

Dr. D. DHANASEKARAN Professor

Contact	
Address	: Department of Microbiology Bharathidasan University
	Tiruchirappalli – 620 024 Tamil Nadu, INDIA
Mobile	: +91-9486258493
mail(s)	: dhansdd@gmail.com ddhanasekaran@bdu.ac.in https://orcid.org/0000-0002-6391-1464
	https://www.researchgate.net/profile/Dhanasekaran_Dharumadurai2/publications https://scholar.google.com/citations?user=T-NdZHMAAAAJ&hl=en

Academic Qualifications: M.Sc. Ph.D.

Teaching Experience: 17 Years

Leadership and outreach and communication

- ✓ Principal Investigator in the National Repository for Microalgae and Cyanobacteria (NRMC) –Fresh water unit, Sponsored by DBT, New Delhi
- ✓ Member in Verification of research publications submitted by Research scholars and Faculty members for Research adversership based on the CARE (Consortium of Academic and Research Ethics)
- ✓ State President of Microbiologists Society, India for academic year 2022-2023 for Tamil Nadu (01/06/2022 to 30/05/2024).
- ✓ Member in Microbiologist's Society, India (MBSI) Award evaluation committee
- ✓ Member in task force for development of course on basic microbiology as an elective subject for BAMS,-National Commission for Indian System Medicine (NCISM) – Ministry of Ayush and Microbiologist's Society, India (MBSI)
- ✓ Member in Screening & Evaluation Committee, Ministry of Micro, Small & Medium Enterprises (MSME), Government of India, Idea Hackathon 3.0 (Women), held at

University College of Engineering, BIT Campus, Anna University, Tiruchirappalli on 26.08.2023

- ✓ External member in Research Advisory Committee (RAC), University College of Engineering, Bharathidasan Institute of Technology (BIT) campus, Anna University, Tiruchirappalli
- ✓ Food safety Officers examiner, Tamil Nadu, Food Safety and Drug administration Department, Teynampet, Chennai- 24.05.2022
- ✓ Chairman /Examiner of the Board of Question Paper Setters in B.Sc Microbiology, Annamalai University Affiliated Colleges, Annamalai Nagar - 608 002
- ✓ Subject Expert in Permanent affiliation Inspection commission B.Sc., Microbiology course, Bharathidasan University
- ✓ Coordinator for NAAC 2018 in the Department of Microbiology, Bharathidasan University
- ✓ DRC member, Department of Microbiology, Bharathidasan University, India
- ✓ UGC-BSR Fellowship Selection committee member (Subject Expert) in the Dept. of Botany, Annamalai University, Chidambaram
- ✓ DST Inspire Fellowship-Convenor- upgradation of JRF to SRF committee member Ms.S.Latha and Ms.G. Vinothini, Research Scholars, Dept. of Microbiology, Bharathidasan University
- ✓ UGC-RGNF Fellowship- upgradation of JRF to SRF committee member as Convener for P.Priya Dharsini and K. Nithya, Research Scholars, Dept. of Microbiology, Bharathidasan University
- ✓ University Graduation Day Committee Member, Bharathidasan University, Tiruchirappalli, India
- ✓ Executive member in International Webinar & 3rd National Conference of the Society for Alternatives to Animal Experiments (IWSAAE& NCSAAE-2020), held at National Centre for Alternatives to Animal Experiments, Bharathidasan University, Tiruchirappalli on Dec 28, 2020
- ✓ Faculty Coordinator for the Bharathidasan University Student Induction Programme-2021(BDU-SIP-2021) for M.Sc., Life Sciences held at Bharathidasan University from 29th November 2021 to 1st December 2021.
- ✓ JRF selection committee- external expert member in DBT Project, "Culturable Actinomycetes Associated with Coastal Lichens: A Potential Source of Bioactive Compounds" - Dr. Dr. Shyam Kumar R (Project Coordinator), Department of Biotechnology, Kamaraj College of Engineering and Technology, K. Vellakulam, Viruthunagar, held on 04/11/2017
- ✓ JRF selection committee member in DBT project, Culturable Actinomycetes Associated with Coastal Lichens: A Potential Source of Bioactive Compounds Dept. of Microbiology, Bharathidasan University held on 27.11.2017
- ✓ Refreshment committee member in 34th Annual convocation, Bharathidasan University held on 21.03.2018
- ✓ Project Fellow (DST –PURSE) and URF Selection committee member in the Dept. of Microbiology, Bharathidasan University on 07.12.2020.

✓ Research Associate and Project Fellow Selection committee member in RUSA 2.0 -Biological Sciences grant Dept. of Microbiology, Bharathidasan University on 24.03.2021.

Areas of Research

- ✓ Actinobacteriology, mycology and phycology: Diversity, taxonomy and natural products derived actinobacteria, fungi, mushroom, microalgae for Plant, animal and human health improvement
- ✓ Genome wide approaches of actinobacteria, cyanobacteria: Biosynthetic gene cluster analysis
- ✓ Microbiome analysis using Next generation sequencing methods- Microbiome of actinorhizal plant root nodules, lichen, mushrooms, algal bloom in lake and dairy cow, buffalo reproductive system by metagenomic approach
- ✓ Probiotics developments from actinobacteria, cyanobacteria

Teaching

The subjects taken to the undergraduate and Postgraduate students: Fermentation technology, Food & dairy Microbiology, Anaerobic Microbiology, Medical Mycology and Parasitology, Medical Microbiology, Bioprocess Engineering and Technology.

- 1) Food & Industrial Microbiology(18MICCC10)-II MSc Microbiology- III Semester https://classroom.google.com/u/0/c/MTIyNDAwMjEzMDM4
- 2) Medical Microbiology-18MICCC7-M.Sc., Microbiology, II semester, https://classroom.google.com/c/Mjc0MDg10DkzNDgx
- 3) Bioprocess Engineering and Technology- M.Sc., Life Sciences-IV Year-VII Semester https://classroom.google.com/u/0/c/MTIyOTM5NzIxMDM2
- 4) PHARMACEUTICAL MICROBIOLOGY-M.Sc., LIFE SCIENCE, V Year https://classroom.google.com/u/0/c/MTQwMjU4MjQ1MzMw

Overseas Exposure / Visits/Fellowship/ Post-Doctoral Research

- 1) Awarded with Raman Post Doctoral Fellowship (UGC, Govt. Of India) for an year to carry out his research under the mentorship Prof. Louis S. Tisa, Department of Molecular, Cellular and Biomedical Sciences, University of New Hampshire, New Hampshire, Durham, USA on genome wide approaches of symbiotic actinobacteria and microbiome analysis by metagenomic methods.
- 2) Training on cyanobacterial sampling, identification, extraction, detection and quantification of cyanotoxins from water, plankton, tissues from Prof. James F. Haney, Department of Biological Science, Centre for Fresh water Biology, University of New Hampshire, Durham, NH 03824 during the UGC Raman Post Doctoral Fellowship visit Fellowship:

INSA Visiting Scientist Fellowship awarded by the National Science Academy, New Delhi, Government of India, and worked in the Dr Prakash M HALAMI, Chief Scientist & Professor- AcSIR, CSIR-Central Food Technological Research Institute, MYSORE 570 020, India for the period of two month (30.09. 2022 to 29.11.2022).

Mentoring and career advice

Program of Study		Completed	Ongoing
Research	Ph.D. PDF	13 01	07
	M.Phil.	20	-
Project	PG	84	-

Publications

International		National		Others		
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals		
116	-	14	05	Books-20 Manuals-04 Chapters-72		
Cumulative Impact Factor (as per JCR) : 178.72						
h-inde	X	:	35			
i10 index		:	88			
Total Citations		:	38			

Grants or funding received

Completed Projects

Sl	Title of Project	Funding	Amount	Duration
No		Agency		
•				
	Characterization of Novel	International	8000 USD	2007-2010
1.	Streptomyces sp. as a potential	Foundation for		
	bioactive substance producer from	Science-IFS		
	marine soil of east coastal region of			
	Tamil Nadu			
	Molecular epidemiology of	VIT-	Rs. 25,000	2006-2007
2.	Chikungunya virus in Vellore,	Technology		
	Tamilnadu, India	Business		
		Incubator		
		Project		

3.	Entrepreneurship programme of Oyster Mushroom cultivation technology for SC/ST population in and around Tiruchirappalli District	Dept. of Biotechnology (DBT) Govt. of India	Rs. 9,24,000	2009–2012
4.	Evaluation of Larvicidal Effect of Actinobacterial Metabolites for Biological Control of <i>Culex</i> Mosquito	Indian Council for Medical Research(ICM R) Govt. of India	Rs. 14,50,000	2012-2014
5	Biosynthesis and antimicrobial applications of silver nanoparticles from marine actinobacteria against the multidrug resistant microbial pathogens	University Grants Commission, India	Rs. 12,10,800	2012- 2015
6	CulturableActinomycetesAssociated with Coastal Lichens:A Potential Source of BioactiveCompounds	Dept. of Biotechnology (DBT) Govt. of India	Rs.42,64,700 Total Rs. 88,53,900	2017-2020
7	Actinobacterial symbionts from Root nodules of Actinorhizal plant <i>Casuarina</i> species	RUSA	Rs 6,18,000	2020-2022
8	Biomimetic cyanobacterialphotosystem based nonodevise for the conversion of solar energy to biofuel- Dr.Sumathi .S	DST-W0S-A	Rs 29,66,000	2019-2022
9	Microalgae-based bioremediation of municipal solid waste leachate	BDU- Memorandum of understanding (MoU) with ZIGMA Global Environ Solutions	Rs 8,05,000	2022-2023

Ongoing Projects

Sl No	Title of Project	Funding Agency	Amount	Duration
1.	Establishment of National Repository for Microalgae and Cyanobacteria – II Phase	Dept. of Biotechnology (DBT) Govt. of India	Rs. 14,86,426	2021-2024

Patents

- 1. Patent granted on Nanobased genomic DNA extraction from microorganisms using biogenic nano silver (E2/1390/2016-CHE/201641015447)- P.M.Gopinath and D.Dhanasekaran
- 2. A Process and System for wastewater Treatment and Sludge minimization (WTSM) (Indian Patent) Application No. 202141019297 A; Filed on: 27th April 2021. Published on: 7th May 2021- Sheik Syed Ishack, K., Panneerselvam, A., Ambikapathy, V., Thajuddin, N., Dhanasekaran, N., et al

Distinctive Achievements / Awards

- **1.** Awarded UGC-Raman Post Doctoral Fellowship to visit USA- University of New Hampshire, Durham (2016-2017).
- **2.** INSA Visiting Scientist Fellowship (2022-23) awarded by the National Science Academy, New Delhi, Government of India to CSIR- Central Food Technological Research Institute, Mysore
- 3. Elected as Fellow of Linnean Society (FLS) of London, UK (March 29th 2022)
- **4.** Agathiyar Chemical Biology Award, Society of Chemical and Synthetic Biology (SCSB)-September, 2022
- 5. Qualified the **Tamil Nadu State Eligibility Test (SET)** for Lectureship held on 12th March 2006 in Life Science conducted by Bharathiyar University, Coimbatore
- 3. First class with distinction (with CWAM of 77.40) and secured Second Rank in M.Sc. Microbiology.

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 10

- 1. **Organizing Chairman** in the National symposium on Prospects and Retraspects in Microbial technology jointly organized by Dept. of Microbiology, Biotechnology, Cauvery College for Women and Dept. of Microbiology, Bharathidasan University, Tiruchirappalli on Feb 17 and 18th, 2012
- 2. Organizing Secretary in the National Conference on New Opportunities and Challenges in Microbial Research, Dept. of Microbiology, Bharathidasan University, September 5-6th, 2013 (Sponsored by DBT, ICMR, DST-PURSE and UGC).
- 3. Organizing Secretary in Workshop on Edible Mushroom cultivation for Self employment of rural population held at Dept. of Microbiology, Bharathidasan University, during 22.02.2018 & 23.02.2018 (supported by DST-PURSE programme)
- 4. Co-ordinator in Training Programme on Innovative Technology of Oyster Mushroom Cultivation for Self Employment of Rural Population, held at Dept. of Microbiology, Bharathidasan University (Sponsored by *Tamil Nadu State council for Science and Technology* (*TNSCST*), Dissemination Innovative Technology (DIT) scheme and DST – PURSE Programme), February 18th - 21st, 2019
- 5. Organizing Secretary in the National Seminar on "Microbes in Women Health" in collaboration with Trichy Obstetric and Gynaecological Society (TRIOGS), Tamil Nadu held at Dept. of Microbiology, Bharathidasan University, (Sponsored by International Society for Microbial Ecology (ISME), The Netherlands), during 11 and 12th July 2019

- 6. Co-Organizing Secretaryin theInternational E-Conference on Cyanobacterial and Algal Biotechnology (CAB '2020) 2020 held at the Department of Microbiology, Bharathidasan University,Tiruchirappalli-620 024 during December, 18 & 20th,2020, (*sponcered by DST-PURSE-Phase II*)
- 7. Organizing Secretary in National Workshop on Molecular Techniques In Taxonomy to Biotechnology of Actinobacteria and Cyanobacteria held at Dept. of Microbiology, Bharathidasan University, during March 8 - 10, 2022, (Supported by Rashtriya Uchchatar Shiksha Abhiyan (RUSA), New Delhi 110067)
- **8.** Organizing secretary in an entrepreneurship programme on Oyster mushroom farming for the empowerment of rural populations, March 24^{th-}25th, 2022 (Supported by DST-PURSE programme-II Phase Grant)
- 9. Organizing secretary in National Seminar on Future of Algal Biotechnology (FAB 2022) organized by the Department of Microbiology, Bharathidasan University, Tiruchirappalli in Association with Microbiologist Society, India (MBSI), Tamil Nadu, Indiaon June18th2022.
- 10. Organizing secretary in the International Conference on Microbiome and Synthetic Biology (ICMSB 22) in association with Society of Chemical and Synthetic Biology organized by the Department of Microbiology, Bharathidasan University, Tiruchirappalli during September 22-23rd, 2022
- 11. Organizing secretary in the International Conference on Algae: Food, Feed, Fuels and Fine Chemicals –ICA-F⁴'23, 60th Birth Anniversary Celebration cum Felicitation of Prof. N. Thajuddin Organized by National Repository for Microalgae and Cyanobacteria (NRMC)- Fresh water and Marine Divisions, Bharathidasan University during September 06-08, 2023

Events Participated

Conferences / Seminars / Workshops: 67

Other Training Programs

- ✓ Participated Seminar cum Workshop on A Primer on Intellectual Property held at IPR Cell, Bharathidasan University, Tiruchirappalli on 30.07.2018
- ✓ Participated Refresher course in Life Science (Interdisciplinary) held at UGC Human Resource Development Centre (HRDC), Bharathidasan University, Tiruchirappalli from 19.06.2018 to 09.07.2018
- ✓ Participated orientation workshop in SWAYAM (MOOC Course) jointly organized by Department of Library and Information Science and UGC-Human Resource Development centre, Bharathidasan University on 03.05.2018.
- ✓ Participated QIIME (Quantitative Insight into Microbial Ecology): Bioinformatic pipeline for Microbial ecology held at Hubbard Center for Genome Studies, University of New Hampshire, Durham, February 13-14th, 2017.
- ✓ Participated Ethical and Responsible Conduct of Research Training held at College Teaching & of Education, University of New Hampshire, Durham, NH on February 17th, 2017
- ✓ Participated Training on Cyanobacteria monitoring collaborative (Bloom watching, cyanoscope and cyanobacteria monitoring), organized by Unitated States Environmental Protection Agency, Merry meeting River, Alton, New Hampshire, USA, June 23, 2017

- ✓ Participated UNH Marine Innovation Day, hosted by University of New Hampshire Innovation at UNH Wildcat Stadium Victory club, Durham, New Hampshire, USA, July 27, 2017
- ✓ Participated Refresher course in Life Science (Interdisciplinary) held at UGC Academic Staff College, Bharathidasan University, Tiruchirappalli from 18.07.2014 to 07.08.2014.
- ✓ Participated Refresher course in Life Science (Interdisciplinary) held at UGC Academic Staff College, Bharathiyar University, Coimbatore from 08.03.2012-28.03.2012.
- ✓ Participated training on Mosquito Collection, preservation, identification and larval bioassay technique, held at Vector Control Research Centre (VCRC), Pondicherry on August 27th-31, 2012.
- Participated Orientation programme held at UGC Academic Staff College, Bharathidasan University, Khajamalai campus, Tiruchirappalli-23 from 27th January 2011-23rd Feb 2011
- ✓ Faculty development programme on Bioprocess principles BP1303, organized by Department of Biotechnology, Banariamman Institute of Technology, Sathyamangalam from 29th May – 10th June, 2006 Sponsored by Anna University, Chennai.

Membership in Professional Bodies

- 1. Life Member in National Academy of Biological Sciences (NABS)
- 2. Life member in Mycological Society of India
- 3. Member in American Society of Microbiology (ASM), USA
- 4. Member in North American Mycology Association (NAMA), USA
- 5. Member in International Society for symbiosis
- 6. Life member in Society for Alternatives to Animal Experiments
- 7. Life member in Society for Chemical and Synthetic Biology (SCSB)
- 8. Life member in Microbiologist Society, India (MBSI)

Journal Editorial Board

- 1. Guest Associate Editor-Frontiers in Cellular and Infection Microbiology (Clinical Microbiology Journal, IF 5.3, May, 2022
- 2. Guest Editor of the Special Issue on Microbiome Analysis Using Next Generation Sequencing Methods, Gene, MDPI Publisher, IF 4.5, Jan 2023
- 3. Associate Editor in International Journal of Mosquito Research (ISSN Number: 2348-5906), Innovative Journal Solutions, 169, Pocket C-11, Sector-3, Rohini, New Delhi, India
- 4. Editorial advisory board member in Intech Opens publication, Croatia, Eastern Europe Academic Bodies
- 1. Board of study member in Microbiology, Auxillium College, Vellore, G.R.Dhamodharan College, Coimbatore, RVS College, Coimbatore, ANJA College, Sivakasi, AVVM Sripushpam College, Poondi, Thanjavur, Vivekanandha College of Arts and Sciences for Women (Autonomous), Elayampalayam 637 205, Tiruchengode, Thassim Beevi Abdul Kader College for Women, Kilakarai, Srimad Andavan Arts and Science College, Tiruchirappalli
- 2. External expert member in **Board of Studies in Part IV Self Employment course Microbial Production Technology**, Ayya Nadar Janaki Ammal College, Sivakasi
- 3. Board of study Member in M.Sc., M.Phil Microbiology, Dept. of Microbiology, Bharathidasan University

- 4. Board of study Member in B.Sc., M.Sc., Microbiology, Bharathidasan University
- 5. BOS Member (an alumnus) in M.Sc. Microbiology in Department of Botany and Microbiology, AVVM Sripushpam College, Poondi, Thanjavur
- 6. BOS Member in B.Sc. Microbiology in Department of Microbiology, Vivekanandha College of Arts and Sciences for Women (Autonomous), Elayampalayam 637 205, Tiruchengode
- 7. BOS Member in B.Sc. and M.Sc., Degree course in Microbiology, RVS College, Coimbuture
- 8. University Representative- Board of Studies in Microbiology, Srimad Andavan Arts and Science College, Tiruchirappalli-620 005 with effect from 27.07.2021 for the period of 3 years.
- 9. Chairman /Examiner of the Board of Question Paper Setters in B.Sc Microbiology, Annamalai University Affiliated Colleges, Annamalai Nagar 608 002 (March 2022)
- 10. BOS Member in M.Sc. Dept. of Microbiology Srimad Andavan Arts and Science College, Tiruchirappalli-University Nominee

Resource persons in various capacities

Number of Invited / Special Lectures delivered: 57

Others

- 1. Articles published in Newspapers / Magazines : 20
- 2. No. of Ph.D Thesis evaluated : 23
- 3. No. of Ph.D Public Viva Voce Examination conducted: 18
- 4. Sequences submitted in GenBank: 107

Metagenome- sequence-bioproject: 7

Bacterial Draft genome: 8

Recent Publications

- 1) Thirugnanam, T., Dharumadurai, D. and Babalola, O.O., 2023. Draft Genome Sequence of Streptomyces moderatus DT446, Isolated from Root Nodules of Casuarina cunninghamiana. Microbiology Resource Announcements, pp.e00181-23.
- Oyedoh, O.P., Yang, W., Dhanasekaran, D., Santoyo, G., Glick, B.R. and Babalola, O.O., 2023. Rare rhizo-Actinomycetes: A new source of agroactive metabolites. Biotechnology Advances, p.108205., IF 17.2
- Balakrishnan, K., Krishnaa, D., Balakrishnan, G., Manickam, M., Abdulkader, A.M. and Dharumadurai, D., 2023. Association of Bacterial Communities with Psychedelic Mushroom and Soil as Revealed in 16S rRNA Gene Sequencing. Applied Biochemistry and Biotechnology, pp.1-25. IF: 2.4
- Oyedoh, O.P., Yang, W., Dhanasekaran, D., Santoyo, G., Glick, B.R. and Babalola, O.O., 2023. Rare rhizo-Actinomycetes: A new source of agroactive metabolites. Biotechnology Advances, p.108205.
- 5) Gueddou, A., Ennis, N.J., Dharumadurai, D. and Tisa, L.S., 2022. High-Quality Genome Sequences of Six Actinobacterial Strains Isolated from Granite, Granodiorite, and

Tourmaline Rock Surfaces Sampled from Tamil Nadu, India, and New England, United States. Microbiology Resource Announcements, 11(11), pp.e00946-22.

- M. Narayanasamy, D. Dhanasekaran and N. Thajuddin, 2022.Frankia consortium extracts high-value metals from e-waste. Environmental Technology & Innovation, 28: 102564, doi: https://doi.org/10.1016/j.eti.2022.102564. IF 5.2
- 7) Nathaniel J E, Dhanasekaran D., and Louis S Tisa. 2022. Draft Genome Sequences of 6 Actinobacterial Strains Isolated from Rock Surfaces Obtained from Indian Stone Ruins in Tamil Nadu, India, and Rocks from New England, United States, Microbiology Resource Announcements, 11(3) e00024-22
- 8) Vishnu Raja V, Karthikeyan S, Maharaja S, Rajkumar J, Panneerselvam A, · Thajuddin N and D. Dhanasekaran, 2022. Metagenomic analysis of lichen-associated bacterial community profiling in *Roccella montagnei*, Archives of Microbiology, 204:54, https://doi.org/10.1007/s00203-021-02707-7, Impact factor: 2.5
- 9) Karthick Raja A and D. Dhanasekaran. 2021. Genomemining of biosynthetic gene clusters intended for secondary metabolites conservation in actinobacteria Microbial Pathogenesis.161,105252, https://doi.org/10.1016/j.micpath.2021.105252, Impact factor 3.78
- 10) Narayanasamy M, Dhanasekaran D, Thajuddin N. 2021. Bioremediation of noxious metals from e-waste printed circuit boards by *Frankia*, Microbiological Research, https://doi.org/10.1016/j.micres.2021.126707, Available online 19 January 2021. (IF 5.41)
- Nathaniel JE., Dhanasekaran.D, Bryce JG, and LS. Tisa (2020). Metagenome Across a Geochemical Gradient of Indian Stone Ruins Found at Historic Sites in Tamil Nadu, India. Microbial Ecology (IF 4.55) https://doi.org/10.1007/s00248-020-01598-3 (September 13, 2020).
- 12) Subrata Da., Sangharaj D., Vinothini G., Balaji P., Gowdhami B., Thirumurugan R., Dhanasekaran D., Bhaskar B. 2020. Synthesis, morphological analysis, antibacterial activity of iron oxide nanoparticles and the cytotoxic effect on lung cancer cell line. Heliyon 4, e04953. https://doi.org/10.1016/j. heliyon.2020.e04953.
- 13) Dhananjay D.,, Afnan Al., Vinothini G., Balaji P., , Gowdhami B., , Thirumurugan R., , Dhanasekaran D., and B.Bhaskar. 2020. C–H functionalization of alkanes, bactericidal and antiproliferative studies of a gold(III)-phenanthroline complex. Journal of Molecular Structure, 1222: 128919 (Impact Factor: 2.46). https://doi.org/10.1016/j.molstruc.2020.128919
- 14) Dhanasekaran.D., Lathaa.S., Suganya.P., Panneerselvam.A., Senthilkumar.T., Alharbi, N.S. Arunachalam, C. ., Alharbi, S.A. and N. Thajuddin. 2020. Taxonomic identification and bioactive compounds characterization of *Psilocybe cubensis* DPT1 to probe its antibacterial and mosquito larvicidal competency. Microbial Pathogenesis. Microbial Pathogenesis 143: 104138 (IF 2.58) https://doi.org/10.1016/j.micpath.2020.104138 (Available online 12 March 2020.)
- 15) Narayanasamy M., Dhanasekaran D., Thajuddin, N. and M.A. Akbarsha. 2020. Morphological, Molecular characterization and biofilm inhibition effect of endophytic *Frankia* sp. from root nodules of Actinorhizal plant Casuarina sp. Journal title: South African Journal of Botany. https://doi.org/10.1016/j.sajb.2020.02.039, (IF: 1.5)
- 16) Narayanasamy M., Lavania R., Dhanasekaran D., and N. Thajuddin. 2020. Recovery of gold and other precious metal resources from environmental polluted e-waste printed

circuit board by bioleaching *Frankia*. International Journal of Environmental Research, 14:165-176. https://doi.org/10.1007/s41742-020-00254-5. (**IF 1.46**)

- 17) Narayanasamy M., Lavania R., Dhanasekaran D., and N. Thajuddin. 2020. Plant growth promoting active metabolites from *Frankia* spp. of Actinorhizal *Casuarina* spp. Applied Biochemistry and Biotechnology, 191: 74-91. DOI 10.1007/s12010-020-03243-8 (IF 2.13)
- 18) Vinothini,G., Latha, S., Arulmozhi,M., and D.Dhanasekaran.2019. Statistical optimization, physio-chemical and bio-functional attributes of a novel exopolysaccharide from probiotic Streptomyces griseorubens GD5. International Journal of biological macromolecules 134, 575-587. (**IF 4.784**).
- 19) Jayapriya, M., Dhanasekaran, D., Arulmozhi, M., and E Nandhakumar. 2019. Green synthesis of silver nanoparticles using *Piper longum* catkin extract irradiated by sunlight: antibacterial and catalytic activity. Research on Chemical Intermediates 45 (6), 3617-3631(**IF 2.06**)
- 20) Srinivasan M., Dhanasekaran D., and G. Archunan. 2019. Vaginal microbiome analysis of buffalo (*Bubalus bubalis*) during estrous cycle using high-throughput amplicon sequence of 16S rRNA gene. Symbiosis. DOI: 10.1007/s13199-018-00595-y (IF 1.71)
- 21) Ranjani, A., Gopinath P.M., Ananth S., Narchonai G., Thajuddin N and D. Dhanasekaran (2018). Multidimensional dose-response toxicity exploration of silver nanoparticles from Nocardiopsis flavascens RD30, Applied Nanoscience 8:699–713.doi.org/10.1007/s13204-018-0824-7. ISSN: 2190-5509 (Print) 2190-5517 (Online), (IF 3.2).
- 22) Nithya K, Muthukumar C, Biswas Br, Alharbi N. S, Shine K., Khaled Jamal M and D. Dhanasekaran. 2018. Desert Actinobacteria as a source of bioactive compounds production with a special emphases on Pyridine-2,5-diacetamide a new pyridine alkaloid produced by *Streptomyces* sp.DA3-7. Microbiological Research, 207, 116-133.https://doi.org/10.1016/j.micres.2017.11.012 (IF 3.2)
- 23) Vinothini G, Kavitha R, Latha S, Arulmozhi M and D. Dhanasekaran. 2018. Cell aggregating temperament and biopotency of cultivable indigenous actinobacterial community profile in chicken (*Gallusgallus domesticus*) gut system. Arabian Journal for Science and Engineering, https://doi.org/10.1007/s13369-018-3083-8. ISSN: 2193-567X (print version), ISSN: 2191- 4281 (electronic version), (IF 1.09).
- 24) Gayathri L., Karthikeyan B.S. Rajalakshmic M., Dhanasekaran, D, Li, A.P., and M. A. Akbarsha.2018. Metabolism-dependent cytotoxicity of citrinin and ochratoxin A alone and in combination as assessed adopting integrated discrete multiple organ co-culture (IdMOC). Toxicology in Vitro. 46 166–177. DOI information: 10.1016/j.tiv.2017.09.022 (https://doi.org/10.1016/j.tiv.2017.09.022) (IF 2.8).
- 25) Latha, S., Sivaranjani, G. and D. Dhanasekaran. 2017. Response surface methodology: Anon-conventional statistical tool to maximize the throughput of Streptomyces species biomass and their bioactive metabolites, Critical Reviews in Microbiology, 43(5): 567– 582(ID: 1271308 DOI:10.1080/1040841X.2016.1271308) (IF 8.13)
- 26) Nithya K, Muthukumar C, Shine K, Naiyf S.A, Jamal M. K, Dhanasekaran D, 2017. Purification, characterization, and statistical optimization of a thermostable α- amylase from desert actinobacterium *Streptomyces fragilis* DA7-7. 3 Biotech. 7(5):350. doi:10.1007/s13205-017-0981-5 (IF 1.36).

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