



**SENGAMALA THAYAAR EDUCATIONAL TRUST WOMEN'S COLLEGE
(AUTONOMOUS)**

SUNDARAKKOTTAI, MANNARGUDI-614016.

(Accredited by NAAC) (An ISO 9001:2005 Certified Institution)

PG AND RESEARCH DEPARTMENT OF MICROBIOLOGY

S.NO	MOU BETWEEN	DEPT. INVOLVED	SIGNED DATE	OBJECTIVE	Activity
1.	Sengamala Thayaar Educational Trust Women's College (Autonomous) , Sundarakkottai , Mannargudi and C.A.K Poly Clinic , Mannargudi · 10, MGR Nagar, Mannargudi, Near Raja Gopala Swamy Temple, Tiruvarur, Tamil Nadu, India - 614001	Nutrition and Dietetics Biochemistry, Microbiology ,	08.04.2011	PG and Research Department of Microbiology : 1. Research areas / activities (survey on the prevalence of diseases, contamination of pathogens in air, water and soil in the hospital area, identification of pathogens from the inanimate objects and surgical materials used in hospital) 2. Training for our students (on collection and transports of specimens / samples, haematological and serological diagnostic procedures) 3. Extension Activities jointly by the college and the hospital (Awareness programmes on blood, organ donations, medical camp)	-

				4. Invited / guest lectures by medical professional	
2.	Sengamala Thayaar Educational Trust Women's College(Autonomous),Sundarakkottai, Mannargudi and Meenakshi Hospital, 244/2, Trichy Main Road, Near New Bus Stand, Nilagiri, Therkku Thottam, Thanjavur, Tamil Nadu 613005	Nutrition and Dietetics Biochemistry, Microbiology ,	15.07.2014	<p>PG and Research Department of Microbiology :</p> <p>Research areas / activities (survey on the prevalence of diseases, contamination of pathogens in air, water and soil in the hospital area, identification of pathogens from the inanimate objects and surgical materials used in hospital)</p> <p>1.Training for our students (on collection and transports of specimens/samples, haematological and serological diagnostic procedures)</p> <p>2.Extension Activities jointly by the college and the hospital (awareness programmes on blood, organ donations, medical camp)</p> <p>3.Invited / guest lectures by medical professional (on emergency medicine, symptoms of cancer, hypersensitivity to chemotherapy)</p>	Internship 2020-2021 2021-2022 2022-2023
3.	Sengamala Thayaar Educational Trust Women College (Autonomous) , Sundarakkottai , Sri Amman Biocare Research Institute, Thirukkanurpatti.	Microbiology	27.10.2021	1. Developing capacity, skills of the students on Biofertilizer production (<i>Azospirillum</i> , <i>Rhizobium</i> and VAM) for their socioeconomic empowerment through agriculture.	One day Industrial visit 2021-2022 2022-2023

				<p>2. Initiating researchers to determine the effectiveness of biofloral products through plot and field experiments</p> <p>3. Evolving marketing strategy for the different range of agricultural products using the services of the students of MBA of STET</p> <p>es.</p> <p>4.Promoting the research to the improvement of organic products for sustainable agriculture</p> <p>5.Providing Vermicompost training to the students and Women Self help groups for self sustaining livelihood development by improving the fertilization capacity of soil as well as quality agricultural production</p> <p>6.Creating awareness about the advantages of biofertilizers and biocontrol agents to farmers, Women Self- help groups and students</p> <p>7.Motivating organic farming to the rural people through the students of STET</p> <p>8. Formulating highly effective and cost- effective technology for the production of Agro- based products from the natural resources</p> <p>9.Arranging personnels from both sides for hands-on training in</p>	
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				Biofertilizer, Vermicomposting and Mushroom production	
4.	Sengamala Thayaar Educational Trust Women College (Autonomous), Sundarakkottai, Mannargudi and TANBIO R & D Solution Periyar Technology Business Incubator (PTBI), Periyar University, Vallam, Thanjavur 613403	Biochemistry, Microbiology, Nutrition and Dietetics	27.01.2022	<ol style="list-style-type: none"> 1. To initiate and to carry out collaborative research projects. 2 To mutually utilize the available research facilities including laboratories, instrumentation and library. 3. To arrange for student / faculty exchange programme 4.To review periodically the syllabus content of courses offered 5.To provide resource person for seminars and conferences 	Research activity 2020-2021
5.	Sengamala Thayaar Educational Trust Women College (Autonomous), Sundarakkottai, Mannargudi and Dr. V. B. Hosagoudar Bio Research Foundation, Killa, Bilagi - 587 116	Microbiology	02.02.2022	<ol style="list-style-type: none"> 1. Rectification of saline soils, making the crops free from root parasites, root grub, etc. using the biological means and methods 2. Documentation of the plant and microbial wealth of the region and make out the medicinal plants for the present and future use and the farmer to benefit 3.Recording the foliicolous fungal parasites from the medicinal plants and identifying target molecules to control the infectious fungal populations 	Research Activity 2020-2021

				<p>4. Making the land viable for crop-plant growth by introducing the eco-friendly microbes and using weeds as biofertilizers, and to improve the soil moisture and fertility through organic farming and other traditional methods</p> <p>5. Developing and boosting agricultural research activities and promotion of modern agriculture</p> <p>6. Identification of the foliicolous fungal flora isolated from Cauvery delta region</p> <p>7. Improving the scientific forum between the states of TamilNadu and Karnataka</p> <p>8. Increasing the number of collections of Foliicolous fungi in the Centre for Mycological Research and improving its status to national level</p>	
6.	Sengamala Thayaar Educational Trust Women College (Autonomous) , Sundarakkottai , Mannargudi and Biofarm, Coimbatore	Moicrobiology	02.05.2018	<p>1.To initiate the researchers to conceive and to promote the production processes of novel biotechnological products</p> <p>2.To improve the processes to produce products of consistent quality</p> <p>3. To motivate and encourage the researchers to carryout research in</p>	Industrial visit 2022-2023

				<p>medicinal plants to suit the growing needs of healthcare</p> <p>4.To create awareness to the people about organic waste management in rural areas</p> <p>5.To train the students to learn in-house technology for the production of agro-based products like organic manure, biofertilizers, biocontrol agents, growth promoters, micronutrients etc.,</p> <p>6.To produce economical, environment friendly and easily available products for the integrated microbial management for sustainable agriculture</p> <p>7.To learn the basic procedure for preparing the rooting medium, amino acid mixture and herbal extract to make them employable in various industries</p> <p>8. To analyze the bioproduct development capabilities in the field of fermentation technology to produce novel biotechnological product</p> <p>9.To avail various training programmes to stakeholders (Staff and Students) in conducting Agriclinic and Agribusiness centre for improving them in the commercial activities</p>	
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				10.To provide the platform to undergo training on Entrepreneurship and Business management so as to make them good entrepreneurs	
7.	Sengamala Thayaar Educational Trust Women College (Autonomous) , Sundarakkottai , Mannargudi and Mr.S.Kannan, Proprietor, Bharath Instruments Services,Pudukkottai.	Microbiology	22.06.2019	<ol style="list-style-type: none"> 1.Calibration of instruments for accurate measurements of samples. 2.Providing Standard operating procedure for each instruments for better operation of instruments 3.Providing opportunity to Life science students to acquire the practical skill and knowledge on analytical instruments 4.Exposing the students to a breadth of experimental techniques using modern instrumentation. 5.Providing repair and maintenance of sophisticated instruments 6.Developing and boosting agricultural research activities and promotion of modern agriculture. 	Training on bioinstrumentation 2021-2022 2022-2023
8.	Sengamala Thayaar Educational Trust Women College (Autonomous) , Sundarakkottai , Mannargudi and Trichy Research Institute of Biotechnology Pvt. Ltd (TRI Biotech),Trichy.	Microbiology	11.03.2022	<ol style="list-style-type: none"> 1.To initiate the researchers to update their knowledge on the production processes of novel biotechnological products 2. To improve the microbial processes to produce products of consistent quality 3. To enlighten the young minds with new technical research skills, enhance their creativity; encourage publishing their innovative research wok thereby 	-

			<p>uplifts the students to succeed in their research career</p> <p>4. To offers a wide range internship programs in different field of life sciences. It will be great opportunities for graduate and post graduate students to enhance their research knowledge with job benefits</p> <p>5. To provides research facility to motivate researchers to develop high – end technological novel research and analysis</p> <p>6. To produce economical, environment friendly and easily available products for the integrated microbial management for sustainable agriculture</p> <p>7. To learn the basic procedure for animal cell culture preparation</p> <p>8. To analyze the bioproducts development in the field of fermentation technology in order to produce novel biotechnological product</p> <p>9. To improve the analytical skills and handling of analytical instruments for interpretation of the research</p> <p>10. To provide the platform to undergo training on Entrepreneurship and Business management so as to make them good entrepreneurs</p>	
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9.	Sengamala Thayaar Educational Trust Women College (Autonomous) , Sundarakkottai , Mannargudi and Phyto Products, Thiruthuraipo	Microbiology	27.11.2020	<p>1.To develop a comprehensive seed collecting strategy since, Neem seed collection needs more scientific approach due to infection caused by of the infestation of the carcinogenic agents</p> <p>2.To initiate researchers targeting towards the determination of the antibiotic/ pesticidal potentialities of the neem oil</p> <p>3.To initiate researchers targeting towards the determination of the nutritional status/ pesticidal properties of the neem oil seed cake and its potential role in soil reclamation</p> <p>4.To create awareness among the public regarding the importance of the use of neem and neem products in agricultural practices through extension service activities</p> <p>5.To motivate and encourage the cultivation of neem plants, wherever possible through extension service activities as a strategy of tree plantation</p> <p>6.To establish neem seed collecting centres/ neem and neem product marketing centre.</p> <p>7.To evolve novel neem based fertilizers/ pesticidal products using neem seeds/ oil/ oilseed cake</p>	Field visit 2021-2022 2022-2023
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				<p>8.To determine the biochemical constituents and the active principles present in the neem seed/oil/cake; and to determine the function of such compounds as antibiotic and pesticide</p> <p>9.To evolve marketing strategy for the neem and neem products using the services of the students of MBA of STET School of Management</p> <p>10.To create a corpus fund in order to make the programme and objectives sustainable</p> <p>11.To create a data bank regarding the area under cultivation of neem, the neem seed output per year, requirement of the neem seeds for the said industry and demand, and to the prospective area to be proposed for neem plant cultivation</p> <p>12.To support the outstanding scholars in pursuit of research from the fund generated through the activities</p>	
10.	Sengamala Thayaar Educational Trust Women College (Autonomous), Sundarakkottai , Mannargudi and Indian Biotrack Research Institute,Thanjavur.	Microbiology	11.03.2022	<p>1.To offers a wide range internship programs in different field of life sciences. It will be great opportunities for graduate and post graduate students to enhance their research knowledge with job benefits</p> <p>2.To provide training for Mass cultivation, purification, toxicity testing of pharmaceutically important</p>	

				<p>compounds, patenting and technology transfer to Biotech industries</p> <p>3.To develop knowledge about the screening, identification and mass cultivation of economically importance of microalgae / fungi for Single Cell Protein (SCP).</p> <p>4. To conserve the endangered and economically important plants using tissue culture technique and improve their potential using techniques of protoplast fusion, cloning, mutation, etc., for further exploitation for recovering pharmaceuticals, enzymes, fatty acids, pigments, etc</p> <p>5.To motivate and encourage the researchers to select new microbial consortium for developing liquid biofertilizer formulations</p> <p>6.To produce economical, environment friendly and easily available products for the integrated microbial management for sustainable agriculture</p> <p>7.To learn the basic procedure for Bioremediation of polluted aquatic environment using microalgae</p> <p>8.To create knowledge about enzyme purification and production, Identification of microbes (algae, fungi and bacteria) and plant anatomy structure through the electron</p>	
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				<p>microscope, Phytochemical and Physicochemical analysis</p> <p>9. To arrange personnel's from both sides for hands on training/ Webinar conduction (zoom, cisco and google meet) seminar, conferences, workshop</p> <p>10.To enrich an academic activity such as projects, innovation, extension practices and training of mushroom cultivation technology and biofertilizer production.</p> <p>11.To enlighten the young minds with new technical research skills, enhance their research knowledge at the molecular level</p>	
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