

PERIYAR UNIVERSITY

NAAC 'A++' Grade with CGPA 3.61 (Cycle - 3) State University - NIRF Rank 56 - State Public University Rank 25 Salem-636011, Tamil Nadu, India.

Workshop on



Integrating Phytochemistry, Nanotechnology, and Computational Modeling for Advanced Research







Likely Sponsors

Organised by Centre for Biodiversity and Forest Studies Department of Botany Periyar University

Periyar University

The Periyar University was established at Salem on 17th September, 1997 by the Government of Tamil Nadu. The University has taken rapid strides and is emerging as one of the leading Universities. The University is named after the Great Social Reformer E.V. Ramasamy, affectionately called as "Thanthai Periyar". The University aims at developing knowledge in various fields to realize the maxim inscribed in the logo "Arival Vilayum Ulagu" (Wisdom Maketh the World). "Holistic development of the students" is the primary objective of the University. The vision of the University is to impart knowledge to the society through formal and informal modes and contributing to nation-building. The University was reaccredited by the NAAC with A++ Grade and secured 56th rank in NIRF and 25th Rank among Indian Universities. The University has 27 departments and 118 affiliated colleges. The University is playing a paramount role in bringing multifaceted development of the country. It is consistently organizing innumerable academic activities to bring academicians and industrialists under one umbrella to discuss, deliberate, and carve out time-demanding solutions to social problems.

Centre for Biodiversity and Forest Studies

The Centre for Biodiversity and Forest Studies is a unique centre that was established in 2011 with funding from Periyar University. The centre has successfully established a Biodiversity Park within the university campus. The Park is home to several rare and endangered flora, ornamental and medicinal plant species, and a Fossil Park that has been conserved. The Biodiversity Museum exhibits specimens of rare and endangered species such as Algae, Fungi, Bryophytes, Pteridophytes, Gymnosperms, and Angiosperms. The centre aims to create a green belt around Salem and Dharmapuri districts and increase afforestation in rural areas. It also works towards identifying flora and fauna, classifying endangered species, and organizing awareness programs for rural communities in collaboration with local NGOs. The centre is committed to conserving biodiversity and forest ecosystems through sustainable utilization. The centre also aims to create awareness about the significance of biodiversity among school children and local communities.

Department of Botany

The Department of Botany was established in the year 2011. The department is being blooming in to making wisdom. Our mission is to discover, maintain, and transmit knowledge concerning basic plant biology and provide leadership in the biological sciences. The department is successfully running postgraduate programme in Botany from the Academic year 2011-2012 and M.Phil. (Regular) and Ph.D. programmes in (Regular & Part Time). The department has separate class and laboratory facilities for teaching and research programmes. PG and research laboratories are established. Instruments, specimens, slides and other facilities such as furnishing the laboratories are equipped. The department of Botany is attempting to contribute solutions to the problems through its broad based and innovative research through M.Phil. and Ph.D. research programmes are started with various disciplines of Plant Sciences such as Phytochemistry and Fungal Biotechnology, Herbal Medicine and Nanotechnology, Edible mushroom cultivation, Crop mutation and Molecular Breeding, Plant Stress Physiology, Soil biology and PGPR, Ethnopharmacology and Algal biotechnology. In addition, the department established and maintained the Botanical Garden, Botanical Museum, Medicinal Plant Cafeteria, Mushroom Cultivation Unit, Fossil Park, Plant and Algal Herbarium and greenhouse.

About the Workshop

This comprehensive 3-day workshop is designed to provide scholars and students with an in-depth understanding of cutting-edge techniques in phytochemistry, nanotechnology, and computational modelling. By bridging these three critical areas of research, the workshop aims to equip participants with a robust toolkit for innovative scientific exploration and application in biomedical and environmental fields.

Objectives of the Workshop

- 1. To introduce participants to the fundamentals and advanced techniques in **phytochemical extraction**, **characterization**, **and purification**.
- 2. To explore **nanotechnology** methods such as synthesis, characterization, and applications in biomedical and environmental sectors.
- 3. To enhance understanding of **computational studies** including **in silico modelling and molecular docking,** providing insights into the molecular interactions of **phytochemicals and nanomaterials.**
- 4. To facilitate interdisciplinary research and collaboration between **phytochemists**, **nanotechnologists**, and **computational scientists**.

Topics/Techniques covered

- 1. Phytochemical Techniques Extraction, Characterization, and Purification
- 2. Nanotechnological Techniques Synthesis, Characterization, and Applications
- 3. Computational Studies In Silico Modeling and Molecular Docking

Who can apply

This workshop is exclusively designed for highly motivated and ambitious students and research scholars who are pursuing B.Sc./M.Sc./Ph.D. in Life Science at renowned universities, colleges, and research institutions. The comprehensive program covers a wide range of disciplines within the domain of life sciences, including botany, biotechnology, microbiology, bioinformatics, zoology, and other allied subjects. Rest assured, this workshop will provide you with an unparalleled learning experience that will set you on the path to success.

Registration

The maximum number of available seats is limited to 50 and will be allocated on a first-come, first-served basis. Spot registration is not allowed.

Registration Fees

Categories	Amount (Rs.)
Students/scholars from other institutions	826/- (including GST)
Students/scholars from Periyar University/ Periyar University ALUMNI	590/- (including GST)

The duly-filled registration form may be sent along with the participation fee by non-refundable Demand Draft (DD) in favour of **"Department of Botany, Periyar University, Salem - 636011",** Periyar University payable at Salem, Tamil Nadu or **Direct Bank Transfer/NEFT/RTGS to "DEPARTMENT OF BOTANY", Periyar University, A/c No. 8450101002876, IFSC Code: CNRB0008450, CANARA BANK.** Kindly send the soft copy of your online fee receipt to the email (maruthumdu82@gmail.com) to confirm your registration. Participation fee includes registration, workshop kit, working lunch and refreshments.

Communication

All communications concerning the Workshop shall be addressed to the Organizing Secretary

Dr. A. Maruthupandian

Assistant Professor Department of Botany School of Life Sciences Periyar University Salem – 636 011, Tamil Nadu, India **Mobile : 91-8248960150 | Whatsapp : 91-9442915354 E.mail : maruthumdu82@gmail.com**

Organizing Committee

:

:

:

:

:

Chief Patron	
Patron	
Convener	
Organizing Secretary	

Organizing Executive Committee

Prof. R. Jagannathan

Honourable Vice Chancellor Periyar University, Salem

Prof. Dr. V. Raj

Registrar (i/c) Periyar University, Salem

Dr. K. Selvam

Director, Centre for Biodiversity and forest Studies Professor and Head Department of Botany School of Life Sciences Periyar University, Salem

Dr. A. Maruthupandian

Coordinator, Centre for Biodiversity and forest Studies Assistant Professor Department of Botany School of Life Sciences Periyar University, Salem

Dr. S. Murugesan

Dr. D. Arulbalachandran Dr. S. Lalitha Assistant Professors

Dr. P. Prakash

Guest Lecturer Department of Botany School of Life Sciences Periyar University, Salem

பெரியார் பல்கலைக்கழகம் PERIYAR UNIVERSITY