



2nd National Conference
on

Frontiers in Ecobiological Sciences and its Applications



Theme

Environmental Security

March 16 & 17, 2017



Organized by
SCHOOL OF LIFE SCIENCES
PERIYAR UNIVERSITY

Re-accredited with 'A' Grade by NAAC
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FESA - 2017

About the University

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 vision of the University is to impart knowledge to the society through formal and informal modes and to contribute to nation building. Periyar University is Reaccredited with 'A' grade by NAAC with a CGPA of 3.15 in a four point scale. The University is ranked 47th among Indian Universities and 2nd among State Universities by MHRD-NIRF. At present, the University has five Science schools and three Arts schools comprising 27 Departments which offer 33 P.G programmes and 26 research programmes. Besides, the University offers 35 diploma, 16 P.G. diploma, 8 certificate and 15 professional programmes. Besides the departments, the University has established exclusive centres for Biodiversity and Forest Studies, Geoinformatics and Planetary Science, Instrumentation and Maintenance Facility, Nanoscience, Tamil Computing, Women and Vivekanandha Studies. Currently, 95 colleges are affiliated to Periyar University from the districts of Salem, Namakkal, Dharmapuri and Krishnagiri which caters to the needs of students from rural areas and downtrodden sections of society. More than 1.5 lakh students have enrolled for various undergraduate and postgraduate programmes offered by Periyar University and their affiliated colleges.

School of Life Sciences

The School of Life Sciences contains the Department of Botany, Environmental Science and Zoology. These Departments were established in the year 2011-2012. The School was armed with well qualified, dedicated and experienced faculty members. Several Conferences, Workshops, special lecture programmes, industrial visits and brainstorming sessions have been conducted periodically pertaining to various aspects of plant, animal and environmental sciences. The aim of the School of Life Sciences is to promote quality and value based education by motivating the practical skills of students and creating awareness on the recent advances in basic and applied science and research fields worldwide, which will make each student as a renovator to seek remedy for the future with a mission and a vision.

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The ecosystems services that resonated most broadly across the stakeholders were: water quality (mitigating pollution-related diseases), water supply (irrigation potential, drinking water), food security (food yields, food diversity, malnutrition), land degradation (erosion, fertility). Sustainability is the theory that we necessity meet the requirements of the present without compromising the ability of future generations to meet their own needs (United Nations World Commission on Environment and Development, 1987). There are some major challenges are threatened to the living world such as biodiversity loss, climate change, pollution, water scarcity, soil degradation, carbon accumulation, natural resources depletion etc. The 17 Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. These 17 Goals build on the successes of the Millennium Development Goals, while including new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice, among other priorities. The goals are interconnected – often the key to success on one will involve tackling issues more commonly associated with another. The goals cover the three dimensions of sustainable development: economic growth, social inclusion and environmental protection. The SDGs came into effect in January 2016, and they will continue guide UNDP policy and funding for the next 15 years. The new Goals recognize that tackling climate change is essential for sustainable development and poverty eradication. The Sustainable Development Goals (SDGs) proposed for water and sanitation (SDG 6) and ecosystems (SDG 15) have targets for restoring and maintaining ecosystems to provide water-related services. The targets mention the need to integrate ecosystem values into planning, development processes, and strategies for reducing poverty. SDG 13 aims to promote urgent action to combat climate change and its impacts.

In poor countries, growing cities are putting pressure on water and land resources, making it more difficult for millions of poor farmers to eke out a living. At the same time, public sectors are struggling to keep up with the waste accumulating in urban areas. The Recovering and Reusing Resources in Urbanized Ecosystems research theme develop solutions that capitalize on waste to reduce the damage from growing cities to communities and the environment. Millions of farmers, particularly in sub-Saharan Africa and South Asia live in poverty. Improving their food security and income requires finding ways to produce more with less. Increasing yields—whether from growing crops or from raising livestock or fish—is dependent on better farming practices as well as on new institutions and policies. In addition, efforts to improve agricultural productivity must be well managed to avoid unintended social, economic and ecosystem consequences across landscapes. Sustainable agriculture incorporates three main purposes like healthy environment, bioeconomy, and economic impartiality in society. Research and innovation will provide opportunities for integrating agricultural practices and healthy environment objectives into sustainable production such as high yielding with effective usage of resources (water) of agriculture, increasing animal and plant production with safety, protection of forest, less consumption of energy resources, and human health. The Sustainably Increasing Land and Water Productivity research theme aims to ensure that more farmers know about practices that improve productivity while preserving the environment.

In these circumstances, Environmental Security is urgent need to maintain the sustainable development through various ecosystem services in agriculture, forestry, biology, energy, environment and health. Hence, the School of Life Sciences, Periyar University makes a great opportunity for science delegates through this Conference to discuss various issues pertaining to ecobiological applications at different themes which will be helpful for the young students, researchers, scientists, academicians, industrialists, policy makers, government and non-government organizations to bring and discuss their novel ideas for sustainable development.

Themes

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| ❖ Afforestation and Carbon Sequestration | ❖ Pharmaceutical Sciences |
| ❖ Agricultural Sciences | ❖ Horticulture and Crop Science |
| ❖ Animal Behaviour | ❖ Integrated Nutrient Management |
| ❖ Aquaculture/Sericulture/Apiculture | ❖ Integrated Pest Management |
| ❖ Biochemistry and Immunology | ❖ Invasion and Forest Ecology |
| ❖ Biodiversity Conservation and Management | ❖ Marine Diversity and its Utilization |
| ❖ Biofuel and Biomass Energy | ❖ Microbial Role in Ecosystem Functions |
| ❖ Bioprospecting and Herbal Drug Technology | ❖ Microbiome and Human genome |
| ❖ Biotechnology and Industrial Applications | ❖ Mutagenesis and Radiation Biology |
| ❖ Cell and Molecular Biology | ❖ Nanotechnology and Nanomedicine |
| ❖ Climate Change Issues | ❖ Plant and Animal Systematics |
| ❖ Ecotourism and Management | ❖ Plant/Animal/Environmental Genomics |
| ❖ Environmental Impact Assessment | ❖ Radar Technology in Biology |
| ❖ Environmental Toxicology | ❖ Renewable Energy Resources |
| ❖ Food Science and Nutrition technology | ❖ Reproductive and Molecular Biology |
| ❖ Forestry and Agro forestry | ❖ Resource Recovery from Wastes |
| ❖ Genetics & Transgenic Engineering | ❖ Soil Ecology and Phytoremediation |
| ❖ Geospatial Technology & Remote Sensing | ❖ Sustainable Agricultural Practices |
| ❖ GIS & Disaster Management | ❖ Vector Borne Diseases |
| | ❖ Water Resources and Wasteland Management |

Abstract Submission

An abstract in MS word, Times New Roman (font size 12, line space 1.5) highlighting the results of the work not exceeding 250 words should be in the following format: Title (Capital and bold with font size 14, Authors Name (bold with font size 12), and Affiliation (Address of the institution with e-mail ID of corresponding author). Presenting author should be indicated with an asterisk symbol(*). Title, author's name and affiliation should be centre aligned. Key words (italic with font size 10) should be limited to 5 words. Text should be justified (spacing 1.5, margin: L 2", R 1"). The abstract should be submitted by e-mail to fesasls2017@gmail.com on or before February 24, 2017.

Oral/Poster presentation

Authors are requested to indicate their choice for oral/poster presentation. The scientific committee will decide on the suitability of paper for oral or poster presentation. The poster should clearly present the title, the author (s) name (s), affiliation (s) and address. The size of the poster should be with a dimension of 1 m (height) x 1 m (width). The content of the poster should be easily readable from a distance of 2-3 meters. Poster should be in one piece either in flex or laminated sheet. Each oral presentation by the participants is restricted to 10 minutes including discussion. Awards will be presented for the meritorious oral and poster presentations. Selected full-length research papers will be published in a book with ISBN from renowned publisher.

Registration

The duly filled registration form may be sent along with the registration fee by non-refundable Demand Draft (DD) in favour of Organizing Secretary, FESA - 2017, School of Life Sciences, Periyar University payable at Salem, Tamil Nadu or Direct Bank Transfer / NEFT/RTGS to Organizing Secretary, FESA - 2017, School of Life Sciences, Periyar University A/c No. 8450101005345, IFSC Code: CNRB0008450, CANARA BANK. Kindly send soft copy of your online fees receipt to the respective email ID to confirm your registration.

Participant	Registration fee
Faculties, Scientists & Delegates	Rs. 1000/-
Students & Research scholars	Rs. 750/-
No Spot Registration	

Deadlines

Registration : 06th March 2017
Submission of Abstract : 28th February 2017
Intimation of Acceptance : 10th March 2017

Accommodation & Travel Arrangements

Accommodation may be arranged in the faculty Guest House (on a first come first served basis) of the University on prior request and payment. The hotels are in the city which is 7 Kms away from the University but close to New Bus stand, Railway Station and Shopping Centres.

University Faculty Guest House: Rs. 500/- person/day

The participants are requested to make their own travel arrangements. If assistance is needed, the participants are requested to contact the following persons:

Mr. C. Santhosh : ☎ 91 - 99764 67617
Mr. B. Perumal : ☎ 91 - 96267 89067
Mrs. K. Saranya : ☎ 91 - 90477 14176
Mrs. L. Archana : ☎ 91 - 89035 07626

About Salem

The Salem City is the fourth largest city in Tamil Nadu. The Salem is of famous women Tamil Poet Avvaiyar's birth place. The Salem City is also called as Steel City and Mango City. The City consist lots of famous tourist places (Yercaud Hills, Kolli hills, Hogenakkal Falls, Mettur Dam) and pilgrimage (Kottai Mariamman Temple, Sughaneshwarar Temple, Kandhashramam, 1008 Lingam Temple, Tharamangalam Kailasanathar Temple and Namakkal Anjaneyar Kovil) sites.

❖ Nearest Airport: Trichy, Coimbatore and Bangalore

❖ Nearest Railway Station: Salem

Organizing Committee Members

Dr. K. Selvam, Associate Professor in Botany, Periyar University

Dr. P. Thiruchenthilnathan, Associate Professor in Zoology, Periyar University

Dr. S. Venkatesan, Associate Professor in Environmental Science, Periyar University

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Dr. P. Senthilkumar, Assistant Professor in Environmental Science, Periyar University

Dr. R. Thangaraj, Assistant Professor in Zoology, Periyar University

Dr. S. Murugesan, Assistant Professor in Botany, Periyar University

Dr. N. Kayalvizhi, Assistant Professor in Zoology, Periyar University

Dr. D. Arulbalachandran, Assistant Professor in Botany, Periyar University

Dr. S. Lalitha, Assistant Professor in Botany, Periyar University

Dr. R. Maheswaran, Assistant Professor in Zoology, Periyar University

Dr. P. Jayanthi, Assistant Professor in Environmental Science, Periyar University

Organizing Committee

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Hon'ble Vice-Chancellor, Periyar University

Chairman **Dr. M. Manivannan**
The Registrar, Periyar University

Convener **Dr. R. Balagurunathan**
Co-ordinator(i/c), School of Life Sciences, Periyar University

Co-Conveners **Dr. S. Murugesh**
Professor & Head in Botany, Periyar University
Dr. K. Murugesan,
Professor & Head in Environmental Science, Periyar University

Organizing Secretary **Dr. A. Maruthupandian**
Assistant Professor, Department of Botany, Periyar University

Organizing Joint Secretary **Dr. P. Thangavel**
Assistant Professor, Department of Environmental Science, Periyar University

Organizing Joint Secretary **Dr. A. Naresh Kumar**
Assistant Professor, Department of Zoology, Periyar University

National Advisory Committee Members

Dr. K. Muthuchelian	(Former Vice-Chancellor, Periyar University, Salem), Head & Chairperson, School of Energy, Environment & Natural Resources, Madurai Kamaraj University, Madurai, Tamil Nadu.
Dr. K. Murugan	Vice-Chancellor, Thiruvalluvar University, Vellore, Tamil Nadu.
Dr. M.N.V. Prasad	Department of Botany, University of Hyderabad, Hyderabad, Telengana
Dr. RS. Sangwan	CEO, CIAB & Director, NABI, Punjab.
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Dr. Bernard F. Rodrigues	Department of Botany, Goa University, Goa.
Dr. R.D. Tripathi	CSIR-NBRI, Lucknow, Uttar Pradesh.
Dr. B. Anjan Kumar Prusty	Gujarat Institute of Desert Ecology (GUIDE), Gujarat.
Dr. L.C. Rai	Banaras Hindu University, Varanasi, Uttar Pradesh.
Dr. Sabhyata Bhatia	Scientist, NIPGR, New Delhi.
Dr. Amrik Singh Ahluwalia	Department of Botany, Panjab University, Chandigarh.
Dr. Raghavendra Rao	CSIR Emiritus Scientist, Chairman, Karnataka State Environment Appraisal Committee, INSA Honorary Scientist, Bangalore, Karnataka.
Dr. N. Nandini	Department of Environmental Sciences, Bangalore University, Karnataka.
Dr. A.G. Devi Prasad	Department of Environmental Science, University of Mysore, Karnataka.
Dr. Dinabandhu Sahoo	Director, Institute of Bioresources & Sustainable Development, Takyelpat Institutional Area, Imphal, Manipur.
Dr. Sumita Jha	CAS in Botany, University of Calcutta, Kolkata, West Bengal.
Dr. K. Arun Kumar	Department of Plant Science, Central University of Kerala, Kerala.
Dr. V.R. Mohan	Department of Botany, V.O.C. College, Tuticorin, Tamil Nadu.
Dr. Utpal nath	Department of MCB, Indian Institute of Science, Bangalore, Karnataka.
Dr. T. Ramasubramanian	Senior Scientist, ICAR-Sugarcane Breeding Institute, Coimbatore, Tamil Nadu.
Dr. Avinash Warundeo Lakkawar	Department of Veterinary Pathology, Rajiv Gandhi Institute of Veterinary Education and Research, Pondicherry.
Dr. S. Poopathi	Scientist, Vector Control Research Centre, Puducherry.
Dr. K. Illango	Scientist, ZSI, Chennai, Tamil Nadu.
Dr. N. Parthasarathy	Department of Ecology & Environmental Sciences, Pondicherry University, Puducherry.
Dr. M. Rajkumar	Department of Environmental Sciences, Bharathiar University, Coimbatore, Tamil Nadu.

Invited Speakers



Dr. S. Sankaran

Ex-Chief Scientist and Head of Environmental Geophysics Division, Advisor, CSIR-National Geophysical Research Institute (CSIR-NGRI), Hyderabad, Telangana.



Dr. S. Ganapathy Venkata Subramanian

Professor, Centre For Environmental Studies, Anna University, Chennai, Tamil Nadu.



Dr. N. Parthasarathy

Professor, Department of Ecology and Environmental Sciences, School of Life Sciences, Pondicherry University, Puducherry.



Dr. K. Arunkumar

Associate Professor, Department of Plant Science, School of Biological Science, Central University of Kerala, Kasaragod, Kerala.



Dr. P. Duraimurugan

Senior Scientist, Indian Institute of oil Seeds Research, Rajendranagar, Hyderabad, Telangana.



Dr. T. Venkatesan

Principal Scientist, Division of Molecular Entomology, ICAR-National Bureau of Agricultural Insect Resources, Bangalore, Karnataka.

FESA - 2016 : At a glance



Address for Communication

Dr. A. Maruthupandian

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Registration Form

2nd National Conference on
**FRONTIERS IN ECOBIOLOGICAL SCIENCES
AND ITS APPLICATIONS (FESA - 2017)**

Theme : Environmental Security

School of Life Sciences

Periyar University

Re-accredited with 'A' Grade by NAAC

Periyar Palkalai Nagar, Salem – 636 011, Tamil Nadu, India.

March 16 & 17 - 2017

Name :

Designation :

Organization / Company :

Address :

Telephone/Mobile :

E – mail :

Registration fee details

Amount (₹) :

DD / DBT-NEFT Number :

Name of the Bank :

Date :

The duly filled registration form may be sent along with the registration fee by non-refundable Demand Draft (DD) in favour of Organizing Secretary, FESA - 2017, School of Life Sciences, Periyar University payable at Salem, Tamil Nadu or Direct Bank Transfer (DBT / NEFT / RTGS) to Organizing Secretary, FESA - 2017, School of Life Sciences, Periyar University A/c No. 8450101005345, IFSC Code: CNRB0008450, CANARA BANK. Kindly send scanned copy of your online fees receipt to the respective email ID to confirm your registration.

Date:

Signature

For further information – fesasls2017@gmail.com

Dr. A. Maruthupandian

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(Photocopies of Registration forms are also accepted)