Name: Dr. Geetha N.
 Designation: Associate Professor

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Phone No.: 0821-2419462

3. Qualification: M.Sc., M.Phil., Ph.D, Post Doc

4. Area of Specialization: Nanobiotechnology, Host- Pathogen Interactions,

Bioremediation, Medicinal Plant Biotechnology,

Cell Signalling & Communication



5. Awards/Recognitions

- Best Oral Presentation Award- Dec, 2020. Bhavya G., Ravikant S., Niranjana S.R., Geetha N. Insights into mycomechanism adapted during heavy metal mycroremediation. International Conference on Fungal Biotechnology: Recent trends and future prospective. 11-12th Dec 2020. Bannariamman Institute of Technology, Tamil Nadu.
- **Best Young Researcher Award- Sept, 2020.** Bhavya G., Ravikant S., Dayanand, K., Geetha N. Role of secretomes in heavy metal tolerance in the fungus- *Geotrichum candidum*. Global Biotechnology Conference, 2020, Hyderabad.
- ♣ Best Poster Award-II 2019. Nandini B., Bhavya G., Ravikanth, S., and Geetha N. Trichomalgamation enhances disease protection ability of the pearl millet against downy mildew pathogen. 40th ISMPP Annual conference, Karnatak University, Dharwad. 24th -26th Sept 2019.
- ♣ Best Poster Award 2019. Astha A., and Geetha N. Isolation, characterization and screening of heavy metal-resistant Actinobacteria from industrial effluents. The 3rd Life Sciences Research Symposium. DOS in Genetics and Genomics, Manasagangotri, University of Mysore, Mysuru-570006.
- **Best Poster Award 2017. Swati K., Geetha N.** Protective effect of *Ficus drupacea* Thunb.var. *pubescens* (Rotb) methanolic extracts on liver and kidney against CCl₄-induced toxicity. UGC-sponsored National Conference on "Recent Trends in Plant Sciences. Dept. of Botany, St. Xavier's College (Autonomous), Palayamkottai, Tirunelveli, Tamil nadu.
- **Best Poster Award- New Biology ISCA 2017.** Nandini B., H. S., Shetty, H. S., and **Geetha**, **N**. Novel membrane lipid nanoemulsion of *Trichoderma* spp. for the induction of systemic resistance in pearl millet against downy mildew disease. **Indian Science Congress**, Tirupathi, 7th Jan, 2017.

- ♣ Best Poster Award- 2015. Nandini B., Prakash, H. S., Shetty, H. S., and Geetha, N. Genetic variability of *Trichoderma* spp. in monocot rhizospheric soils collected from different geographic regions of India. NABS-National Seminar on Biological Products for Crop, Animal and Human Health-Problems and Prospects, held at DOS in Biotechnology, University of Mysore at 21-22, Aug, 2015.
- ♣ Best Poster Award- 2015. Nandini B., Shetty H.S., and Geetha N. Modulation of Octadecanoid pathway during induction of systemic resistance by *Trichoderma* elicitors in pearl millet against downy mildew pathogen. Metabolomics-2015. Department of Biochemistry, Indian Institute of Science, Bengaluru, India. 12th Jan 2015.
- ♣ Best Poster Award- 2009. Akshatha J.V., Geetha N., Prakash H.S., and Shetty H.S. 2009. Elicitation of defense responses in tomato against *Fusarium solani* infection. ISMPP 08- 10th November 2009. University of Mysore, Karnataka, India.
- **Best Poster Prize-III- 2006**. Roopa, K.S., **Geetha, N.**, Prakash, H.S., and Shetty, H.S. Oligosaccharides from *Fusarium oxysporum* Cms1606 induces downy mildew disease resistance. Proceedings of the National conference on "National Seminar on New Frontiers in Plant Pathology", held at Kuvempu University. Karnataka, India.
- ♣ Prof. Biligrami Best Paper of the Global Conference- 2005-06 at Global Conference-II on Mycology and Plant Pathology, held at Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan, India.
- Best Poster Award-2005 in the section-"Molecular host-pathogen interaction for the paper entitled "Chitinase activities and isoforms in pearl millet and its relevance to downy mildew resistance" at the Global Conference-II on Mycology and Plant Pathology, Udaipur, Rajasthan India.
- **Best Research Paper Award- 2005**, "Isolation and characterization of a protein elicitor *S. graminicola* and elicitor-mediated induction of systemic resistance in cultured cells of *Pennisetum glaucum*" at "Centenary Symposium on Plant Pathology", CPRI, Shimla, Himachal Pradesh, India.
- **Best Poster Award-** 2004 for the paper entitled "Induction of HRGPs in pearl millet against *S. graminicola* by treatment with biotic and abiotic inducers" at National Conference on "Emerging Trends in Mycology, Plant Pathology and Microbial Biotechnology", Osmania University, Hyderabad, India.
- ♣ <u>Sri. P.P. Singhal Memorial Pesticide India Award-2004</u> for the paper entitled " Chitin Oligomers and polyunsaturated fatty acids act synergistically in inducing resistance to pearl millet against downy mildew disease" at National Seminar on Advances in Mycology and Host-pathogen interaction, University of Goa, Goa, India.
- ♣ Smt. Guman Verma Memorial Best Woman Scientist Award-2002 for the paper entitled "Determination of Cellular Fatty Acid Components in Five Pathotypes of Sclerospora graminicola, the Downy Mildew Pathogen of Pearl Millet" at Asian Congress of Mycology and Plant Pathology, University of Mysore, Karnataka, India.
- ➡ <u>ISCA-Young Scientist Award- 2002</u> in the section- Biochemistry, Biophysics and Molecular Biology (New Biology) for the paper entitled "Biochemical events triggered in pearl millet upon elicitation with free fatty acids" at Indian Science Congress, Lucknow, India.
- Best Oral Presentation Award- 1999 for the paper entitled "Development and detection of downy mildew resistant somaclones in pearl millet" in National Symposium of Perspectives in Biotechnology, Kakatiya University, Warangal, Andhra Pradesh, India.

1. Number of Projects:

Sl. No.	Title of the project	Funding Agency	Amount In	Year (From-To)
			Lakhs	
1.	Cell Culture System for the Production of	Minor Research project		2009-2011
	Chemotherapeutics from <i>Tinospora</i>	Grant by the University of	1	
	cordifolia	Mysore		
2	In vitro conservation, Molecular Phylogeny, Metabolic Profiling for Bioactive Potential of medicinal plants	MHRD-UGC	9.0	2010- 2014
3	Rhizoremediation of Heavy Metals and Health Hazard compounds from the Agricultural Lands of Karnataka	UGC	14.20	2012-2015
4	Elicitation of induced systemic resistance in pearl millet by the activation of oxylipin signaling intermediates using biogenic nanoparticles as elicitors against downy mildew disease"	SERB-DST-Fast Track for Young scientists	19.40	2013-2016
5	Mycogenic synthesis of nanocomposites for Chromium bioremediation	Minor Research project Grant by the University of Mysore	75,000	2017-2018

2. Number of Ph.D candidates successfully completed: 05

3. Number of Ph.D candidates currently working: 03

4. Number of M.Phil candidates successfully completed: 10

5. Number of M.Phil candidates currently working: 00

6. Book chapters

- 1. Nandini B., <u>Geetha N</u>*. 2021. *Trichoderma*: From gene to field. In: Biocontrol Agents and Secondary Metabolites. *Elsevier Publications*.
- 2. Nandini B., <u>Geetha N</u>*. 2020. Smart delivery mechanisms of nanofertilizers and nanocides in crop biotechnology. In: Advances in Nano-Fertilizers and Nano-Pesticides in Agriculture. https://doi.org/10.1016/B978-0-12-820092-6.00015-X. *Elsevier Publications*.
- 3. Ashok B., and <u>Geetha N*.</u> **2018. Recent Trends in Biosorption of heavy metals by Actinobacteria**. In: Actinobacteria: Diversity and Biotechnological applications. New and Future Developments in Microbial Biotechnology and Bioengineering. 18: 257-276.
- 4. Madhu, D., Subasri and <u>Geetha N.</u> 2013. Yeasts: *Candida* and *Cryptococcusis*. In Bacterial and Mycotic Infections in Immunocompromised Hosts: Clinical and Microbiological Aspects. *Omics E-book group*.

1. Publications (Last 5 years- 2017 onwards)

- Haider, M.S., De Britto, S., Geetha N., Bhavya G., Ravikant S., Ito, S-C., and Sudisha J. June 2021. Genome-Wide Identification, Diversification, and Expression Analysis of Lectin Receptor-Like Kinase (LecRLK) Gene Family in Cucumber under Biotic Stress. *Int. J. Mol. Sci.* 2021, 22(12), 6585. IF: 5.923
- 2. Yu, J., Wang, D., **Geetha N.**, Khawar K.M. Jogaiah, S., Mujtaba, M. **June 2021.** Current trends and challenges in the synthesis and applications of chitosan-based nanocomposites for plants: A review. **Carbohydrate Polymers**. <u>261</u>: 1 June 2021, 117904. **IF: 7.182**
- **3.** Nandini, B., Hariprasad P., Saini, R.K., Prakash, H.S., Geetha, N. **May 2021.** Trichovariability in rhizosphere soil samples and their biocontrol potential against downy mildew pathogen in pearl millet. **Scientific Reports**. Nature publications. 11:9517. https://doi.org/10.1038/s41598-021-89061-2. **IF: 3.998.**
- **4.** Nandini B., **Geetha N**., Prakash H.S., Hariprasad, P. **March 2021.** Natural uptake of anti-oomycetes *Trichoderma* produced secondary metabolites from pearl millet seedlings A new mechanism of biological control of downy mildew disease. **Biological Control.** 156: 104550. **Elsevier publications. IF: 2.54.**
- 5. Bhavya G., Seema A.B., Raja M., **Geetha N**., Shetty H.S., Udekeri S.S., Jogaiah S. Feb 2021. Remediation of emerging environmental pollutants: a review based on advances in the uses of eco-friendly biofabricated nanomaterials. **Chemosphere. Elsevier publications. IF:** 7.086.
- 6. <u>Geetha N.</u>, Bhavya G., Abhijith, P., Shekhar R., Dayanand B., Sudisha J. **Nov 2020.** Insights into Nanomycoremediation: Secretomics and mycogenic biopolymer nanocomposites for heavy metal detoxification. **J. Hazardous Materials.** Elsevier publications. Available online 11 November 2020, 124541. **IF: 10.588.**
- 7. Ahmad, H., Venugopal, K., Rajagopal, K., De Britto, S., Nandini, B., Pushpalatha, H.G., Konappa, N., Udayashankar, A.C., <u>Geetha, N.</u>, and Jogaiah, S. <u>March 2020.</u> Green synthesis and characterization of Zinc oxide Nanoparticles using *Eucalyptus globules* and their Fungicidal ability against Pathogenic fungi of Apple orchards. <u>Biomolecules.</u> 2020, 10, 425; doi:10.3390/biom10030425. MDPI publications <u>Impact Factor</u>: 4.694.
- 8. Nayak S., Bhat M.P., Udayashankar A.C., Lakshmeesha T.R., <u>Geetha N.</u>, Jogaiah S. Feb 2020. Biosynthesis and characterization of *Dillenia indica*-mediated silver nanoparticles and their biological activity. **Appl Organometal Chem.** 2020; e5567. https://doi.org/10.1002/aoc.5567. Wiley publishers. **Impact factor: 3.140.**
- 9. Nandini, B., Hariprasad P., Prakash, H.S., Adhikari, S., Jogaiah, S., <u>Geetha N</u>*. Jan 2020. Elicitation of Novel Trichogenic-Lipid Nanoemulsion Signaling Resistance Against Pearl Millet Downy Mildew Disease. *Biomolecules* 2020, 10(1), 25; https://doi.org/10.3390/biom10010025. (This article belongs to the Special Issue <u>Biology</u>, <u>Biotechnology</u> and <u>Bioprospecting</u> of <u>Microbial Biomolecules</u>). MDPI publications. Impact Factor: 4.694
- 10. Shekhar, R., Bhavya G., Prakash H.S., <u>Geetha N*</u>. **2019**. DNA barcoding-based authentication of *Musa acuminata* var. Nanjungud rasabale. *Journal of Emerging Technologies and Innovative Research*. 6 (3): 62-65.
- 11. Abhijith P., Bhavya G., Ashika P., <u>Geetha N*</u>. **September 2019.** Characterization of silver nanoparticles from the endangered medicinal plant *Salacia chinensis* and analysis of its bioactive potentials. *Life Science Edge*. 5 (1): 43-50.

- **12.** Kumar K.K.N., Mohana, N.C., Nuthan, B.R., Ramesha K.P., Rakshith, D., <u>Geetha N.</u>, Satish S. **2019.** Phyto-mediated synthesis of zinc oxide nanoparticles using aqueous plant extract of *Ocimum americanum* and evaluation of its bioactivity. **SN Applied Sciences**, Springers Nature.1: 651-8. **Impact Factor: 2.2**
- 13. Bhavya G., Abhijeet P., Shekhar, R., <u>Geetha N*</u>. **2019**. A study on anti-oxidant activity and membrane integrity of *Candida* sp. Strain Y-01 upon Pb stress. *Journal of Emerging Technologies and Innovative Research*. 6 (3): 8-12.
- 14. Narasanagi, S., Kuppur, M.S., Shreevathsa, M., Channarayapatna, S.K., Kukkundur, K.R., <u>Geetha N</u>. 2018. *In vitro* study on anti-oxidant and anti-inflammatory properties of Varnya Mahakashaya Dashemani (aqueous extract): A polyherbal formulation. **Ayu 2018**; 39:81-6. www.ayujournal.org.
- 15. Bankar, A., Sawant O., Mahale, S., Vaneetha, R., <u>Geetha N</u>. 2018. Fungal Citric acid production using waste materials: A mini-review. Journal of Microbiology, Biotechnology and Food sciences. Faculty of Biotechnology and Food Sciences. (Slovak University of Agriculture in Nitra. 8(2): 821-828. DOI: 10.15414/jmbfs.2018.8.2.821-828
- 16. Sheyda A., Biazar E., Singh, V., Keshel, S.H., <u>Geetha N</u>*. July 2018. The effect of the carbodiimide cross-linker on the structural and biocompatibility properties of collagen-chondroitin sulfate electrospun mat. <u>International Journal of Nanomedicine</u>. 13. 4405–4416. **IF:** 5.115.
- **17.** Bagnazar M., Mahesh M.G., Saidi M., Kini K R., Prakash H S. <u>Geetha N*.</u> 2018. Evaluation of genetic stability using FRAPD markers as novel method along with antioxidant and anti-diabetic properties of micropropagated *Salacia chinensis* L. **Acta Physiologiae Plantarum** 40:1-8. Springer publishers. **Impact factor: 1.760.**
- 18. Majid B., Mehdi S., Meysam M., Orang K., <u>Geetha N</u>. June 2018. Pre-harvest CaCl₂ and GA₃ treatments improve post-harvest quality of green bell peppers (*Capsicum annum* L.,) during storage period. **Scientia Horticulturae.** 240: 258–267. Elsevier Publications. IF: 2.769.
- **19.** Abhijith P, Ashika P, Bhavya G, <u>Geetha N*</u>. Feb 2018. A Study of Interaction between Low Frequency Sound Waves and Germination of Cowpea Seeds (*Vigna unguiculata*). **Biotechnol Ind J.** 14(1):159. **IF: 0.89.**
- 20. Kujur S., Sunil K.C.R, Sampath K.K.K, Bankar A.V. and <u>Geetha N</u>*. **2018.** Hepatoprotective activity of methanolic bark extracts of *Ficus* species. *International Journal of Research and Reviews in Pharmacy and Applied sciences*. 8 (01): 001-009.
- 21. Akhshabi, S., Biazar, E., Singh, V., Keshel, S.H. <u>Geetha N</u>*. Jan 2018. The effect of gluteraldehyde cross-linker on structural and biocompatibility properties of collagen-chondroitin sulfate electrospun mat. **Materials Technology**. 33 (4): 253-261. **IF: 1.738.**
- 22. Majid B.N, Mehdi S., Madhusudhan M. C., Prakash, H.S., <u>Geetha N*.</u> 2017. Phytoconstituents, Pharmacological Properties and Biotechnological Approaches for Conservation of the Anti-diabetic Functional Food Medicinal Plant *Salacia*: A Review Note. *Appl Food Biotechnol*, Vol. 4, No. 1. 1-10.
- 23. Bharathi TR, Sekhar S, <u>Geetha N</u>, Niranjana SR, Prakash HS. **2017**. Identification and characterization of *Memecylon* species using isozyme profiling. **Phcog Res**; 9:408-13. SCI.
- 24. Majid, B., Mehdi, S., <u>Geetha N.</u> 2017. Establishment of an improved, efficient and ecofriendly micropropagation system in *Salacia chinensis* L., an endangered Anti-diabetic medicinal plant. **Agriculture and Forestry.** 63(3): 167-176.

- Sunilkumar C.R., Rachel, L., Bhavya, G., Swati1, K., Sridhar, R.S., Samanth Kumar, J., Kini, K.R., Prakash, H.S., <u>Geetha N*</u>. 2017. Practiced Gram negative bacteria from dyeing industry effluents snub metal toxicity to survive. *J. of Appl. Biol. & Biotech*. 5 (04), 037-042.
- **26.** Nandini, B., Hariprasad, P., Shankara H.N., Prakash H.S., <u>Geetha N</u>*. **2017.** Total crude protein extract of *Trichoderma* spp. induces systemic resistance in pearl millet against the downy mildew pathogen. <u>3 Biotech.</u> 2017 7(3):183. doi: 10.1007/s13205-017-0816-4. **Springer Publishers**, SCI. **IF: 2.45.**
- **27.** Nandini B., Hariprasad P., Prakash, H. S., Shetty, H. S. <u>Geetha, N</u>*. **2017.** *Trichogenic*-selenium nanoparticles enhance disease suppressive ability of *Trichoderma* against downy mildew disease caused by *Sclerospora graminicola* in pearl millet. **Scientific Reports**, **Nature Publications**. 7: 2612. SCI. **IF: 3.998.**
- **28.** Swati K., Sunil K. C.R., Barapatre, A., <u>Geetha N*.</u> **2017.** Ameliorative effect of *Ficus dalhousiae* Miq. (Moraceae) methanolic leaf extract on carbon tetrachloride induced hepatic and renal toxicity. *Intl. J. of Phytomedicine*. 9(2):332-341. **SCI. Impact factor: 0.65.**
- **29.** Chandrashekar M.A., Supreeth M., Pai, K.S., Ramesh S.K.C., <u>Geetha N</u>., Puttaraju H.R., Raju N.S. **Jan 2017.** Biodegradation of organophosphorous pesticide, Chlorpyrifos by soil bacterium *Bacillus megaterium* RC 88. *Asian Jr. of Microbiol. Biotech. and Env. Sc.* 19(1):127-133. SCI. **Impact Factor: 0.11**
- 30. Roopa G., Madhusudhan M.C., Majid B.N., Sampath K.K.K., Prakash H.S., <u>Geetha N*.</u> **2017**. Diversity of fungal endophytes from *Salacia* species in Western Ghats of Karnataka, India. *Res. J. Pharm. Biol. and Chem. Sc.* 8(2): 549-555. SCI.
- 31. Nandini, B., Hariprasad, P., Prakash, H.S., <u>Geetha N*.</u> 2017. *Trichoderma* oligosaccharides priming mediates resistance responses in pearl millet against downy mildew pathogen. *J. App. Biol. Biotech.* 5(02): 097-103.

^{*} As Corresponding Author

2. Papers in Conference /Seminar/ Proceedings (Last 5 years- 2017 onwards)

- 1. Plant Bioprospecting recent developments. 13.07.2021. In: AICTE Training and Learning (ATAL) Academy Sponsored Faculty development Programme (FDP) On "Drug Engineering through Bioprospecting" July 12 16, 2021. Organized by Department of Biotechnology, Dr. N.G.P. College of Education & Dr. N.G.P. ARTS & Science College. Coimbatore-641048. Tamil Nadu, India.
- 2. Mycogenic Nanoformulations as Smart Delivery Options to Manage Crop Diseases. In: International Online Conference on Nano Materials (ICN 2021). 10.04.2021. Organized by Mahatma Gandhi University, Kottayam, Kerala, India & Wroclaw University of Technology, Wroclaw, Poland & Gdansk University of Technology, Poland, & Wuhan University, China. 9-11 April 2021. At Mahatma Gandhi University, Kottayam, Kerala, India.
- 3. Biopriming with Mycogenic Nano formulations for improving plant health. 26/03/2021. In One Week National Training Programme on "Recent Advances in Development of Bioformulations for use in Sustainable Agro-ecosystems in India". Webinar- based training programme organized by Division of Basic Sciences & Humanities, Faculty of Agriculture, SKUAST Kashmir and sponsored by National Higher Agriculture Education Project of ICAR. (March 25th-31th, 2021). SKUAST, Kashmir-March 2021.
- 4. **Geetha N. Nov, 2020 "Post Covid-19 Preventive Measures".** One Day National Webinar on "Current Status and Remedies on Covid 19- Biotechnological Perspectives". 7th Nov 2020. Yashwantrao Chavan Institute of Science, Satara, Maharashtra.
- 5. Geetha N. Sept, 2020. "Foreseen Applications of Bio-inspired Therapeutic Nanomaterials in Agriculture and Food". Session: Nanobiotechnology. Global Biotech-2020, 2nd Sept, 2020, Hyderabad.
- 6. **Geetha N. July, 2020 "Biosynthesis of Nanoparticles-Various Methods-Characterizations"**. Five Days Faculty Development Program on "Nanomaterials characterization techniques and results analysis methodology: Ideas, Innovations & Initiatives" organized by our College in collaboration with UGC-HRDC, SPPU, Pune, 29th July 2020.
- 7. Geetha N. Feb, 2020. "Women in Science". National Science Day Celebrations-28th Feb 2020, SDM College, Mysuru.
- 8. Geetha N. Feb, 2020. "Mindfulness: Need of the Hour for Psychosocial and Emotional Well-being of Women". National Symposium on Emotional Wellness: The Need of the Hour. Feb 22nd, 2020. Organized by Department of Zoology, Sri Sarada College for Women (Autonomous), Salem 636 016, Tamil Nadu.
- 9. Geetha N. Dec, 2019. "Biopriming: Novel technique for the management of seed-borne pathogens in horticultural crops" at the ICAR sponsored 21 days CAFT training programme on "Advances and developments of Seed Science and Technology in the era of genomics for management and utilization of horticultural plant genetic resources" from 25th Nov-15th Dec, 2019. Lecture delivered on 14th Dec 2019. Held at College of Horticulture, University of Horticultural Sciences, Yelwala, Mysuru.
- 10. Geetha N. September, 2019. "Nanobiotechnology-enabled Smart Delivery Options: A New Window For Sustainable Agriculture" at the Two-Day International Conference on "Biotechnological Advances in Medicinal Plants Research" held on September 19-20, 2019, Biorujivith-2019, organized by Department of Life Sciences, School of Sciences, GCU, Bengaluru.

- **11.** Geetha N. July, **2019**. "Nanobiotechnology- Prospects and Applications". DBT Star College Scheme lecture. **27**th July **2019** at Dr. N.G.P. College of Education & Dr. N.G.P. ARTS & Science College. Dr. N.G.P. Nagar, Kalapatti Road, Coimbatore-641048. Tamil Nadu, India.
- **12. Geetha N. March, 2019.** "Career opportunities after higher education" at the "Brain Storming workshop on successfully facing competitive examinations" at PG centre, Hemagangotri, Hassan on **25**th **March 2019.**
- **13. Geetha N. March, 2019.** "Career opportunities after higher education" at the "Brain Storming workshop on successfully facing competitive examinations" at Dr. B.R. Ambedkar PG centre, Chamarajanagar on **18**th **March 2019.**
- 14. Geetha N. 2019. "Biogenic Nanoformulations for Plant Health Management". ICAR-sponsored Experimental learning programme on "Bioinputs: Biofertilizers and Biopesticides" organized by College of Horticultural Sciences, Mysuru, 26-28th Feb, 2019.
- 15. **Geetha N. 2019. Applications of Nanotechnology in Plant Sciences.** International Conference on "Contemporary Panorama of Biosciences (ICCPOB '19)", Organized by Department of Botany in association with JETIR, Sri Sarada College for Women, Salem, Tamil nadu, 6 7th Feb, 2019.
- 16. **Geetha N. 2018. Interventions of Nanoresonance for Plant Health Management and Sustainable Agriculture.** National Symposium on "Alternative approaches in plant health management for enhancing farmer's income", Organized by Indian Phytopathological society and Dr. YSP University of Horticulture and Forestry, Nauni, Solan, Himachal Pradesh, 2nd 3rd Nov, 2018.
- 17. Geetha N. 2018. Novel membrane lipid nanoemulsions of *Trichoderma* species for inducing downy mildew disease resistance in pearl millet. ICAR-Workshop on Biopesticides organized by College of Horticultural Sciences, Mysore on 6th Sept., 2018.
- 18. Geetha N. 2017. Bioprospecting of Novel Anti-diabetic and Anti-cancer metabolites from Medicinal plant Endophytes using Biotechnological tools" at the Department of Biotechnology proposed, Science and Engineering Research Board sponsored 10th National conference on "Bioprospecting- Indian Perspectives, Challenges & Oppurtunities" on 28th December 2017 at Dr. N.G.P. College of Education, Dr. N.G.P. Nagar, Kalapatti Road, Coimbatore-641048. Tamil Nadu, India.
- 19. **Geetha N. 2017. Nanotechnology for Plant Health Management.** ICAR-Workshop on Biopesticides organized by College of Horticultural Sciences, Mysuru, 9-21st October, 2017.
- **20. Geetha N. 2017**. *Trichogenic*-selenium Nanoparticles for Disease management of Crop Plants. ICAR-Workshop on Biopesticides organized by College of Horticultural Sciences, Mysuru, 9-21st October, 2017.
- 21. Geetha N. 2017. Novel *Trichogenic*-selenium nanoemulsions induce systemic resistance in pearl millet against downy mildew pathogen upregulating Jasmonate signaling intermediates. Indian Society of Mycology and Plant Pathology, organized National Symposium on "Innovative Approaches for Detection, Diagnosis and Management of Plant Diseases" at University of Horticultural Sciences, Bagalkot, Karnataka, India, 10 Oct., 2017.
- 22. Geetha N. 2017. Novel membrane Lipid Nanoemulsion of *Trichoderma* spp. for the Induction of systemic resistance in Pearl millet against Downy Mildew disease. UGC-sponsored National Seminar on "Recent Advances in Plant Biology" held at Dept. of Plant Biotechnology, The Standard Fireworks Rajaratnam College for Women, Sivakasi, Tamilnadu, India, 13-14th July 2017.
- 23. Geetha N. 2017. Bioprospecting of Medicinal plants and their Endophytes to unlock Biopharmaceutical Potentials. UGC-sponsored National Conference on "Recent Trends in

- Plant Sciences" held at Dept. of Botany, St. Xavier's College (Autonomous), Palayamkottai, Tamilnadu, India, 1st March 2017.
- **24.** Geetha N. 2017. Phytoremediation- Plants and Microorganisms at work to sequester Heavy metals in polluted effluents. UGC-sponsored National Conference on "Recent Trends in Plant Sciences" held at Dept. of Botany, St. Xavier's College (Autonomous), Palayamkottai, Tamilnadu, India, 2nd March 2017.

15. Conference/Seminar organized: (Last 5 years- 2017 onwards)

61. No.	Status as organizer	Title of the conference/seminar	Date
1	Organizing Committee Member	Scientific Advancement for Sustainable Development, MMKSDM- and GASYM, Mysuru	22-02-18 23-02-18
2	Organizing Committee Member	Life Science for Future Sustainability, Govt. College for Women's , Mandya and GASYM, Mysuru	30 th Jan, 2019
3	Organizing Committee Member	Algal conference, Tirunelveli, Tamil Nadu	Dec, 2019
4	Organizing Committee Member	National Seminar on "Recent Trends in Biotechnology"	July, 2021

16. Conference/Seminar chaired: (Last 5 years- 2017 onwards)

Sl. No.	Title of the seminar	Organized by	Date
1.	Scientific Advancement for Sustainable Development	MMKSDM- and GASYM, Mysuru, India	22-02-18 to 23-02-18
2.	International Conference on Contemporary Panorama of Biosciences (ICCPOB '19)	Department of Botany in association with JETIR, Sri Sarada College for Women, Salem, Tamil nadu, India	06-02-19 to 07-02-19
3.	Contemporary Panorama of Biosciences (ICCPOB '19)	Two-day International Conference Department of Botany in association with JETIR, Sri Sarada College for Women, Salem, Tamil nadu.	6 th Feb, 2019
4.	National Women Science Congress	SBBR Mahajana's College, Mysuru	8 th Nov, 2019
5.	National Symposium on Emotional Wellness: The Need of the Hour.	Sri Sarada College for Women (Autonomous), Salem - 636 016, Tamil Nadu	Feb 22 nd , 2020
6.	International Online Conference on Nano Materials (ICN 2021)	Mahatma Gandhi University, Kottayam, Kerala, India & Wroclaw University of Technology, Wroclaw, Poland & Gdansk University of Technology, Poland, & Wuhan University, China.	April 10 th 2021.

17. Conference /Seminar / workshops participated: (Last 5 years- 2017 onwards)

Sl. No.	Title	Organized by	Year/ Month	Participat ed and presented the paper
1	Plant Bioprospecting - recent developments.	AICTE Training and Learning (ATAL) Academy Sponsored Faculty development Programme (FDP) On "Drug Engineering through Bioprospecting" Organized by Department of Biotechnology, Dr. N.G.P. College of Education Coimbatore, Tamil Nadu, India.	July 12 - 16, 2021.	Resource person
2	Mycogenic Nanoformulations as Smart Delivery Options to Manage Crop Diseases	International Online Conference on Nano Materials (ICN 2021). Organized by Mahatma Gandhi University, Kottayam, Kerala, India & Wroclaw University of Technology, Wroclaw, Poland & Gdansk University of Technology, Poland, & Wuhan University, China. Held at Mahatma Gandhi University, Kottayam, Kerala, India.	9-11 th April 2021	Invited Lecture
3	Biopriming with Mycogenic Nano - formulations for improving plant health	One Week National Training Programme on "Recent Advances in Development of Bioformulations for use in Sustainable Agro- ecosystems in India". Organized by Division of Basic Sciences & Humanities, Faculty of Agriculture, SKUAST Kashmir and sponsored by National Higher Agriculture Education Project of ICAR. SKUAST, Kashmir-	March 25th-31th, 2021.	Resource person
4	Current Status and Remedies on Covid- 19: Biotechnological Perspective".	One day National seminar on 'Post Covid-19 Preventive Measures' Yashavantrao Chavan Institute of Science, Satara, Maharashtra	26 th November, 2020	Invited Lecture
5	Biosynthesis of Nanoparticles- Various Methods- Characterizations	Five Days Faculty Development Program, "Nanomaterials characterization techniques and results analysis methodology: Ideas, Innovations & Initiatives". Organized by UGC-HRDC, SPPU, Pune.	27 th July, 2020 to 31 st July, 2020	Resource person

		Maharashtra		
6	Foreseen Applications of Bio- inspired Therapeutic Nanomaterials in Agriculture and Food	Global Biotech-2020, The Reignite, Hyderabad.	Aug 30-31st 2020	Invited Lecture
7	Women in Science	National Science Day Celebrations, SDM College, Mysuru.	28 th Feb 2020	Invited Lecture
8	Mindfulness: Need of the Hour for Psychosocial and Emotional Well- being of Women	National Symposium on Emotional Wellness: The Need of the Hour Organized by Department of Zoology, Sri Sarada College for Women (Autonomous), Salem - 636 016, Tamil Nadu.	Feb 22 nd , 2020.	Invited Lecture
9	Biopriming: Novel technique for the management of seed- borne pathogens in horticultural crops	ICAR sponsored - 21 days CAFT training programme on "Advances and developments of Seed Science and Technology in the era of genomics for management and utilization of horticultural plant genetic resources" College of Horticulture, University of Horticultural Sciences, Yelwala, Mysuru.	25 th Nov- 15 th Dec, 2019.	Resource person
10	Nanobiotechnology- enabled Smart Delivery Options: A New Window For Sustainable Agriculture"	Two-Day International Conference on "Biotechnological Advances in Medicinal Plants Research" Biorujivith-2019, Department of Life Sciences, School of Sciences, GCU, Bengaluru.	September 19 th , 2019	Invited Lecture
11.	Career opportunities after Higher Education	Brain Storming workshop on- Successfully facing competitive examinations, PG centre, Hemagangotri, Hassan	25 th March, 2019	Resource person
12.	Biogenic nanoformulations for Plant Health management	Bioinputs: Biofertilizers and Biopesticides, organized by College of Horticultural Sciences, Mysuru	26 th Feb, 2019	Resource person
13.	International Conference on Contemporary Panorama of Biosciences (ICCPOB '19)	Department of Botany in association with JETIR, Sri Sarada College for Women, Salem, Tamil nadu, India	06 th Feb, 2019	Invited Lecture

14.	Interventions of Nanoresonance for plant health management and sustainable agriculture	National Symposium on "Alternative approaches in plant health management for enhancing farmer's income", Indian Phytopathological society and Dr. YSP University of Horticulture and Forestry, Nauni, Solan, Himachal Pradesh, India	2 nd Nov, 2018	Invited Lecture
15	Novel membrane lipid nanoemulsions of Trichoderma species for inducing downy mildew disease resistance in pearl millet	ICAR-Workshop on Biopesticides organized by College of Horticultural Sciences, Mysuru	6 th September, 2018	Resource person
16.	Bioprospecting of Novel Anti-diabetic and Anti-cancer metabolites from Medicinal plant Endophytes using Biotechnological tools	National conference on Bioprospecting- Indian Perspectives, Challenges & Oppurtunities, Dr. N.G.P. College, Dr. N.G.P. Nagar, Kalapatti Road, Coimbatore-641048. Tamil Nadu, India.	28 th Decem ber, 2017	Invited Lecture
17.	"Novel membrane lipid nanoemulsions of Trichoderma species for inducing downy mildew disease resistance in pearl millet" and "Trichogenic-selenium nanoparticles for disease management of crop plants"	ICAR-Workshop on Biopesticides organized by College of Horticultural Sciences, Mysuru, India	9-21 st October, 2017	Resource person
18.	Novel Trichogenic- selenium nanoemulsions induce systemic resistance in pearl millet against downy mildew pathogen upregulating Jasmonate signaling intermediates	Indian Society of Mycology and Plant Pathology, MPUAT, Udaipur organized National Symposium on "Innovative Approaches for Detection, Diagnosis and Management of Plant Diseases" at University of Horticultural Sciences, Bagalkot, India	9-10 th October, 2017	Invited Lecture

19.	Novel membrane Lipid Nanoemulsion of Trichoderma spp. for the Induction of systemic resistance in Pearl millet against downy mildew disease	UGC-sponsored National Seminar on "Recent Advances in Plant Biology" held at Dept. of Plant Biotechnology, The Standard Fireworks Rajaratnam College for Women, Sivakasi, India	13-14 th July, 2017	Keynote Address
20.	Bioprospecting of medicinal plants and their endophytes to unlock biopharmaceutical potentials	UGC-sponsored National Conference on "Recent Trends in Plant Sciences" held at Dept. of Botany, St. Xavier's College (Autonomous), Palayamkottai, Tamilnadu	1 st March, 2017	Keynote Address
21.	Phytoremediation- Plants and microorganisms a work to sequester heavy metals in polluted effluents	UGC-sponsored National Conference on "Recent Trends in Plant Sciences" held at Dept. of Botany, St. Xavier's College (Autonomous), Palayamkottai, Tamilnadu	2 nd March, 2017	Invited Lecture

18. Chairman/Member of Authority/Committee etc: (Last 5 years- 2017 onwards)

Sl.	Chairman/	Committee/	Year
No.	Member/Secretary	Authority	(From-To)
1	Vice-President	Global Association of Scientific Young Minds - GASYM	2015 to till date

19. Membership to professional Organization/Associations:

Sl. No.	Name of the Association/Organizations	Life member/ Ordinary member
1	Nuclear Magnetic Resonance Society (NMRS)	Life Member
2	Indian Science Congress Association (ISCA)	Life Member
3	Society of Mycology and Plant Pathology (ISMPP)	Life Member
4	Association of Women Scientists in India	Life Member
5	Global Association of Scientific Young Minds - GASYM	Life Member
6	Association of Microbiologists of India (AMI)	Ordinary Member
7	Society of Biotechnologists – Member Secretary	Ordinary Member
8	Indian Botanical Society (IBS)	Ordinary Member
9	Society of Biological Chemists (SBC)	Ordinary Member

20. Any other Information:

DNA Sequence Deposit

- 1. Pachbale Banana AAA group isolate ITS sequence, partial sequence; Accession No.: MT317115; April 2020
- 2. Nanjangud Rasabale Banana AAB group isolate ITS sequence, partial sequence; Accession No.: MT317116; April, 2020
- 3. Elakki Banana AB group isolate ITS sequence, partial sequence; Accession No.:MT317117; April, 2020
- 4. Nendran Banana AAB group isolate ITS sequence, partial sequence; Accession No.: MT317118; April, 2020
- 5. Kaadubale Banana AAB group isolate ITS sequence, partial sequence; Accession No.:MT317119; April, 2020
- 6. Boodhbale Banana ABB group isolate ITS sequence, partial sequence; Accession No.:MT317120; April, 2020
- 7. Cooking Banana ABB group isolate ITS sequence, partial sequence; Accession No.:MT317121; April, 2020
- 8. Chandra bale Banana AAA group isolate ITS sequence, partial sequence; Accession No.:MT317122; April, 2020
- 9. Coorg Banana AB group isolate ITS sequence, partial sequence; Accession No.: MT317123; April, 2020
- 10. Mysore Chigurele isolate ITS sequence, partial sequence; Accession No.: MT318588; April, 2020
- 11. Kolkata Paan isolate ITS sequence, partial sequence; Accession No.: MT318589; April, 2020
- 12. Banarsi Paan isolate ITS sequence, partial sequence; Accession No.: MT318590; April,2020
- 13. Geotrichum candidum strain UOMGNBF04; MH802507; 28th Aug 2018
- 14. Ochroconis mirabilis strain UOMGNBF05; MH802508; 28th Aug 2018
- 15. Candida tropicalis strain UOMGNBY01; MH802509; 28th Aug 2018
- 16. Trichoderma asperellum isolate MY-7; Accession: KM043489; July 2014
- 17. Trichoderma asperellum isolate MY-5; Accession: KM043487; July 2014
- 18. Trichoderma asperellum isolate MY-4; Accession: KM043486; July 2014
- 19. Trichoderma asperellum isolate MY-1; Accession: KM043483; July 2014
- 20. Trichoderma asperellum isolate DL-81; Accession: KM100835; July 2014
- 21. Trichoderma asperellum isolate RJ-69; Accession: KM100833; July 2014
- 22. Trichoderma asperellum isolate MH-54; Accession: KM100829; July 2014
- 23. Trichoderma asperellum isolate MH-53; Accession: KM100828; July 2014
- 24. Trichoderma asperellum isolate MH-52; Accession: KM100827; July 2014
- 25. Trichoderma asperellum isolate MH-51; Accession: KM100826; July 2014
- 26. Trichoderma asperellum isolate MH-49; Accession: KM100825; July 2014
- 27. Trichoderma asperellum isolate MH-48; Accession: KM100824; July 2014
- 28. Trichoderma asperellum isolate UP-87; Accession: KM100821; July 2014
- 29. Trichoderma asperellum isolate DL-86; Accession: KM100820; July 2014
- 30. Trichoderma asperellum isolate DL-83; Accession: KM100817; July 2014
- 31. Trichoderma asperellum isolate DL-82; Accession: KM100816; July 2014
- 32. Trichoderma asperellum isolate RJ-68; Accession: KM100805; July 2014
- 33. Trichoderma asperellum isolate GU-63; Accession: KM100800; July 2014
- 34. Trichoderma asperellum isolate MP-58; Accession: KM100797; July 2014
- 35. Trichoderma asperellum isolate MP-57; Accession: KM100796; July 2014
- 36. Trichoderma asperellum isolate MP-56; Accession: KM100795; July 2014
- 37. Trichoderma asperellum isolate MP-55; Accession: KM100794; July 2014
- 38. Trichoderma asperellum isolate TN-47; Accession: KM100786; July 2014
- 39. Trichoderma asperellum isolate TN-46; Accession: KM100785; July 2014
- 40. Trichoderma asperellum isolate AP-41; Accession: KM100780; July 2014
- 41. Trichoderma asperellum isolate AP-40; Accession: KM100779; July 2014

- 42. Trichoderma asperellum isolate AP-39; Accession: KM100778; July 2014
- 43. Trichoderma asperellum isolate AP-36; Accession: KM100775; July 2014
- 44. Trichoderma asperellum isolate GB-35; Accession: KM100774; July 2014
- 45. Trichoderma asperellum isolate GB-34; Accession: KM100773; July 2014
- 46. Trichoderma asperellum isolate GB-33; Accession: KM100772; July 2014
- 47. Trichoderma asperellum isolate GB-32; Accession: KM100771; July 2014
- 48. Trichoderma asperellum isolate GB-29; Accession: KM100768; July 2014
- 49. Trichoderma asperellum isolate MD-19; Accession: KM100765; July 2014
- 50. Trichoderma asperellum isolate MD-18; Accession: KM100764; July 2014
- 51. Trichoderma asperellum isolate MD-17; Accession: KM100763; July 2014
- 52. Trichoderma harzianum isolate MY-8; Accession: KM043490; July 2014
- 53. Trichoderma harzianum isolate MY-3; Accession: KM043485; July 2014
- 54. Trichoderma harzianum isolate MY-2; Accession: KM043484; July 2014
- 55. Trichoderma harzianum isolate HR-73; Accession: KM100834; July 2014 56. Trichoderma harzianum isolate DL-85; Accession: KM100819; July 2014
- 57. Trichoderma harzianum isolate DL-84; Accession: KM100818; July 2014 58. Trichoderma harzianum isolate DL-80; Accession: KM100815; July 2014
- 59. Trichoderma harzianum isolate DL-79; Accession: KM100814; July 2014
- 60. Trichoderma harzianum isolate DL-78; Accession: KM100813; July 2014 61. Trichoderma harzianum isolate HR-77; Accession: KM100812; July 2014
- 62. Trichoderma harzianum isolate HR-76; Accession: KM100811; July 2014
- 63. Trichoderma harzianum isolate HR-75; Accession: KM100810; July 2014
- 64. Trichoderma harzianum isolate HR-74; Accession: KM100809; July 2014
- 65. Trichoderma harzianum isolate RJ-72; Accession: KM100808; July 2014
- 66. Trichoderma harzianum isolate RJ-71; Accession: KM100807; July 2014
- 67. Trichoderma harzianum isolate RJ-67; Accession: KM100804; July 2014
- 68. Trichoderma harzianum isolate GU-66; Accession: KM100803; July 2014
- 69. Trichoderma harzianum isolate GU-65; Accession: KM100802; July 2014
- 70. Trichoderma harzianum isolate GU-62; Accession: KM100799; July 2014
- 71. Trichoderma harzianum isolate BG-25; Accession: KM100792; July 2014
- 72. Trichoderma harzianum isolate BG-23; Accession: KM100790; July 2014
- 73. Trichoderma harzianum isolate BG-22; Accession: KM100789; July 2014
- 74. Trichoderma harzianum isolate AP-42; Accession: KM100781; July 2014
- 75. Trichoderma harzianum isolate AP-38; Accession: KM100777; July 2014
- 76. Trichoderma harzianum isolate AP-37; Accession: KM100776; July 2014
- 77. Trichoderma harzianum isolate GB-30; Accession: KM100769; July 2014
- 78. Trichoderma harzianum isolate GB-28; Accession: KM100767; July 2014
- 79. Trichoderma harzianum isolate GB-27; Accession: KM100766; July 2014
- 80. Trichoderma harzianum isolate MD-15; Accession: KM100761; July 2014
- 81. Trichoderma harzianum isolate MD-12; Accession: KM100758; July 2014
- 82. Trichoderma harzianum isolate MD-11; Accession: KM100757; July 2014
- 83. Trichoderma harzianum isolate MD-10; Accession: KM100756; July 2014
- 84. *Trichoderma virens* isolate MY-6; Accession: KM043488; July 2014
- 85. Trichoderma virens isolate UP; Accession: KM100837; July 2014
- 86. Trichoderma virens isolate MP-60; Accession: KM100832; July 2014
- 87. Trichoderma virens isolate UP-89; Accession: KM100823; July 2014
- 88. Trichoderma virens isolate UP-88; Accession: KM100822July 2014
- 89. Trichoderma virens isolate RJ-70; Accession: KM100806; July 2014
- 90. Trichoderma virens isolate GU-64; Accession: KM100801; July 2014
- 91. Trichoderma virens isolate GU-61; Accession: KM100798; July 2014
- 92. Trichoderma virens isolate TN-45; Accession: KM100784; July 2014
- 93. Trichoderma virens isolate TN-44; Accession: KM100783; July 2014

- 94. Trichoderma virens isolate TN-43; Accession: KM100782; July 2014
- 95. Trichoderma virens isolate GB-31; Accession: KM100770; July 2014
- 96. Trichoderma virens isolate MD-16; Accession: KM100762; July 2014
- 97. Trichoderma virens isolate MD-14; Accession: KM100760; July 2014
- 98. Trichoderma virens isolate MD-13; Accession: KM100759; July 2014
- 99. Trichoderma longibrachiatum isolate MY-9; Accession: KM043491; July 2014
- 100. Trichoderma longibrachiatum isolate MP-59; Accession: KM100831; July 2014
- 101. Trichoderma longibrachiatum isolate BG-24; Accession: KM100791; July 2014
- 102. Trichoderma longibrachiatum isolate BG-21; Accession: KM100788; July 2014
- 103. Trichoderma longibrachiatum isolate BG-20; Accession: KM100787; July 2014
- 104. Trichoderma atroviride isolate MH-50; Accession: KM100830; July 2014
- 105. Trichoderma atroviride isolate BG-26; Accession: KM100867; July 2014
- 106. Fusarium verticillioides isolate AP-118; Accession: KM100858; July 2014
- 107. Uncultured fungus isolate GB-111; Accession: KM100857; July 2014
- 108. Aspergillus nidulans isolate GB-109; Accession: KM100855; July 2014
- 109. Aspergillus quadrilineatus isolate GB-108; Accession: KM100854; July 2014
- 110. Aspergillus nidulans isolate GB-107; Accession: KM100853; July 2014
- 111. Aspergillus nidulans isolate GB-106; Accession: KM100852; July 2014
- 112. Penicillium sp. MD-101; Accession: KM100847; July 2014
- 113. Aspergillus fumigatus isolate MD-100; Accession: KM100846; July 2014
- 114. Penicillium commune isolate MD-98; Accession: KM100844; July 2014
- 115. Clonostachys pseudochroleuca isolate MY-97; Accession: KM100843; July 2014
- 116. Clonostachys pseudochroleuca isolate MY-96; Accession: KM100842; July 2014
- 117. Clonostachys rosea isolate MY-95; Accession: KM100841; July 2014.
- 118. Clonostachys pseudochroleuca isolate MY-94; Accession: KM100840; July 2014
- 119. Penicillium chrysogenum isolate MY-93; Accession: KM100839; July 2014
- 120. Citrobacter freundii strain ECOBIO_1; Accession: KP877533; Feb 2015
- 121. Bacillus licheniformis strain ECOBIO_2; Accession: KP877534; Feb 2015
- 122. Pseudomonas stutzeri strain ECOBIO_3; Accession: KP877535; Feb 2015
- 123. Alcaligenes sp. ECOBIO_4; Accession: KP877536; Feb 2015
- 124. Geotrichum candidum strain UOMGNBF04; Accession: MH802507; Aug 2018.
- 125. Ochroconis mirabilis strain UOMGNBF05; Accession: MH802508; Aug 2018.
- 126. Candida tropicalis strain UOMGNBY01, Accession: MH802509 Aug 2018.