

Name : **DR.M.MEENAKSHISUNDARAM**

Designation : **HEAD & ASST. PROF.**

Department : **BOTANY**



ACADEMIC QUALIFICATIONS:

M.Sc., Ph.D

TEACHING EXPERIENCE :

12 years

RESEARCH EXPERIENCE :

15 years

ADDITIONAL RESPONSIBILITIES :

- Self-finance Co-coordinator
- Associate Dean of Research

AREA OF RESEARCH :

- ❖ Microbiology,
- ❖ Plant Biotechnology

RESEARCH SUPERVISION / GUIDANCE :(for past five years)

PUBLICATIONS : (for past five years)

- ❖ M.Pramila ., N. Prabhusaran., **M.Meenakshisundaram.,** J. Lalithambigai and P.Karthick, 2018. Evaluation of antibacterial potential of silver nitrate – *An invitro approach . Saudi Journal of pathology and microbiology .* 211-214.
- ❖ M.Pramila ., N. Prabhusaran., **M.Meenakshisundaram.,** J. Lalithambigai and P.Karthick, 2018. Characterization of *Azadirachta indica* mediated copper and silver nanoparticles comparative approach . *Annals of international medical and dental Research .* 4: (6) 1-6.
- ❖ M.Pramila ., N. Prabhusaran., **M.Meenakshisundaram.,** J.Lalithambigai and P.Karthick, 2018. Invitro antibacterial analysis of copper solution (microparticle) a novel anti- infective molecule for wound management. *Journal of dental and medical sciences,* 17: (7) 22-26.
- ❖ M.Pramila ., N. Prabhusaran., **M.Meenakshisundaram.,** J.Lalithambigai and P.Karthick and Ganeshkumar, 2018. An overview of factors influencing the occurrence of post operative wound infection. *World journal of pharmaceutical and medical research,* 4: (1) 57-66.
- ❖ M.Pramila ., N. Prabhusaran., **M.Meenakshisundaram.,** Prabakar, Y.K J.Lalithambigai and P.Karthick 2018. Antibacterial analysis of *ocimum sanctum* mediated silver and copper nanoparticles. *International Journal of Allied medical sciences and clinical Research,* 4: 827-837.
- ❖ M.Pramila ., **M.Meenakshisundaram.,** N. Prabhusaran., J.Lalithambigai and P.Karthick 2018. Evaluation of wound biofilm forming bacterial pathogens by crystal violet binding assay. *Asian journal of multidimensional Research,* 7: 1-18.
- ❖ M.Pramila ., **M.Meenakshisundaram.,** N. Prabhusaran., J.Lalithambigai and P.Karthick 2018. Post operative wound infection: Isolation, characterization and invitro antibiotic susceptibility analysis . *The Pharma innovation Journal,* 7 (7) 169-175.
- ❖ **M.Meenakshisundaram** and M.Pramila, 2018. An overview of factors influencing the occurrence of post operative wound infection . *World journal of Pharmaceutical and medical research,* 1:57-66.

- ❖ **M.Meenakshisundaram** and M.Pramila, 2017. Biosynthesis of iron (Fe) nanoparticles and its inhibitory effect on *Pseudomonas aeruginosa* biofilm. *Indian Journal of Applied Research*, 7: (8)251-259.
- ❖ **M.Meenakshisundaram** and M.Pramila, 2017. Detoxification of heavy metals by microbial biosurfactants *International Journal of Current Microbiology and Applied Sciences*, 6: (3)402-411.
- ❖ **M.Meenakshisundaram** and M.Pramila, 2016. Ecofriendly synthesis and characterization of silver Nanoparticles from *Azadirachta indica* and *Ocimum Sanctum* leaf extract. *International Journal of Scientific Research & Development*, 4: 2331-0613
- ❖ **M.Meenakshisundaram** , M.Pramila and R.Rameswari, 2016. Isolation and Screening of biosurfactant producing bacteria from uyyokondan river, Tiruchirappalli District, Tamil Nadu. *International Journal of Advanced Research*, (1) 170-176.
- ❖ R.Rameswari and **M.Meenakshisundaram**, 2015. Counts of indicator bacterial assemblages and concentration of trace metal and physiochemical analysis of oil polluted water and sediment samples from automobile garage in Tiruchirappalli city, India. *Int Research Journal of Env Science*, 4 (10): 1-10.
- ❖ R.Rameswari and **M.Meenakshisundaram**, 2015. Microbiological and physiochemical analysis of petroleum and diesel oil contaminated samples from motor mechanic workshop in trichy city, Tamilnadu, india. *Journal of Environmental science, computer science and technology*, 4:834-842.
- ❖ M.Pramila and **M.Meenakshisundaram**, 2015. An insilico approach to treat Halistosis disease using mint compound-Benzydamine. *International Journal of Pharma Biosciences*, (6) 2: 1197-1207.
- ❖ R.Rameswari and **M.Meenakshisundaram**, 2015. Characterization of PHA accumulating *Bacillus* sp associated with petroleum and diesel oil contaminated soil using traditional techniques. *International Journal of Advanced Research*, 3 (4) 226-232.

- ❖ **Meenakshisundaram, M and Bharathiraja, C.** 2014. Isolation and Molecular identification of Hydrocarbon degrading bacteria from oil contaminated soils from Tamil Nadu. *Indian Journal Applied Research*, 4: (7) 2249-2255.
- ❖ Subash, N., **Meenakshisundaram, M.**, Sasikumar, C and Unnamalai, N. 2013. Mass cultivation of *Trichoderma harzianum* using agricultural waste as a substrate for the management of damping off disease and growth promotion in chilli (*Capsicum annum*). *International Journal of Pharmacy and Pharmaceutical Sciences*, 6(5)188-192.
- ❖ Rameshwari, R and **Meenakshisundaram, M.** 2013. A Review on downstream processing of Bacterial thermoplastic Polyhydroxyalkonate. *International Journal of Pure Applied Bioscience*, 2 (2) 68-80.
- ❖ Ramesh, P., Rajendran, A and **Meenakshisundaram, M.** 2013. Green synthesis of Zinc oxide nanoparticles using flower extract *Cassia auriculata*. *Journal of Nanoscience and Nanotechnology*, 2: (1) 41-45.
- ❖ R.Rameswari and **M.Meenakshisundaram.** 2013. A Review on bacterial polyhydroxyalkonate . *International Journal of Recent scientific Research*, 4: (11) 1781-1788.
- ❖ **M.Meenakshisundaram** and C.Bharathiraja.2013. Isolation of wood rot fungi from Maruthamali Hills Western Ghats area of south India, *International Journal of Current Microbiology and Applied Sciences*, 2: (9) 215-218.
- ❖ Bharathiraja, C., Anbalagan, S., Kannan, S., **Meenakshisundaram, M.**, Krishnan, M., Jean Francois Picimbon. 2013. Intra Populational Genetic diversity in the Tobacco Armyworm *Spodoptera Litura* (Lepidoptera: Noctuidae), *Asian Journal of Biochemical and Pharmaceutical research*, 2: (3) 100-113.
- ❖ Bharathiraja, C., Sukirtha, R., **Meenakshisundaram, M.**, Anbalagan, S., Krishnan, M and Baburaj, S.2013. *In vitro* micropropagation and somatic induction of *Tribulus terrestris* from nodal explants, *International Journal of Biology, Pharmacy and Allied Sciences*, 2 (4) 903-914.
- ❖ Sivaranjani, K and **Meenakshisundaram, M.** 2013. Biological synthesis of silver nanoparticles using *ocimum basillicum* leaf extract and their antimicrobial activity,

- ❖ Subash, N., **Meenakshisundaram, M.**, Unnamalai, N and Sasikumar, C.2013. Effect of *Trichoderma harzianum* to control damping off disease and capsicum annum growth promotion in chilli, *International Journal of Pharma Biosciences*, 4 (2) 1076-1082.
- ❖ Subash, N., **Meenakshisundaram, M** and Sasikumar, C. 2013. In vitro evaluation of different strains of *Trichoderma harzianum* as biocontrol agents of chilli, *International Journal of Biology, Pharmacy and Allied sciences*, 2 (2)495-500.
- ❖ Subash, N., Viji, J., Sasikumar, C and **Meenakshisundaram, M.** 2013.Isolation, media optimization and formulation of *Trichoderma harzianum* in agricultural soil, *Journal of Microbiology and Biotechnology Research*, 3 (1) 61-64.
- ❖ **M.Meenakshisundaram** and K.Santhaguru. 2012. Biocontrol potential of Fluorescent pseudomonas against wilt off tomato caused by *Fusarium oxysporum*. *International journal of science innovations and Discoveries*, (2) 152-163.
- ❖ **M.Meenakshisundaram** and R.Vasanthi. 2012. Optimization of Pectinase enzyme production by using sour orange peel as substrate in solid state fermentation. *Asian Journal of biochemical and pharmaceutical Research*, 1: (2) 16-26.
- ❖ **M.Meenakshisundaram**, and K.Santhaguru. 2011. Studies on association of Arbuscular Mycorrhizal fungi with *Gluconacetobacter diazotrophicus* and its effect on improvement of *Sorghum bicolor* (L.). *International journal of current scientific research*, 1 (2) 23-30.
- ❖ **M.Meenakshisundram**, K.Santhaguru and K.Rajendran. 2011. Effects of Bioinoculants on quality seedlings production of *Delonix regia* in tropical nursery condition. *Asian Journal of Biochemical and Pharmaceutical research*, 1 (1) 97-107.
- ❖ **M.Meenakshisundarm** and K.Santhaguru.2010. Isolation and nitrogen fixing efficiency of a novel endophytic diazotroph *Gluconacetobacter diazotrophicus* associated with *Saccharum officinarum* from southern districts of Tamilnadu. *International journal of Biological and Medical research*, 1 (4) 298-300.
- ❖ **M.Meenakshisundaram** and K.Santhaguru, 2009. Impact of *Glomus fasciculatum* and *Gluconacetobacter diazotrophicus* on alleviation of drought stress in *Sorghum bicolor* (L)

Monech. *Journal of cell and Tissue Research*, 9 (3) 1957-1962.

- ❖ **M.Meenakshisundaram.**, V.Kumarasamy and K.Santhaguru, 2009. Evaluation of grain legume rhizobia from semi arid regions of Tamil Nadu. *Electronic journal of Environmental sciences*, 2: 69-72.
- ❖ P.Kamalakaran, **M.Meenakshisundaram** and S. Chandrasekaran. 2008. Ecological studies on herbaceous vegetation in two dry deciduous forest in dindigul districts of Tamil Nadu. In: Forest biodiversity, vol 1, K.Mutuchelian; S.Kannaiyan, and A.Gopalam (Eds) Associated publishing company, New Delhi, pp 112-125.
- ❖ **M.Meenakshisundaram** and K.Rajendran, 2007. Microbial inoculants for quality seedlings production of Neem (*Azadirachta indica*) in tropical nursery conditions. *Journal of Non Timber Forest Products*.14 (4): 255-260
- ❖ **M.Meenakshisundaram** and K.Santhaguru.2005. Interaction between AM fungi and *Gluconacetobacter diazotrophicus* on infection, growth total nitrogen, phosphorus and soluble sugars and chlorophyll content in leaves of *S.bicolor*. *Journal of Soil Biology and Ecology*, **25**: 231-234.
- ❖ K.Senthilvadivelan, **M.Meenakshisundaram** and K. Santhaguru, 2004. Arbuscular mycorrhizal diversity of tree-legumes in the soils of Sirumalai Hills.*Journal of Range management of Agroforestry*, **25**(2): 173-176.
- ❖ **M.Meenakshisundaram** and K.Santhaguru, 2006. Interactive effects of AM fungi and *Gluconacetobacter diazotrophicus* on alleviation of drought stress in *S.bicolor* (L) Monech. *Proceeding of National seminar on Current Trends in Biotechnological Application, Thiagarajar College.Madurai*.
- ❖ P.Muthumanickam, **M. Meenakshisundaram** and K.Santhaguru,2006. Biocontrol basis of plant growth promotion by *fluorescent pseudomonads* and its infested in *Lycopersicum esculentum*. *Proceeding of National seminar on Current Trends in Biotechnological Application, Thiagarajar College.Madurai*.

EVENTS ORGANIZED IN LEADING ROLES : (for past five years)

Title of event Organized	Funding Agency	Year	Amount
Science Academies Lecture Workshop on Modern Trends in Biological Sciences	Indian Academy of sciences, Bangalore	2014	1, 25, 500/-
Science Academies Lecture Workshop on “New Frontiers in Plant Sciences and Biotechnology”	Indian Academy of sciences, Bangalore	2016	1, 85, 250/-
Workshop on Need based Value added Research Proposal writing	Indian council of medical research	2014	40, 000/-
National Seminar on Frontiers in Biotechnology	CSIR	30, 000/-	2013

MEMBERSHIP IN

ACADEMIC BODIES (Such as Board of Studies etc.,)

1. M.Sc Botany Board of studies chairman at Nehru memorial College, Puthanampatti.
2. B.sc Botany, Board of studies chairman at Nehru memorial College, Puthanampatti.
3. B.sc Biotechnology, Board of Studies subject Expert at Rajah Serfoji College, Thanjavur.