual conference of Association of Microbiologists of India (AMI), International conference on microbial world: Recent innovations and future trends, KIIT University, Bhubaneswar, Odisha, India. November 22-25, 2012.
- 70. **Sinosh Skariyachan** and Jagannatha Rao GS. International conference on biomolecular forms and functions, a celebration of 50 years of the Ramachamdran Map. Indian Institute of Science, Bangalore, 8-11 January 2013.
- 71. Akshatha Prasanna, Ballari Sen, **Sinosh Skariyachan**, Kiran S, Rajeswari Narayanappa, Jagannatha Rao GS (2012). Computer aided virtual screening and *in vitro* evaluation of herbal therapeutics against Streptococcal infections, UGC and DBT sponsored National conference on "computational biology, pharmaceutical & life sciences, Maharani Lakshmi Ammanni College for Women, Bangalore, 23 24 November.
- 72. Naik Soumyalaxmi Narayan, Monika S, Sushmitha N, Tejaswini S, **Sinosh Skariyachan**, Kiran S, Rajeswari Narayanappa, Jagannatha Rao GS (2012). Structure based virtual screening of natural therapeutics against Streptococci mediated outbreaks and inhibition of their virulence potential. 5<sup>th</sup> Annual KSTA Conference-2012, State level conference on "Science and technology for societal transformation" Jointly organized by Karnataka Science and Technology Academy and Dayananda Sagar Institutions, 19-20 December 2012.
- 73. Usha BN, Divya Nethravathi R, Vinutha A, **Sinosh Skariyachan**, Sudhanva M Desai (2012). Microbial characterization of Nickel and Chromium degrading bacteria from electroplating industries in Bangalore and study of their biodegradation efficiency. 5<sup>th</sup> Annual KSTA Conference-2012, State level conference on "Science and technology for societal transformation" Jointly organized by Karnataka Science and Technology Academy and Dayananda Sagar Institutions, 19-20 December 2012.
- 74. **Sinosh Skariyachan** (2012). Structure prediction and computer aided modeling. UGC sponsored national seminar cum workshop on Bioinformatics-Current trends in Bioinformatics. Organized by Educational Multimedia Research Centre, University of Calicut. 08-09 August 2012.
- 75. Navya Bharadwaj, Nisha Prakash and **Sinosh Skariyachan** (2012). Selection and screening of novel herbal remedies against Shigellosis: An *in silico* virtual screening. National conference on green technologies, "fight pollution", Organized by VTU, Karnataka State Pollution Control Board and Acharya Institute of Technology, 4-5 April 2012.
- 76. Priyanka L, Reshma Rao, **Sinosh Skariyachan** (2012). A pilot study of water pollution and characterization of multi-Drug resistant superbugs from Byramangala tank, Ramanagara district. National conference on green technologies, "fight pollution", Organized by VTU, Karnataka State Pollution Control Board and Acharya Institute of Technology, April 4-5, 2012.
- 77. Divya Nethravathi R, Usha BN, Vinutha A, **Sinosh Skariyachan**, Sudhanva M Desai (2012). Microbial characterization of Nickel and Chromium degrading microorganisms from industrial effluents and study their efficiency of biodegradation. BIOCADENCE-2012, a national level symposium, Organized by Department of Biotechnology, KLE college of Engineering and Technology, Belgaum, 30 -31 March 2012.
- 78. Nisha GJ, Navya CP, **Sinosh Skariyachan** (2011). Design and discovery of novel therapeutic drugs against tetanolysin O toxin of *Clostridium tetani*: a novel pharmacological approach

- against tetanus. National conference on biopharmaceuticals and health care, Organized by Sir M Visvesvaraya Institute of Technology, Bangalore on 0<sup>4th</sup> and 05 November 2011.
- 79. Priyanka Lokesh, Reshma Rao, **Sinosh Skariyachan**, Kiran S (2011). Prudent elucidation of physiochemical and bacterial characteristics of Byramangala tank, Ramanagara district. "Aarohan 2011"- State level symposium and inter-collegiate Biotechnology fest. Organized by Department of Biotechnology, New Horizon College of Engineering, Bangalore. 31 October, 2011.
- 80. Nisha GJ, Navya CP, **Sinosh Skariyachan** (2011). Computer aided drug design of novel therapeutic agents against Tetanus. National level conference CHEMEXCEL-2011, Organized by Department of Chemical Engineering, Bapuji Institute of Technology, Davanagere. 21 October 2010.
- 81. Priyanka Lokesh, **Sinosh Skariyachan**, Reshma Rao, Arushi Umeshkumar Gupta, Kiran S. Physiochemical and bacteriological characterization of Byramangala tank, Ramanagara district, Karnataka, India. Under the track water resources (SDEWES11-0645). Sponsored by UNESCO, 6<sup>th</sup> DUBROVNIK Conference on Sustainable Development of Energy Water and Environment System, Dubrovnik, Croatia. 25 29 September, 2011.
- 82. Narasimha Sharma, Arpitha BM, **Sinosh Skariyachan**, Kiran S (2011). Microbial characterization of *Clostridium perfringens* from cooked meat-poultry samples and *in silico* simulations of delta enterotoxin, Bangalore India Bio-2011, An international symposium. Organized by Vision group on Biotechnology, Department of IT & BT, Govt. of Karnataka, 04-06 May, 2011.
- 83. Rao Shruti Krishnan, Usha B Biradar, **Sinosh Skariyachan** (2011). *In silico* investigation and docking studies of E2F3 tumor marker: Discovery and evaluation of potential inhibitors for prostate and breast cancer. National symposium on instrumentation (NSI-35), Jointly organized by Visvesvaraya Technological University, Belgaum and Instrumentation Society of India, Indian Institute of Science, 7-9 January, 2011.
- 84. Arpitha BM, Sharma N, **Sinosh Skariyachan** (2011). *In silico* investigation and docking simulations of CagA of *Helicobacter pylori*: A rational drug design for gastrodudodenal cancer. International conference on frontiers in carcinogenesis and cancer prevention: Scientific advances and public health initiatives, Jointly organized by Carcinogenesis Foundation of USA and Dayananda Sagar College of Engineering, Bangalore, India. 16 18 February 2011.
- 85. Narasimha Sharma, Arpitha BM, **Sinosh Skariyachan** and Kiran S. Microbial characterization of *Clostridium perfringens* from cooked meat-poutry samples and *in silico* simulations of Delta enterotoxin ,16<sup>th</sup> National Conference on aerobiology & National Symposium on Applications of Biotechnology in Environment Management & Medicine. Bapuji Institute of Engineering & Technology, Davanagere. 19- 21 November 2010.
- 86. Narasimha Sharma, Arpitha BM, **Sinosh Skariyachan**. An integrative *in silico* characterization and docking studies of β- enolase: a novel therapeutic insight for β-enolase deficiency, National level conference CHEMEXCEL-2010, Organized by Department of Chemical Engineering, Bapuji Institute of Technology, Davanagere. 21-22 October 2010.
- 87. Arpitha BM, Narasimha Sharma, **Sinosh Skariyachan**, Kiran S (2010). *In silico* biomodelling and docking studies of Claudin 1: A rational approach of drug design for enteropathogenic *E. coli* infections, National conference on molecular medicine and nanobiotechnology, NIMHANS Convention Center, Bangalore. Organized by Sir MVIT & Reva Institute of Science and Management. 13- 14 October 2010.
- 88. Sinosh Skariyachan, Arpitha BM, Usha B Biradar (2010). Isolation, identification and characterization of *Clostridium perfringens* from cooked meat poultry samples and *in silico*

- biomodeling of its delta enterotoxin. International conference on convergence of science & engineering in education and research a global perspective in the new millennium, ICSE 2010, Dayananda Sagar Institutions, Bangalore. 21-23 April 2010.
- 89. Vimala Bharadwaj, **Sinosh Skariyachan** (2009). Production of arachidonic acid from filamentous fungi *Morterella alpine*, Symposium on emerging trends in nanobioscience and workshop on nanoscience and engineering, Dayananda Sagar Institutions, Bangalore. 19- 20 November, 2009.
- 90. **Sinosh Skariyachan**, Murugan S (2005). Adult and embryonic stem cells: scope and applications, National symposium on "recent trends in life science" organized by Oxford college of Arts & Science, Bangalore from 02-04 March 2005.
- 91. **Sinosh Skariyachan**, Murugan S (2004). Consumer's attitude towards GM Foods. National seminar on "emerging trends in Microbiology" organized by Sri Ramakrishna College of Arts and Science for Women, Coimbatore from 24-25 August 2004.

# **Awards and honors**

- ❖ World's Top 2 % Scientist published by Stanford University, USA & Elsevier (2024)
- **❖ Best Microbiology Teacher Award (National Level)**: Microbiologists Society, India (MBSI) (2023).
- ❖ Best Research Paper Award: DBT and CSIR Sponsored International Virtual Conference on Biological innovations & Computational Exploration for Pandemic Challenges (CICPAC'22) organized by Department of Biotechnology and Bioinformatics, Bishop Herber College, Tiruchirappalli, Tamil Nādu. (2022)
- **❖ EMBO-EMBL** Symposia fellowship to attend EMBL Symposium: Multiomics to Mechanisms: Challenges in Data Integration (2021)
- ❖ Bill and Melinda Gates Foundation Abstract Award for Scientists to attend World Microbe Forum 2021 by ASM Microbe 2021 and FEMS2021 (2021)
- ❖ Conference grant from EMBO-EMBL to attend EMBL Symposium: New Approaches and Concepts in Microbiology (2021)
- ❖ Best Oral Presentation Award. Technical Education Quality Improvement Program (TEQUIP)-III. Two Days National Symposium on "Recent Developments in Infectious Diseases" (2019).
- **❖ Conference attendance grant** from **Federation of European Microbiological Society** to attend FEMS 2019, Glasgow, Scotland, UK (2019).
- **❖ Travel grant award** from **Science and Engineering Research Board (SERB)**, DST, Govt. of India to attend FEMS 2019, Glasgow, Scotland, UK (2019).
- ❖ Publon Peer Review Award-2019- Top 1% of reviewers in (1) Biology and Biochemistry (2) Computer Science (3) Cross-Field on Publons global reviewer database by Web of Science group, Clarivate Analytics on September 2019.
- ❖ Publon Peer Review Award-2018: World's Top 1 % of Reviewer in Biology & Biochemistry in 2017-18 year awarded by Publon (2018).
- ❖ Outstanding Faculty Award in Biotechnology (2018): Centre for Advanced Research and Design, Vinus International Foundation.
- ❖ Outstanding Reviewer (2017). Journal of Genetic Engineering & Biotechnology (Elsevier)
- ❖ Young Scientist Award: Association of Microbiologists of India (AMI), under the category Medical & Veterinary Microbiology, 57<sup>th</sup> Annual meeting and International Symposium on Microbes and Biosphere; what is new what is next (2016)
- **Outstanding Reviewer** (2016). Journal of Molecular Catalysis. B, Enzymatic (Elsevier)

- **❖ Travel grant award from Association of Microbiologist of India (AMI)** to attend the AMI 57<sup>th</sup> Annual conference and international Symposium (2016).
- ❖ Young Investigator Award from India and South East Asia: Society for Infectious Disease, 17<sup>th</sup> International Congress for Infectious Disease (2016).
- **❖ Travel grant award from International Society of Infectious Disease (ISID)** to attend 17<sup>th</sup> International Congress for Infectious Disease (2016).
- ❖ Best Poster Award: National Symposium on Next Generation Sequencing and Microarray Data Analysis (2016).
- ❖ Young Scientist Award Presentation (Organizers Award): Association of Microbiologist of India, 56<sup>th</sup> Annual symposium and International Conference (2015).
- **Best poster award:** Metabolomics-2015. Indian Institute of Science, Bangalore (2015).
- **❖ Travel grant award from American Society for Microbiology (ASM)** to attend the Culture Responsibility workshop (2014).
- ❖ Best research project award, 37<sup>th</sup> SPP program, Karnataka State council for Science and Technology, IISc, Bangalore (2014).
- ❖ Best poster award: National conference on recent advances, career prospects and entrepreneurial opportunities in Bioengineering and Biotechnology (2014).
- ❖ Best poster award. 38<sup>th</sup> EMSI Conference, Bhabha Atomic Research Centre, Mumbai (2013).
- ❖ Special recognition award for Poster. Bangalore India Bio-13 (2013).
- **Second prize** in Poster Presentation, National conference on computational biology (2012).
- **Best paper award** in R & D category, National conference on green technology (2012).
- **First prize** in poster presentation, National conference on green technology (2012).
- **Third prize** in oral presentation. State level symposium (2011).
- ❖ First prize in poster presentation.16<sup>th</sup> National conference on aerobiology (2010).
- **First prize** in paper presentation. National level conference CHEMEXCEL-2010 (2010).
- ❖ Second prize in paper presentation. National conference on molecular medicine and nanobiotechnology (2010).
- **First prize** in poster presentation, Symposium on emerging trends in nanobioscience (2009).
- **Best outgoing student award**, St. Pius X College Rajapuram, Kasargod, Kerala (2003).
- **Best NSS volunteer** (2003).
- **Best NSS volunteer** of the year (2002).
- ❖ Best Camper in NSS ten-day special camp (2001).

# **Funded research projects**

- 1. Prudent elucidation of physiochemical & bacterial characteristics of Byramangala Tank, Ramanagara District. Vision Group of Science and Technology, Department of Science and Technology, Govt of Karnataka (No.VGST/P-10/SPiCE/2011-12/1069).
- 2. Selection and screening of microbial consortia for efficient and eco-friendly degradation of plastic wastes in Urban and Rural Areas of Bangalore, Sponsored by Karnataka State Council for Science and Technology, Indian Institute of Science Campus, Bangalore 560012 (Reference No. 37S0835) (2014).
- 3. Formulation and characterization of novel plastic degrading microbial consortia isolated from various places of Bangalore city and study of their bio degradation potential. Sponsored by Karnataka State Council for Science and Technology, Indian Institute of Science Campus, Bangalore 560012 (Reference No. 38S0142) (2015).
- 4. Application of novel thermophilic bacterial consortia screened from cow dung as an ecofriendly approach for the degradation of plastic garbage in Bengaluru City Sponsored by

- Karnataka State Council for Science and Technology, Indian Institute of Science Campus, Bangalore 560012 (Reference No. 39 BE 0074) (2016).
- 5. Prioritizing the plastic degradation potential of novel thermophilic consortia screened from various waste management landfills and sewage treatment plants in selected areas of Karnataka state: an eco-friendly biotechnological intervention for plastic waste management. Sponsored by Karnataka State Council for Science and Technology, Indian Institute of Science Campus, Bangalore 560012 (Reference No. 40S\_BE\_2123) (2017).

# Accession numbers of the molecular sequences deposited in GenBank, NCBI, NIH

# Number of sequences deposited: 47

PP917533, PP917534, OR474406, OR474405, OR567880, OR475565, OR475564, OR475563, OR474404, MN431238, MN431232, MN251628, MN211551, MN108025, MH576917, MF359596, MF359595, MF359594, MF359592, MF359591, KY673793, KX788166, KX462782, KX462781, KX462780, KX462779, KX462778, KF225564, KF225563, KF225562, KF225561, KF225560, KT334809, KT334808, KT334807, KT334806, KT334805, KF225557, KF225556, KF225555, KF225554, KF225559, PV138028, PV138016, PV454379, PV449829

# Professional body membership

- 1. Member, American Association for the Advancement of Science (AAAS) (Membership No. 60538399).
- 2. Member, American Society for Microbiology (No. 100007570).
- 3. Life Member, The Indian Science Congress Association (No. L31638).
- 4. Life Member, National Academy of Biological Sciences (No. LM- 067-18)
- 5. Life Member, Association of Microbiologist of India (No. AMI/LM-212/2012).
- 6. Life Member, Bioinformatics and Drug Discovery Society (No. LMBIDDS17-431)
- 7. Life Member, The Biotech Research Society, India (LM 2913)
- 8. Life Member, Environmental Mutagen Society of India (No. LM-460).
- 9. Life Member, Indian Biophysical Society (No. 1266)
- 10. Life Member, Society of Biological Chemist, Indian Institute of Science (No. 2442).
- 11. Life Member, Microbiologists Society, India (No. MS/LM/695)
- 12. Life Member, Indian Network for Soil Contamination Research (INSCR)- (No. 2022-186)
- 13. Life Member, Society for Biotechnologists (India) (No. L-912)
- 14. Life Member, IAENG Society of Bioinformatics (No. 117844).
- 15. Life Member, IAENG Society of Artificial Intelligence (No. 117844).
- 16. Life Member, International Association of Computer Science and Information Technology (IACSIT) (No.80345946).
- 17. Life Member, Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEES) (No-201763)
- 18. Affiliate Member, Microbiology Society (No. C037890)
- 19. Member, European Federation of Biotechnology
- 20. Member, International Association of Advanced Materials, Sweden (No.826291911931)
- 21. Member, The Science Advisory Board (SAB), USA
- 22. Member, International Society for Environmental Information Sciences.
- 23. Member, International Society for Infectious Diseases.

# Academic and scientific society member

- ❖ Member, Board of Studies (UG), Biochemistry & Bioinformatics, Kannur University, Kerala (June 2021-till date)
- ❖ Member, Faculty of Science: Biochemistry & Bioinformatics, Kannur University, Kerala (June 2023-till date)
- ❖ Member, Board of Studies (Combined), Microbiology, Kannur University, Kerala (June 2021-till date)
- ❖ Member, Board of Studies (UG), Microbiology, University of Calicut (Feb 2020- till date)
- ❖ Member, Adhoc- Committee, PG Curriculum development, Kannur University (2022- till date)
- Member, Adhoc- Committee, UG Curriculum development, Kannur University (2023-till date)
- ❖ Master Trainer, Implementation of FYUGP, Kannur University (2023- till date)
- ❖ Member, Board of Studies- Biotechnology, Kondu Arts and Science College (Autonomous), Erode, TN (2022-till date)
- ❖ Chairman, Board of Question Paper Setters, B. Sc Microbiology (CUCBCSS), Calicut University, Kerala (August 2021-till date)
- ❖ Chairman, Board of Question Paper Setters, M. Sc Microbiology (CBCSS), Calicut University, Kerala (August 2022-till date)
- ❖ Member, Board of Examiner (UG), Department of Biotechnology, Siddaganga Institute of Technology, Tumkur (2018-2019)
- ❖ Member, Board of Examiner (PG), Department of Food Technology, Jain University, Bangalore (2018-2019)
- ❖ Member, Board of Examiners (PG), Dept of Life Sciences, University of Calicut (2009- till date)
- ❖ Member, Board of Examiners (UG & PG), Biotechnology Board, Visvesvaraya Technological University, Belagaum (2016—2017)
- ❖ Member, Panel of Examiners (PG & UG), Biotechnology & Bioinformatics, Visvesvaraya Technological University, Belagaum (2008 −2019).
- ♦ Member, Board of Examiners (UG), University of Kannur (2005-2008; 2019-till date)
- Executive committee member, Society for Biotechnologist of India (SBT (I)- (2018-2019)

# **Editorial Board -International Journals**

- **Executive Editor (Editor in chief)**: Computers in Biology and Medicine (Elsevier) (Dec 2024-present)
- **❖ Associate Editor**: Computers in Biology and Medicine (Elsevier) (2019-2014)
- **Academic Editor:** Plos One (Plos)
- **Guest Editor**: Frontiers in Microbiology (Frontiers)
- **Guest Editor**: Current Medicinal Chemistry (Bentham Science)
- ❖ Editorial Board Member: In Silico Research in Biomedicine (Elsevier)
- \* Editorial Board Member: Journal of Medicine, Surgery, and Public Health (Elsevier)
- ❖ Editorial Board Member: Informatics in Medicine Unlocked (Elsevier)
- \* Review Editor: Frontiers in Microbiology (Frontiers)
- ❖ Editorial Board Member: Current Biotechnology (Bentham Science)
- ❖ Editorial Board Member: Current Indian Science (Bentham Science)
- \* Editorial Board Member: Recent Patents on Food, Nutrition & Agriculture (Bentham Science)

# **Reviewer for international journals**

# Number of papers reviewed (As per Clarivate record 2024): More than 7000

# Nature Group

- 1. Emerging Microbes and Infections (Nature)
- 2. Scientific Report (Nature)

# American Chemical Society

- 3. ACS Nano
- 4. ACS Omega

# FEMS group

5. Pathogens and Disease

#### **Frontiers**

- 6. Frontiers in Bioengineering and Biotechnology
- 7. Frontiers in Microbiology
- 8. Frontiers in Chemistry

#### Elsevier

- 9. Journal of Hazardous Materials
- 10. Biomedical Signal Processing and Control
- 11. Environmental Pollution
- 12. Environmental Technology & Innovation
- 13. Chemosphere
- 14. Steroids
- 15. Food Chemistry
- 16. Ecotoxicology and Environmental Safety
- 17. Science of the Total Environment
- 18. Journal of Environmental Management
- 19. Archives of Biochemistry and Biophysics
- 20. Archives of Medical Research
- 21. Journal of Molecular Graphics and Modelling
- 22. Biomedical and Environmental Sciences
- 23. Bioorganic Chemistry
- 24. Biomedicine & Pharmacotherapy
- 25. Saudi Pharmaceutical Journal
- 26. Microbial Pathogenesis
- 27. Marine Pollution Bulletin
- 28. International Dairy Journal
- 29. Current Plant Biology
- 30. Phytomedicine
- 31. Pedosphere
- 32. Process Biochemistry
- 33. Journal of Molecular Catalysis B-Enzymatic
- 34. Journal of Molecular Structure

- 35. Journal of Molecular Liquids
- 36. Journal of Infection and Public Health
- 37. Journal of Genetic Engineering and Biotechnology
- 38. Informatics in Medicine Unlocked
- 39. Computers in Biology and Medicine
- 40. Computer Methods and Programs in Biomedicine
- 41. Computational Biology and Chemistry
- 42. Current Plant Biology
- 43. International Journal of Biological Macromolecules
- 44. Journal of Pharmaceutical Analysis
- 45. Journal of King Saud University Science
- 46. Journal of Infection and Chemotherapy
- 47. Research in Veterinary Science
- 48. Results in Chemistry
- 49. Biocatalysis and Agricultural Biotechnology
- 50. Emerging Contaminant
- 51. Acta Tropica

## Springer

- 52. Biomass Conversion and Biorefinery
- 53. Applied Microbiology and Biotechnology
- 54. Applied Biochemistry and Biotechnology
- 55. Bulletin of Environmental Contamination & Toxicology
- 56. Environmental Science and Pollution Research
- 57. Environmental Sciences Europe
- 58. Journal of Polymers and the Environment
- 59. The Protein Journal
- 60. Structural Chemistry
- 61. Indian Journal of Microbiology
- 62. Molecular Biology Reports
- 63. Microbial Cell Factories
- 64. International Journal of Peptide Research and Therapeutics
- 65. Interdisciplinary Sciences: Computational Life Sciences
- 66. Proceedings of the National Academy of Sciences, India Section B: Biological Sciences
- 67. Chemical Research in Chinese Universities
- 68. Cell Biochemistry and Biophysics
- 69. 3Biotech
- 70. International Journal of Environmental Research
- 71. SN Applied Sciences

# **Plos**

72. Plos One

#### Tailor & Francis

- 73. Archives of Physiology and Biochemistry
- 74. Critical Reviews in Microbiology
- 75. Expert Opinion on Drug Discovery
- 76. Expert Opinion on Drug Metabolism and Toxicology

- 77. Journal of Enzyme Inhibition and Medicinal Chemistry
- 78. International Journal of Modelling and Simulation
- 79. Journal of Molecular Recognition
- 80. Journal of Receptors and Signal Transduction
- 81. Natural Product Research
- 82. Environmental Technology
- 83. mAbs
- 84. SAR and QSAR in Environmental Research
- 85. Journal of Experimental Nanoscience
- 86. Molecular Physics
- 87. Polycyclic Aromatic Compounds
- 88. Journal of Taibah University for Science
- 89. Journal of Biomolecular Structure and Dynamics
- 90. Journal of Plant Interactions
- 91. Inorganic and Nano-Metal Chemistry
- 92. Aquatic Ecosystem Health & Management
- 93. Archives of Agronomy and Soil Science
- 94. Drug and Chemical Toxicology
- 95. Chemistry and Ecology
- 96. Journal of Herbs, Spices & Medicinal Plants

## Wiley

- 97. Applied Organometallic Chemistry
- 98. Cell Biology International
- 99. Cell Biochemistry & Function
- 100. Journal of Biochemical and Molecular Toxicology
- 101. Journal of Cellular and Molecular Medicine
- 102. Proteins: Structure, Functions, and Bioinformatics
- 103. Phytotherapy Research
- 104. Peptide Science
- 105. Medicinal Research Reviews
- 106. Clinical and Experimental Pharmacology and Physiology
- 107. Drug Development Research
- 108. Nordic Journal of Botany
- 109. Journal of Applied Microbiology
- 110. Letters in Applied Microbiology
- 111. Molecular Simulation
- 112. Nordic Journal of Botany Archiv der Pharmazie
- 113. Journal of Pharmacy and Pharmacology
- 114. Journal of Food Processing and Preservation
- 115. Journal of Food Biochemistry
- 116. Journal of Basic Microbiology
- 117. Environmental Quality Management
- 118. Archives of Insect Biochemistry & Physiology
- 119. Vietnam Journal of Chemistry

#### **BioMed Central**

120. BMC Bioinformatics

- 121. BMC Microbiology
- 122. BMC Biotechnology
- 123. BMC Complementary Medicine and Therapies
- 124. Infectious Diseases of Poverty
- 125. Global Health Research and Policy
- 126. Gut Pathogens

## Royal Society

- 127. RSC Medicinal Chemistry
- 128. Green Chemistry
- 129. New Journal of Chemistry
- 130. Physical Chemistry Chemical Physics
- 131. Chemical Communications
- 132. Royal Society Open Science
- 133. RCS Advance

#### **MDPI**

- 134. Genes
- 135. Marine drugs
- 136. Food

#### **IEEE**

137. IEEE Journal of Biomedical and Health Informatics

# Oxford journals

138. Toxicology research

## Mary Ann Liebert, Inc.

- 139. Microbial Drug Resistance
- 140. Foodborne Pathogens and Disease
- 141. Cancer Biotherapy & Radiopharmaceuticals

# **Future Science Group**

142. Nanomedicine

#### Bentham Science

- 143. Combinatorial Chemistry & High Throughput Screening
- 144. Letters in Drug Design & Discovery
- 145. Current Enzyme Inhibition
- 146. Current Bioactive Compounds
- 147. Infectious Disorders Drug Targets
- 148. The Open Conference Proceeding Journal

#### **Dove Medical Press**

- 149. Infection and Drug Resistance
- 150. Drug Design, Development and Therapy

# **DeGruyter**

- 151. Journal of Integrative Bioinformatics
- 152. Turkish Journal of Biochemistry
- 153. e-Polymers
- 154. Journal of Basic and Clinical Physiology and Pharmacology

## Karger

155. Journal of Innate Immunity

#### **Thieme**

156. Planta Medica

# World Scientific Publishing

157. Journal of Computational Biophysics and Chemistry

# Indian Council of Medical Research

- 158. Indian Journal of Medical Research
- 159. Experimental and Therapeutic Medicine

#### Spandidos Publications

- 160. Molecular Medicine Reports
- 161. Oncology Reports
- 162. Oncology Letters

#### *Inderscience*

163. International Journal of Bioinformatics Research and Applications

## Hindawi

- 164. International Journal of Microbiology
- 165. Evidence-Based Complementary and Alternative Medicine
- 166. BioMed Research International

#### Other Publishers

- 167. Journal of the Brazilian Chemical Society
- 168. SYDOWIA An International Journal of Mycology
- 169. Expert Opinion on Environmental Biology (International Publisher of Science, Technology and Medicine)
- 170. Family Medicine and Community Health
- 171. American Journal of Food Science and Nutrition
- 172. Journal of Microbial & Biochemical Technology (Omics Group)
- 173. Journal of Microbiology, Biotechnology and Food Sciences
- 174. Journal of Biophysics and Structural Biology (Academic journals)
- 175. African Journal of Food Science (Academic journals)
- 176. African Journal of Microbiology Research (Academic journals)
- 177. African Journal of Agricultural Research (Academic journals)
- 178. Microbiology Indonesia
- 179. Bioinformation
- 180. Journal of Natural Science, Biology and Medicine

# Scientific/ academic meetings

- \* Resource Person, 65<sup>th</sup> Annual Meeting of Association of Microbiologist of India (2025).
- Resource Person, 62<sup>th</sup> Annual Meeting of Association of Microbiologist of India (2022).
- ❖ Grantee, EMBO-EMBL Symposium-New Approaches and Concepts in Microbiology (2021)
- ❖ Grantee, World Microbe Forum, Jointly Organized by ASM and FEMS (2021)
- Resource Person, 61<sup>th</sup> Annual Meeting of Association of Microbiologist of India (2021).
- ❖ Grantee, 8<sup>th</sup> Congress of European Microbiologists-FEMS2019.
- ❖ Delegate, 59<sup>th</sup> Annual Meeting of Association of Microbiologist of India (2018).
- ❖ Awardee, 4<sup>th</sup> Contemporary Academic Meet-VAM 2018-VIFA 2018
- ❖ Delegate, 58<sup>th</sup> Annual Meeting of Association of Microbiologist of India (2017).
- ❖ Young Scientist Awardee, 57<sup>th</sup> Annual Meeting of Association of Microbiologist of India (2016).
- ❖ Faculty coordinator, 39<sup>th</sup> SPP Program, Karnataka State Council for Science and Technology (2016).
- ❖ Delegate, 17<sup>th</sup> International Symposium of International Society for Infectious Decease (2015).
- ❖ Delegate, 56<sup>th</sup> Annual Meeting of Association of Microbiologist of India (2015).
- ❖ Invited delegate, CoE Biomolecular interaction meeting (2015).
- ❖ Invited delegate, ASM Culture Responsibility Workshop (2014).
- ❖ Staff coordinator, 37<sup>th</sup> SPP Programm, Karnataka State Council for Science and Technology (2014).
- ❖ Delegate, 55<sup>th</sup> Annual Meeting of Association of Microbiologist of India (2014).
- ❖ Delegate, 54<sup>th</sup> Annual Meeting of Association of Microbiologist of India (2013).
- ❖ Delegate, 38<sup>th</sup> Annual Meeting of Environmental Mutagen Society of India (2013).
- ❖ Delegate, 53<sup>rd</sup> Annual Meeting of Association of Microbiologist of India (2012).
- ❖ Delegate, Workshop on Finalization of the Syllabus for M. Tech in Bioinformatics and Biotechnology of VTU for the year 2012-13 held at Department of Biotechnology, RV College of Engineering, Bangalore (2012).
- ❖ Delegate, Workshop on Finalization of the Syllabus for BE in Biotechnology of VTU for the year 2010-13 held at Department of Biotechnology, Dayananda Sagar College of Engineering, Bangalore (2010)
- ❖ Delegate, Syllabus discussion workshop on Bioinformatics for BE Biotechnology of VTU, Belgaum, held at CMRIT Institute of Technology, Bangalore (2009).

# **Teaching: Subjects handled**

#### 1. Graduate Level: BE and B. Sc

- \* Theory: Microbiology, Microbial diversity, Molecular biology, Cell biology & Genetics, Structural biology, Biochemistry, Microbial biotechnology, Environmental Microbiology, Food Biotechnology, Bioinformatics, Gene chip and microarray technology, Genetic engineering, Genomics and proteomics, Protein engineering and in silico drug design, Gene chip and micro array technology and Biophysics and computer applications, Research Methodology, Biosafety and Bioethics, Molecular modeling and drug discovery, Chemoinformatics & Computational Drug Discovery
- ❖ *Practical*: Microbiology lab, Cell & Molecular biology lab and Bioinformatics lab, Genetic Engg & Immunotechnology Lab, Computer aided drug discovery

#### 2. Post Graduate level: M. Tech & M. Sc

- ❖ Theory: Bioinformatics and Computational Biology, Molecular modeling and Computer aided drug discovery, Chemoinformatic, Genomics and Proteomics, Systems Biology, Research methodology & IPR
- \* Practical: Computational Biology, Molecular modeling and computer aided drug discovery

# Number of dissertations/thesis/projects supervised

❖ Post graduate level (M. Tech/M.Sc) : 12❖ Graduate level (B. E/B.Sc) : 70

# Research Guide ship- PhD/M. Sc (Engg. Res.)

- ❖ Visvesvaraya Technological University, Belagavi (RSRI: VTU081783) (2017-2019)
- Number of students: 02
- Number of PhD thesis evaluated: 05
- ❖ Number of PhD defense as adjudicator: 02

# Session chair/moderator in Conferences and Symposium (National/International)

- ❖ Session Chair: Young Scientist Award Presentation. DBT- sponsored International Conference on "Biotechnological Applications in Ayurveda and Biomedical Sciences" & Annual Meet of Society of Biotechnologists India (SBTI). Organized by Faculty of Allied Health Sciences. 30th March 1st April 2025.
- ❖ Session chair: Lead talk session 7: Theme: Microbial therapeutics and anti-microbial resistance, 65<sup>th</sup> International Conference of Association of Microbiology of India (AMI) on "Perspectives of microbes for human welfare" organized by Guru Jambeshwar University of Science & Technology, Hisar, Haryana. 16 November 2024.
- ❖ Session moderator on day third session 3 in the AICTE ATAL sponsored online Faculty development program on "Recent developments in sustainable processes" organized by Indian Institute of Carpet Technology, Bhadohi from 31 May to 4 June 2021.
- ❖ Session chair for the oral presentations on themes-Cancer Biology in the National Virtual Conference on Recent Breakthroughs in Biotechnology (NCRBB-2021)' organized by Organized by Department of Human Genetics and Molecular Biology Bharathiar University, Coimbatore, Tamil Nadu in association with Society for Biotechnologists (India) during January 22 and 23, 2021.
- ❖ Session chair. AMI-INSCR Innovative Research (Students/Scholars). 61<sup>th</sup> Annual International Conference of the Association of Microbiologists of India (AMI) & Indian Network for Soil Contamination Research (INSCR) in Association with The Energy and Resources Institute (TERI), University of Delhi (DU), Indian Agricultural research Institute (IARI) and Indian National Science Academy (INSA): Microbial World: Recent Development in Health, Agriculture and Environmental Sciences. 05 February 2021.

# FDPs/Refresher Courses/ Orientation program/ Workshops/ Entrepreneurship training programs

- ❖ Delegate: UGC sponsored Refresher Course in Life Sciences (ID) on "Recent advances in Life Sciences" conducted by the UGC − Human Resource Development Centre (HRDC), Madurai Kamaraj University, Madurai, TN. 17-30 March 2023 (14 Days).
- ❖ Delegate: Hands on Training on Learning Management System (Moodle) Institution Level Cluster Programme under Let's Go Digital initiative of the Government of Kerala organized by Kerala State Higher Education Council in association with the Digital University of Kerala. 11-17 May 2022.
- ❖ Delegate: Four Week Induction/ Orientation program for Faculty in University/ Colleges/ Institute of Higher Education, organized by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, Govt. of India from 19 July 2021-17 August 2021.
- ❖ Delegate: All India Council for Technical Education (AICTE) Training and Learning (ATAL) Academy Online FDP on "Genome Engineering for Environment" from 23 August 2021 to 27 August 2021 at Indian Institute of Technology Guwahati, India.
- ❖ Delegate: All India Council for Technical Education (AICTE) Training and Learning (ATAL) Academy Online FDP on "Technological advancement and manufacturing of Biosimilars for Cancer therapy: Present hurdles and Future prospects" from 21 June 2021 to 25 June 2021 at National Institute of Pharmaceutical Education and Research, Hajipur, Bihar, India
- ❖ Delegate: All India Council for Technical Education (AICTE) Training and Learning (ATAL) Academy Online FDP on "Recent developments in Sustainable Processes-Green Technology & Sustainability Engineering" from 31 May 2021 to 04 June 2021 at Indian Institute of Carpet Technology, Bhadoda, UP, India
- ❖ Delegate: Science Academies Science Leadership Workshop, India's First Science Leadership Program organized by Central University of Punjab, Bathinda, India in association with Indian National Science Academy (INSA), Indian Academy of Sciences (IAS), National Academy of Sciences (NAS) from 22-28 June 2020.
- ❖ Delegate: All India Council for Technical Education (AICTE) Training and Learning (ATAL) Academy Online FDP on "Data Sciences" from 11 to 15 May 2020 at National Institute of Technology Nagaland, India
- ❖ Delegate: Work shop on "Art of Publication and Communication" Jointly Organized by International Society for Microbial Ecology (ISME) and Association of Microbiologists of India (AMI) on 11 December 2018 at University of Hyderabad.
- ❖ Special invitee: 4<sup>th</sup> Contemporary Academic Meet and Vinus International Faculty Awards-2018 organized by the Centre For Advanced Research and Design, Vinus International Foundation, Chennai on 07 July 2018.
- ❖ Delegate: Seven Days Faculty Development Programme on "Recent Advances in Nanotechnology for Sustainable World-2018" Jointly Organized by Department of Biotechnology Dayananda Sagar College of Engineering, School of Basic and Applied Sciences, Dayananda Sagar University, Centre for Incubation, Innovation, Research & Consultancy, Jyothy Institute of Technology, Association of Microbiologists of India (AMI), Bengaluru Chapter, from 19 to 26 June 2018.
- ❖ Selected Delegate: CoE Workshop on biomolecular interactions. Jointly Organized by NCBS, IISc. & DBT, Govt. of India at National Centre for Biological Sciences, Bangalore. November 25-28, 2015.
- ❖ National trainer (ASM culture responsibility): Selected as invited delegate to participate "Train the Trainers" workshop on ASM's new training series on "Culture of Responsibility."

- Organized American Society for Microbiology (ASM), in collaboration with Jawaharlal Nehru University (JNU) and Society for Biosafety, October 13-14, 2014.
- ❖ **Delegate**: ASM special workshop on "Art of science communication", 55<sup>th</sup> AMI Annual conference, TNAU, Coimbatore, India, 13<sup>th</sup> November 2014.
- ❖ **Delegate**: ASM special workshop on "Scientific writing and publishing", 53<sup>rd</sup> Annual conference, KIIT University, Bhubaneswar, India, 22<sup>nd</sup> November, 2012.
- ❖ **Delegate**: UGC sponsored workshop for teachers "Promotion of ethics and human values" and completed the certificate course "Value based dynamic parenting". November 2005 to March 2007.
- ❖ **Delegate**: UGC sponsored workshop for teachers "Promotion of ethics and human values" and completed the certificate course "Development of human values". November 2005 to March 2007.
- ❖ **Delegate**: Two-day workshop on "Research methodologies and latex" Organized by Visvesvaraya Technology University, Belgaum, 05 & 06 August 2011.
- ❖ **Delegate**: National workshop on "Chromatographic techniques" Organized by Amrita Institute of Medical Science & Research Centre, Cochin. 08-09 September 2005.
- ❖ Delegate: National seminar/workshop on "recent trends in industrial Biotechnology" conducted by Vivekananda College of Engineering for women, Trichencode from 14-15 February 2005.
- ❖ **Diploma**: Completed a diploma in MS Office from Bharathiar University, Coimbatore with first class (2004-05).

# **E- content development**

- Developed E content for a Two Week Online Short-Term Course on "Emerging Infectious Diseases" organized by Sree Narayana College, Kannur in collaboration with Kerala State Council for Science Technology and Environment, Trivandrum from 17 to 30 October 2020.
- **Content reviewer**: Bioinformatics, E-content development, Educational Multimedia Research Centre (EMMRC), University of Calicut, Kerala.

#### Invited talks as resource person

- 1. **Distinguished speaker**: DBT- sponsored International Conference on "Biotechnological Applications in Ayurveda and Biomedical Sciences" & Annual Meet of Society of Biotechnologists India (SBTI). Organized by Faculty of Allied Health Sciences. Mahayogi Gorakhnath University Gorakhpur. Topic: Computational Drug Discovery for Combating Antimicrobial Resistance in ESKAPE Pathogens. 30th March 1st April 2025.
- 2. **Distinguished speaker**: National Conference on Strategies to Combat the Menace of Multidrug Resistant (MDR) Pathogens. Organised by Karpagam Academy of Higher Education-Deemed University, Coimbatore, Tamil Nadu. Title: Exploring Artificial Intelligence and Computational Biology Approaches in Tackling Multi-Drug Resistance. 07-08 March 2025
- 3. **Lead Speaker:** Drug Discovery 2025-Emerging Trends and Future Prospects. Organized by Centre for Interdisciplinary Research in Basic Sciences Jamia Millia Islamia Central University, New Delhi. Topic: Elucidation of the prospective molecular targets of drugresistant *Acinetobacter baumannii* and *Pseudomonas aeruginosa* by computer aided screening and cheminformatics modelling. 24-25 February 2025.

- 4. **Invited Speaker:** Workshop 2025. Designing and Benchmarking Microbiology Courses to Meet Higher Education Teaching Learning Standards Under NEP 2K20. Jointly organized by Academy of Microbiological Sciences & Association of Microbiologists of India at IIT Delhi Sonipat Campus, Rajiv Gandhi Education City, G.T Road, Sonipat, Haryana. 15-16 February 2025.
- 5. **Invited Speaker:** Two-week Online Refresher Course in Life Science. Organised by UGC-Malaviya Mission Teacher Training Centre, Central University of Kerala, Kasaragod. Title: Scope of Computational Biology and Bioinformatics in Modern Drug Discovery and Curtailing Antimicrobial Resistance. 20 January 2025 1 February 2025.
- 6. **Lead Invited Speaker.** 65<sup>th</sup> International Conference of Association of Microbiology of India (AMI) on "Perspectives of microbes for human welfare" organized by Guru Jambeshwar University of Science & Technology, Hisar, Haryana. 16 November 2024. Topic: *In Silico* Bioprospecting and Chemoinformatics Screening of Potential Inhibitors against Drug Resistant *Acinetobacter baumanii* and *Pseudomonas aeruginosa*.
- 7. **Invited Speaker.** One Week Faculty Development Program from 5-10 August 2024 with the theme "Subject-specific benchmarking as a tool for outcome-based teaching and learning" organized by the Association of Microbiologists of India (AMI) and Academy of Microbiological Sciences (AMSc) in collaboration with School of Basic Sciences d Research Sharda University, Greater Noida, New Delhi. Topic: Curricular perspectives in Computational Biology and Bioinformatics. 09 August 2024
- 8. **Invited Speaker**. 8<sup>th</sup> International Conference of Indian Network for Soil Contamination Research (INSCR) & 4th International Symposium on Ciliate Biology Exploring the Microbial World-From Human Health to Environmental Sustainability. Topic: In Silico Bioprospecting and Chemoinformatics Screening of Potential Lead Molecules against Multi-drug Resistant WHO Priority Pathogens. 2-5 April 2024.
- 9. Chief Guest & Invited Speaker. National Bioforum on Biotechnological and Microbiological Research: Current Challenges and Future Perspectives 2024. PG Department of Microbiology and Biotechnology, SRI Bharathi Arts & Science College for Women, Kaikkurichi, Pudukkottai, Tamil Nadu Topic: Emerging Trends and Data Science Driven Approaches for Curtaining Antimicrobial Resistance. 1-2 March 2024.
- 10. **Invited Speaker**. Focus 2024: Multidisciplinary Seminar Series (17-27 Feb 2024) organized by the department of Botany, Sree Narayana College, Kannur in collaboration with Kerala State Higher Education Council, Govt. of Kerala. Topic: Emerging Trends and Applications of Computational Biology and Bioinformatics. 23 February 2024.
- 11. **Invited Speaker.** EMSI-2024: 46<sup>th</sup> Annual Meeting of Environmental Mutagen Society of India & International Conference on Environmental Mutagenesis: Impact on Biodiversity and Human Health in Changing World organized by School of Biological Sciences, Central University of Kerala, Kasaragod, Kerala. Topic: In Silico Bioprospecting of Novel Natural Lead Molecules as Potential Inhibitors against Multi-drug Resistant *Acinetobacter baumanii* and *Pseudomonas aeruginosa*. 29-31 January 2024.
- 12. **Invited Speaker.** Gifted Children Program 2023-24- Kannur District Talent Meet. Dept of the General Education, Govt. of Kerala. Title: The world of microbes: amazing field to foster your career. Organized by the General Education Department, Govt. of Kerala. 23 December 2023.
- 13. **Invited Speaker**. Three Day National Level Workshop In Silico tools for Computer Aided Drug Design (i-CADD). Jointly organized by the department of Chemistry & Zoology, Lady Doak College, Madurai & Department of Physical Chemistry Madurai Kamaraj University, Madurai, TN. 29 November 01 December 2023. Topic: Scope of Molecular Modeling and Docking in Computational Drug Discovery. 30 November 2023.

- 14. **Chief Guest & Invited Speaker**. National Seminar 2023 organized by PG Department of Microbiology in Association with IQAC Sharaf Arts & Science College. Kaithakkad, Kasaragod, Kerala. Title: Curtailing Global Antimicrobial Resistance by Integrated Microbial Omics. 10 November 2023.
- 15. **Invited Speaker**. Two-day national seminar on sustainable future through microbial innovations sponsored by Directorate of Collegiate Education, Govt. of Kerala. Topic: Computational Molecular Biology in Curtailing Global Antimicrobial Resistance: Innovations in Microbial Omics. 12 October 2023
- 16. **Invited Speaker**. National Seminar under DBT Star scheme program organized by Department of Biotechnology, RVS College of Arts and Science (Autonomous), Coimbatore, TN. Topic: Recent Trends, Scope and Opportunities of Computational Biology and Bioinformatics. 22 September 2023.
- 17. **Chief Guest and Plenary Speaker**: Department of Biotechnology (DBT), Govt of India sponsored Star College Scheme program at Department of Biotechnology, Kongu Arts and Science College, Erode (Autonomous Institution affiliated to Bharathiar University, Coimbatore), Tamil Nadu. Talk Title: Bioinformatics Based Approaches for Discovering Novel Drugs Against Emerging Infectious Diseases. 03 August 2023.
- 18. **Invited Speaker.** First National Conference of Microbiologists Society of India (MBSI) on "Biotechnology for Better Tomorrow"22-24 January 2023. Organized by MBSI & Department of Microbiology, Shri Sachhidanand Shikshan Santha's Taywade College, Mahadula- Koradi, Nagpur. Topic: Computational medicinal chemistry and virtual screening aided approaches of discovering potential molecular targets and natural lead molecules towards multidrug resistant *Pseudomonas aeruginosa*. 21-24 January 2023.
- 19. **Invited Speaker.** Gifted Children Program 2022-23 of the General Education, Govt. of Kerala. Title: nurturing the future career in post Covid era- Scope of microbial aided interdisciplinary sciences. Organized by the Education District of Kannur, Kerala. 19 November 2022.
- 20. **Invited speaker**. 7<sup>th</sup>Annual International Conference of Indian Network for Soil Contamination Research (INSCR): Modulating the environment with microbes organized by INSCR and Phixgen Pvt. Ltd, Gurugram. Title: Computational modelling and virtual screening decipher that response regulator GacA and transcriptional activator RhlR proteins of biofilm associated *Pseudomonas aeruginosa* are prospective molecular targets for natural lead molecules. 08-14 November 2022.
- 21. **Invited speaker**. Two Day National Seminar on Challenges of Emergent and Resurgent Infectious Diseases in a Changing World. Jointly organized by Department of Microbiology, Sree Narayana College, Kannur and Kerala State Council for Science Technology and Environment, Govt. of Kerala. Topic: Computational Biology and Data Science Driven Approaches for New Generation Drug Discovery Towards Emerging and Re-emerging Infectious Diseases. 13-14 October 2022
- 22. **Lead invited speaker**. 62<sup>nd</sup> Annual meeting and International Conference of Association of Microbiologists of India Organized by University of Mysore in association with CSIR-CFTRI, DRDO-DFRL, KSTA and JSS AHER, Mysuru. Topic: Computational discovery of prospective molecular targets and potential natural lead molecules against multidrug resistant *Acinetobacter baumannii*. 21-23 September 2022.
- 23. **Invited speaker**. Two-day seminar on Emerging trends in Computational Biology and Bioinformatics organized by Department of Biotechnology, Sir Visvesvaraya Institute of Technology, Bangalore. Topic: Bioinformatics and Computer Aided Drug Discovery: Cutting Edge Perspectives in Post Pandemic Era. 01 July 2022.

- 24. **Invited speaker**. National Webinar on World Malaria Day. Jointly organized by Microbiologists Society, India, Jharkhand Unit and St. Xavier's College, Ranchi, Jharkhand. Topic: Scope of Computational Biology and Omics Sciences for the Discovery of Novel Antimalarial Agents. 25 April 2022.
- 25. **Invited speaker**. Ten-Day Hands-on Training on Advanced Molecular Docking. Jointly organized by SIAS Research Forum, Calicut University and The Directorate of Research, SAFI Institute of Advanced Study, Vazhayur, Kerala. Topic: Scope of Molecular Docking in Drug Design on 18th October 2021, Ligand Protein Docking with AutoDock Software on 19 October 2021, Ligand Protein Docking with AutoDock Vina Software on 24 October 2021.
- 26. **Invited speaker**. Third Refresher Course in Biotechnology-16-29 September 2021.UGC-Human Resource Development Centre, University of Calicut. Applications of Bioinformatics in Biotechnology.17 September 2021.
- 27. **Invited speaker**. International Webinar on Clinical Microbiology and Infectious Diseases "Modern research and technologies of microbiology. Organized by Logdom Publishers, Belgium. Natural molecules are plausible therapeutic leads to the major protein targets of SARS-CoV-2: Insights from computational modelling and molecular dynamic simulation studies. 29 June 2021.
- 28. **Invited speaker.** Two Days Online Webinar on Recent Trends in Plant Sciences. Organized by Department of Studies in Botany, Davangere University. Discovery of potential molecular targets and promising lead molecules towards SARS-CoV-2: prioritizing the scope of computational biology and chemoinformatics resources. 26-27 June 2021.
- 29. **Invited Speaker.** 61<sup>th</sup> Annual International Conference of the Association of Microbiologists of India (AMI) & Indian Network for Soil Contamination Research (INSCR) in Association with The Energy and Resources Institute (TERI), University of Delhi (DU), Indian Agricultural research Institute (IARI) and Indian National Science Academy (INSA): Microbial World: Recent Development in Health, Agriculture and Environmental Sciences. Computer Assisted Virtual Screening of Potential Therapeutic Targets and Putative Lead Molecules for SARS CoV-2: Insight for COVID19 lead discovery. 04 February 2021.
- 30. **Invited Speaker.** Special Lecture Under Star College Scheme, Department of Biotechnology, Govt. India. Department of Biotechnology, RVS College of Arts and Science, Coimbatore. Molecular modeling and computer assisted screening of potential lead candidates against SARS-CoV-2: Insights for COVID-19 drug discovery. 17 December 2020.
- 31. **Invited Speaker.** Five Day Faculty Development Program (Virtual) on Trends in Computational Biology. Computer Assisted Virtual Screening of Potential Therapeutic Targets of SARS CoV-2: Screening of Putative Lead Molecules Against COVID19. Department of Biotechnology, Sapthagiri College of Engineering, Bangalore. 12 December 2020.
- 32. **Invited Speaker.** National Webinar Series COVID 19 What you need to know. Organized by the Department of Microbiology, Sree Narayana College, Kannur, Kerala in association with IQAC. 19 September 2020. Topic: Computational Virtual Screening of Potential Drug Targets of SARS CoV-2: Insight for Therapeutic Developments against COVID19.
- 33. **Invited Speaker.** Antibiotics 2020: 2<sup>nd</sup> International Webinar on Antibiotics and Antimicrobial Resistance. Theme: Antibiotics: Use Wisely; Take Precisely. Meetings International. 30 August, 2020. Topic: Computational aided virtual screening of natural epiesteriol as probable lead molecules towards prospective targets of multidrug resistant *Acinetobacter baumannii*.
- 34. **Invited Speaker.** Young Science Leader Series. Organized by Dr. Felix Bast, Associate Professor, Department of Botany, Central University of Punjab, Bathinda, Punjab. 11 July 2020. Topic: My journey .... as teacher, researcher and science communicator.

- 35. **Invited Speaker.** Webinar organized by Department of Microbiology, in collaboration with IQAC, Gurudev Arts and Science College, Mathil, Payyanur, Kerala. 17 July 2020. Topic: Scope of molecular modeling and computational drug discovery in the era of COVID-19.
- 36. **Invited Speaker.** One Week Live Webinar Series of International E-Conference in Plant Sciences. Organized by Department of Studies in Botany, Davangere University, Karnataka, in association with Ciencias Agrogenómicas, León-Universidad Nacional Autónoma De México, León, Guanajuato, México. 25-30 May 2020. Topic: Deciphering the relevance of computer-aided drug discovery: Prediction of three-dimensional structures and folding patterns of molecular drug targets.
- 37. **Invited Speaker.** FEMS 2019. 8<sup>th</sup> Congress of European Microbiologists. Organized by Federation of European Microbiological Society. Glasgow, Scotland, UK. 07-11 July 2019. Topic: Computational modeling, molecular dynamic simulation and *in vitro* studies suggested that natural epiesteriol is a potential inhibitor against Omp38, RecA, PyrE and PyrF targets of multi-drug resistant *Acinetobacter baumanni*.
- 38. **Invited speaker.** DBT-HRD sponsored training programme on synthetic and molecular approaches for crop improvement. Department of Biotechnology. University of Agricultural Sciences, GKVK Campus, Bangalore-560 065. 11-16 March 2019. Topic: Computer aided molecular modeling: prediction of three-dimensional structures and folding patterns of protein targets.
- 39. **Invited speaker.** National Conference on Recent Trends in Microbiology, Department of Life Sciences, University of Calicut, Kerala. 26-27 September 2017. Topic: Curtailing antimicrobial resistance by molecular modeling and computer aided lead discovery: A paradigm shift in Medical Microbiology.
- 40. **Invited speaker.** DBT Sponsored National Workshop in Chemoinformatics- *In silico* Craft Innovation. Bioinformatics infrastructure Facility (BIF), Department of Biotechnology, Calicut University, Kerala, 6-8 December 2016. Topic: Molecular modeling and macromolecular docking- new insights for cheminformatics analysis.
- 41. **Young Scientist Award Presentation** (Medical & Veterinary Microbiology). 57<sup>th</sup> Annual conference of Association of Microbiologist of India (AMI) and International Symposium on Microbes and Biosphere; what is new what is next" held on 24-27 November 2016 at Guwahatti University, Guwahatti, Assam. Topic: Antibiotic resistance patterns of the fecal coliforms in fresh water ecosystem and screening of novel herbal lead molecules against probable drug targets of MDR pathogens by computational virtual screening.
- 42. **Invited speaker.** Training program to Bioinformatics (09-12 August 2016). School of Applied Animal Production and Biotechnology, College of Veterinary and Animal Scinces, Kerala Veternary and Animal University, Mannuthy, Thrissur, Kerala, 10 August 2016. Topic: Molecular modeling in drug designing.
- 43. **Invited speaker under Young Scientist category.** 56<sup>th</sup> Annual Conference of Association of Microbiologists of India (AMI-2015) & International Symposium on "Emerging Discoveries in Microbiology". School of Life Science, Jawaharlal Nehru University, New Delhi, 7-10 December 2015. Topic: Environmental monitoring of antibiotic resistance patterns of the fecal coliforms isolated from Cauvery River, major drinking water source in Karnataka, India and screening of novel herbal lead molecules against probable drug targets of MDR pathogens by computational virtual screening.
- 44. **Invited speaker.** DBT Sponsored workshop on Bioinformatics Tools & Applications, Organized by Department of Biotechnology, University of Calicut. 18-19 February 2015. Topic: Phylogenetic analysis-The phylome: Evolutionary foundations of Bioinformatics.

- 45. **Invited speaker.** ICAR Winter School: 2015. Bioinformatics Centre (DIC), Kerala Agricultural University, Thrissur, Kerala, 15 January 2015. Topic: Molecular modeling and its emerging dimensions in agriculture.
- 46. **Invited speaker.** UGC sponsored national workshop on recent trends in Bioinformatics. Organized by Department of Microbiology and Biochemistry, Pazhassiraja College Pulpally, Wayanad, Kerala.15-17 December 2014. Topic: Phyolgenetic analysis and primer design.
- 47. **Invited speaker:** Two-day seminar cum workshop on computational biology applications. Sponsored by DBT, jointly organized by Maharani Lakshmi Ammanni College for women, Bangalore and forum for excellence in education, Bangalore. February 14 & 15, 2014. Topic: Prevalence of multidrug resistant bacteria in river Cauvery and computational virtual screening for natural inhibitors against MDR genes.
- 48. **Plenary speaker:** TM's 3<sup>rd</sup> world drug discovery online conference. Organized by GD Target Meeting: A leading online life science conference organizer, October 15-17, 2013. Topic: Computer aided virtual screening and designing of novel therapeutic leads against virulent targets of multi-drug resistant bacterial isolates.
- 49. **Invited speaker:** UGC sponsored national seminar on Bioinformatics: Applications in modern Science. Jointly organized by Department of Zoology, Mercy College, Palakkad, Kerala & Bioinformatics centre, Kerala Agricultural University, Kerala. 26 September 2013. Topic: Exploration of Structural insights towards functional studies of biomolecules- Emerging trends and future perspectives.
- 50. **Subject expert**: Food Biotechnology, Edusat Programme, Visveswarya Technological University, Belgaum, India
- 51. **Invited speaker:** UGC sponsored national seminar on Bioinformatics- Current trends in Bioinformatics. 08-09 August 2012, Organized by Educational Multimedia Research Centre, University of Calicut. Topic: Structure prediction.
- 52. **Invited speaker**: UGC sponsored national workshop on current trends in Bioinformatics. 09-10 August 2012, Organized by Educational Multimedia Research Centre, University of Calicut. Topic: Computer aided modeling and simulation.
- 53. **Invited speaker**: Inauguration of association of Microbiology, St. Pius X College Rajapuram, Kasaragod, Kerala. 25 October 2011. Topic: Emerging trends in protein engineering and application.

#### Member, organizing committee in National and International conferences

- Organizing committee member: UGC sponsored national seminar on "quality management systems and HACCP for food industries" organized by Dept. of Microbiology, St. Pius X College Rajapuram from 26-27 July 2000.
- Organizing committee member: National Conference on Genomics, proteomics and system biology" held at Indian Institute of Science, jointly organized by DSCE & Sir MVIT, Bangalore from 01-03 September 2008.
- Organizing committee member: Symposium on emerging trends in nanobioscience and workshop on nanoscience and engineering, Dayananda Sagar Institutions, Bangalore. 19- 20 November, 2009.
- **Organizing committee member:** International conference on frontiers in carcinogenesis and cancer prevention: Scientific advances and public health initiatives, Jointly organized by Carcinogenesis Foundation of USA and Dayananda Sagar College of Engineering, Bangalore, India. 16 18 February 2011.

- Organizing committee member: 5<sup>th</sup> Annual KSTA Conference-2012, State level conference on "Science and technology for societal transformation" Jointly organized by Karnataka Science and Technology Academy and Dayananda Sagar Institutions, 19-20 December 2012.
- Organizing committee member: One day Symposium on Advances in Microbiology for Human Welfare, Organized by AMI Bangalore chapter, DSI, 15 May 2013
- Organizing committee member: National Conference on "Utilization of Bio-diversity for Value Added Products: Food, Pharma, Nutraceuticals and Biofuels (NCUBD 2015)".
   Organized by Dept. of Biotechnology, Chemical Engineering & Chemistry. 25 & 26 September 2015.
- **Joint Organizing Secretary**: Seven Days Faculty Development Programme on "Recent Advances in Nanotechnology for Sustainable World-2018" Jointly Organized by Department of Biotechnology Dayananda Sagar College of Engineering, School of Basic and Applied Sciences, Dayananda Sagar University, Centre for Incubation, Innovation, Research & Consultancy, Jyothy Institute of Technology, Association of Microbiologists of India (AMI), Bengaluru Chapter, from 19 to 26 June 2018.
- Organizing Secretary: National Conference on Advances & Innovations in Biotechnology: Multidisciplinary Approaches to Food, Health, Environmental and Energy Issues & Annual meeting of Society for Biotechnologist (India). Jointly Organized by School of Basic and Applied Sciences, Dayananda Sagar University (DSU), Department of Biotechnology, Dayananda Sagar College of Engineering (DSCE), Bengaluru and Society for Biotechnologist (India) (SBT (I)). Bangalore. 15 & 16 November 2018.
- Organizing Secretary: Five Days Faculty Development Programme on "Food and Fermentation Engineering" jointly Organized by Department of Chemical Engineering & Department of Biotechnology Dayananda Sagar College of Engineering, Bangalore from 05 to 09 August 2019.
- **Organizing secretary:** International Webinar on membrane transport biophysics in vitro to *in situ* investigations using electron spin resonance spectroscopy, Organized by Department of Microbiology, St. Pius X College, Rajapuram, 07 December 2020.
- Organizing Committee Convenor: ILLUMINISMO 2021-International Webinar Series on "The emerging trends in interdisciplinary sciences and social sciences". Organized by St. Pius X College Rajapuram. 02-13 August 2021.
- Organizing secretary: Gracias Gurú 2022: Two-day National Webinar on Emerging Trends and Frontiers in Applied Microbiology and Biotechnology jointly organized by the Department of Microbiology, St. Pius X College, Rajapuram, Kasaragod, Kerala and Microbiologists Society, India (MBSI). 10- 11 March 2022.
- Organizing secretary: National Seminar on Frontiers in Biological Sciences and IPR Jointly organised by Kerala Academy of Sciences (KAS) & Microbiologists Society, India (MBSI), Department of Microbiology, Department of Life Sciences (Zoology) and Computational Biology, St. Pius X College Rajapuram, Kasaragod, Kerala on 22 August 2024

#### **Scientific Professional Society**

**Association of Microbiologist of India -Bangalore Chapter** (Headed by DSI, Bangalore)

• Took active role in the establishment of AMI Bangalore Chapter at DSI campus

- Periodically attended AMI Annual Conference sand Annual Meeting and represented DSCE and AMI Bangalore chapter (2012-2019)
- Executive Committee member (2012)
- Hon. Treasurer (2013-15)
- Hon. Secretary (2016- 2019)

# Microbiologist Society, India (MSI) St. Pius X College, Rajapuram Unit)

- Initiated MBSI St. Pius X College unit (2022) and inducted 127 students' members to MSI
- Faculty Coordinator MBSI chapter, St. Pius X College, Rajapuram
- State coordinator of MBSI, Kerala State (2020- till date)

# **Responsibilities undertaken** (St. Pius X College, Rajapuram, Kasaragod, 2019- till date)

- Coordinator, Mentoring, St. Pius X College, Rajapuram (2024- till date)
- Research committee coordinator, St. Pius X College, Rajapuram (2019- 2023)
- Coordinator, Academic council, St. Pius X College, Rajapuram (2023-24)
- Coordinator, Alumni Association, St. Pius X College, Rajapuram (2020-24)
- Member, IQAC, St. Pius X College, Rajapuram (2022-till date)
- Member, Academic council, St. Pius X College, Rajapuram (2019- 2023)
- Nodal officer, National Scholarship Scheme (2019- 2022)
- Fine arts advisor, St. Pius X College, Rajapuram (2019-2022)
- Class mentor (2020 & 2022 admission undergraduates in Microbiology, St. Pius X College, Rajapuram)
- Member, NIRF accreditation committee, St. Pius X College, Rajapuram (2019-2024)
- Member, College website, St. Pius X College, Rajapuram (2019-till date)
- Member, PTA Executive committee, St. Pius X College, Rajapuram (2022-2024)

# **Responsibilities undertaken** (Dayananda Sagar Institutions, Bangalore, 20098-2019)

#### PG Coordinator for M. Tech Bioinformatics

• Coordinated the PG activities in the dept (2015-2018)

#### **Assistant Student Welfare Officer-DSI** (2015- 2019)

• Periodic monitoring of the discipline in DSI hostels.

# Member, Societies and Forum (2015-2019)

• Activities in the professional society of the college.

# **Department Website Coordinator** (2015- 2017)

• **Responsibilities handled:** Maintaining the department website in a dynamic way with activities and periodic updates.

# **Department Proctor Coordinator** (2011-2015; 2017- 2019)

• *Responsibilities handled*: Coordinated the mentoring/ proctorial activities in the department.

# **Program Coordinator-**Short term Certificate Course in Computational Biology (2016)

• Conducted special hands-on training programs in computational Biology for the graduate students from Computer Science, Medical Electronics and Biotechnology, DSCE.

# **Department Alumni Coordinator** (2010-2019)

#### Activities:

- Interacted with each alumnus from the department of Biotechnology (2010-2019) and to collect their suggestions and feedbacks about the vision, mission of the department and institutions
- Invited distinguished alumni and conducted exchange programs with third- and four-year students.
- Suggested the students for the interships/training programs/project works with the supports from the alumni

#### NAAC

- Actively participated in the NAAC and NBA activities in the college and department as per the directions from eth superiors.
- Coordinator—Criteria-1

#### **NBA**

- Criteria Coordinator (Criteria-3)
- Module coordinator & Course Coordinator

# **ISO & IQAC**

• Faculty coordinator from the Department of Biotechnology

# **Coordinator (NPTEL, Online Courses)**

- Encouraged the undergraduate students to enroll various online courses offer by National Programme on Technology Enhanced Learning (NPTEL, by Indian Institute of Technology), Swayam MOOCs (AICTE) and MITx.
- Coordinated and documented the online courses undertaken by undergraduate students in BE biotechnology.

## Faculty Editor-Department Magazine (2018 & 2019)

• Faculty editor in department magazine – (1) "Chaperons: Helpers to serve the Society" released during the National Science Day, February 2018 (2) "Biohrome: A powerful challenge towards colourful inventions, released during the National Science Day, February 2019

## **BOS Member** (DSCE Autonomous, Department of BT)

• Took lead role for the framing of the Syllabus for BE (Biotechnology)and M. Tech (Bioinformatics) by collecting the feedback from eth stake holders

# **NIRF Coordinator** (Department of BT, DSCE Autonomous) (2018-2019)

• Coordinated the activities of Department of Biotechnology for NIRF ranking of DSCE

# Other responsibilities undertaken

- Project coordinator (VII) Sem) (2014 & 2015)
- Seminar coordinator (VIII Sem) (2013, 2014, 2017, 2019)
- Time table coordinator (2013)
- Test coordinator (2011-13)
- Class teacher/Coordinator (2008-present in all the semester)
- Faculty Coordinator: Science Day (2018, 2019)

#### **Co-curricular activities**

## **National Service Scheme (NSS)**

- \* NSS State award- Unit secretary, best NSS unit award from Govt. of Kerala (2003).
- ❖ Joined and served as an active NSS volunteer in St. Pius College Rajapuram (Unit No. 36 & 37) under the NSS cell, Kannur University, Kerala (2001 to 2003).
- ❖ National integration camp for NSS volunteers, Mangalore University (2002)
- ❖ Cultural Exchange for National Integration for, SDM College, Ujire, Mangalore University (2002).
- ❖ Three University leadership training camps for NSS volunteers, Kannur University (2001 − 2003)
- $\bullet$  Three Ten-day special camping program for NSS volunteers (2001 2003).

#### Other activities

- ❖ Secretary-Alumni association, St. Pius X College Rajapuram, Kasaragod, Kerala (2009).
- **Editor in chief** "Blossomed ten years"- Decennial souvenir of St. Pius X College Rajapuram, Kasargod, Kerala (2007).
- **❖ Fine arts club secretary** College Union, St. Pius X College Rajapuram, Kasaragod Kerala (2003).
- ❖ Editor in chief- "Dhwani" Department magazine, Dept. of Microbiology, St. Pius X College Rajapuram, Kasaragod Kerala (2002).
- ❖ Editor in chief- "Haritham"-NSS Annual magazine, National Service Scheme, St. Pius X College Rajapuram, Kasaragod Kerala (2003).

# **Personal Profile**

Permanent address : Vattakudiyil (House)

Panathady (P.O), Cherupanathady

Rajapuram (Via) Kasaragod (Dist) Kerala – 671532

Name of the father : Mr. V.V Skariyachan

Sex : Male
Marital status : Married
Nationality : Indian
Date of birth : 29-06-1982

Languages known : English, Hindi, Malayalam, Kannada and Tamil

# References

# Prof. Edward John Ciaccio, PhD

Former Editor-in-chief Computers in Biology & Medicine (Elsevier), Present Editor-in-chief Informatics of Medicine Unlocked (Elsevier) Department of Medicine - Division of Cardiology Columbia University, NY, USA

E-mail: edwardciaccio@gmail.com, ciaccio@columbia.edu

# Dr. N. Rajeswari, PhD

Professor & Head

Department of Biotechnology, Dayananda Sagar College of Engg., Bangalore, Karnataka Email: rajeswari-bt@dayanandasagar.edu, nraja7@gmail.com, Ph: +91 9480648300

# **Declaration**

I hereby declare that the above furnished details are true to the best of my knowledge and belief.

12 April 2025

(Sinosh Skariyachan, PhD)