

Program Details

Resource Persons	Contents/ Statistical Tools to be covered
Dr. P. Muthukrishnan Associate Professor Department of Statistics Bharathiar University Coimbatore – 641 046	• R Statistics - Software - Data visualization (Data Inputs and Outputs) • Descriptive Statistics (Mean, Standard Deviation, Standard Error, Variance, Coefficient of Variation) • Correlation and Regression (Simple – Multiple, Linear-Nonlinear) • Parametric Tests: T Tests (Paired – unpaired) ANOVA (One way, Two Way, Three Way/ Multiple) • Non Parametric Tests: Chi Square Test, Kruskal Wallis Test, Mann Whitney U Test • Multiple Comparison Tests • Principle Component Analysis (PCA). • Diversity Indices
Dr. R. Nagarajan Associate Professor Department of Zoology and Wildlife Biology A.V.C. College (Autonomous), Mannampandal, Mayiladuthurai - 609 305	

Organizing Committee

Patron	Prof. Dr. C. SWAMINATHAN Hon'ble Vice-Chancellor Periyar University
Chairman	Dr. M. MANIVANNAN The Registrar Periyar University
Convener	Dr. K. MURUGESAN Professor and Head Department of Environmental Science Periyar University
Organizing Secretary	Dr. P. JAYANTHI Assistant Professor Department of Environmental Science Periyar University
Organizing Committee Members	Dr. S. VENKATESAN Associate Professor Dr. P. THANGAVEL Dr. L. SIVAKUMAR Dr. P. SENTHILKUMAR Assistant Professors Department of Environmental Science Periyar University

Registration Form

Hands on Training in

R Statistical Tools for Life Science Researchers

January 21 & 22, 2016

Name (in Block Letters) : Dr/Mr/Ms.

Designation :

Institution :

Address :

Telephone/Mobile :

E – Mail :

Registration fee details

Amount :

OnlineTransfer ID / DD number :

Name of the Bank :

Date :

Mode of Payment: The DD should be drawn in favour of 'The Head, Department of Environmental Science, Periyar University' payable at Salem, Tamil Nadu, India or Direct Bank Transfer to The Head, Department of Environmental Science, Periyar University A/c No. 8450101002661, IFSC Code: CNRB0008450, CANARA BANK

Date : Signature

For Further Informations Contact

Dr. P. Jayanthi
 Organizing Secretary
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 Periyar University, Salem, Tamil Nadu, India.
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(Photocopies of Registration forms are also accepted)



Hands on Training
in

R Statistical Tools for Life Science Researchers

January 21 & 22, 2016



Organized by

Department of Environmental Science
 School of Life Sciences
 Periyar University

Re-accredited with 'A' Grade by NAAC

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

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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 the NAAC with a CGPA of 3.15 in a four point scale. At present, the University has five Science schools and three Arts schools comprising 25 Departments which offer 26 P.G programmes and 24 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, 92 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 its affiliated colleges.

About the Department

The Department of Environmental Science (School of Life Sciences) was created in 2011 with the aim of providing innovative knowledge and awareness to the students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. The Department has established well equipped laboratory to gain more practical knowledge. On behalf of PENGREEN (Periyar University Environmental Science Association), the Department has conducted National seminars, special

lecture series, lecture cum demonstration programmes with advanced equipments in collaboration with Tamil Nadu Pollution Control Board (TNPCB) and industrial visits which strengthened the students' views and knowledge in various environmental issues. Also, the postgraduate students and research scholars in Environmental Science in this University get an exposure to varied subjects such as Biodiversity and Conservation, Environmental Biotechnology and Microbiology, Environmental Impact Assessment (EIA) and Disaster Management, Remote Sensing and GIS, Global Climate Change Issues and Conservation of Natural Resources. The Department is striving for industry partnership and collaboration with Foreign Universities, which enable the students and scholars to have direct exposure to industrial careers through internships, scholarships and fellowships.

About the Training:

Statistics have proven to be an invaluable tool in modern biological history. Biological studies often involve studying extremely small microbes and its microscopic properties to larger biodiversity studies, scaling from molecular analysis, laboratory based analytical works to species surveys and field works. Putting the data sets of extensive research work into statistical form and inferring valuable information from then becomes very crucial.

Basic statistical concepts help biologists correctly prepare experiments, verify conclusions and properly interpret results. Many biology courses of study require a course in biostatistics that covers such concepts as randomized trials, hypothesis testing and the use of statistical software. So far we have been practiced to use various types of Softwares (SPSS, MATLAB, Python etc.,) for interpreting our datasets. At this juncture, R statistics - Recently developed tool for statistical applications proves to be more robust; user friendly and freely available software catering to all our statistical application needs.

In line with this context, this hands on training program aims to introduce, train and to provide, a real time working experience in R program to the young researchers and

academicians involved in length and breadth of life science research. Extreme focus will be given to the participants to understand the core theme of applying appropriate statistical tool for their datasets.

Specific statistical data analyses requirements for Ph.D scholars will also be addressed individually. We strongly believe that this hands on training program will be extremely useful in understanding the biostatistical tools and their applications and will drive out the fear of statistics for life science researchers.

Participants

Academicians/Scientists/Research Scholars and PG Students of all life science courses such as Environmental Science, Botany, Zoology, Microbiology, Biotechnology, Biochemistry, Food Science and other relevant courses having crucial need/requirements of statistical tools for their research outputs.

Registration

The duly filled registration form may be sent along with the registration fee by non-refundable Demand Draft (DD) in favor of The Head, Department of Environmental Science, Periyar University payable at Salem, Tamil Nadu or through Online Bank Transfer (The Head, Department of Environmental Science, Periyar University A/c No. 8450101002661, IFSC Code: CNRB0008450 CANARA BANK)

Participant	Registration fee	Last Date for Registration
Faculty, Scientists & Delegates	Rs. 300/-	January 19, 2016
Students & Research Scholars	Rs. 200/-	

Important Note:

- The number of Participants is restricted to 50 on first come first serve basis for effective interaction and training.
- Accommodation will be arranged based on request on charge basis.
- Registration fee include working lunch & refreshments for both days.