



PERKINELMER STA 8000 enables real-time measurement and analysis of sample weight change and heat flow in one compact lab instrument with innovative sensor technology and compact furnace design. Applications from the TGA/DTG includes: Compositional analysis, decomposition temperatures, oxidative and thermal stabilities. Applications from the DTA/DSC include melting and crystallization behaviour, glass transition temperatures, kinetic studies, transition and reaction enthalpies.



PERKINELMER CHNS ELEMENTAL ANALYSER is a proven instrument for the rapid determination of the Carbon, Hydrogen, Nitrogen, Sulphur content in organic and other types of materials with capability of handling a wide variety of sample types in the field of polymers, chemicals, pharmaceuticals environmental (C/N ratio in soil) and energy (C/H ratio of fuels) including solids liquids and semi viscous types.



## Central Laboratory for Instrumentation and Facilitation University of Kerala

Central Laboratory for Instrumentation and Facilitation at Karyavattom Campus is a new and exciting initiative by University of Kerala established in 2016 to strengthen technological infrastructure to carry out advanced research in various science disciplines under one roof. We encouraged the research community to have innovative ideas and enhanced an interdisciplinary research by providing guidance for analysis of data and train in operation of sophisticated instruments. The Centre represents one of the largest commitments for research in the history of the university to carry forward decades of research into new realms of application and discovery. CLIF houses various sophisticated instruments which can be used by researchers and industries on payment basis. The Centre has been acknowledged in various international publications. CLIF provides an opportunity to get hands-on training in sophisticated instruments through its internship programmes.

### CONTACT DETAILS

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**UNIVERSITY OF KERALA**

**TWO DAY NATIONAL**

**WORKSHOP ON**

**CHNS ANALYSER**

**AND**

**SIMULTANEOUS THERMAL  
ANALYSER (TGA-DTA-DSC)**

**17<sup>th</sup> -18<sup>th</sup> December, 2019**

**Venue: CLIF, Kariavattom Campus**



**ORGANISED BY**

**CENTRAL LABORATORY FOR  
INSTRUMENTATION AND FACILITATION**



Central Laboratory for Instrumentation and Facilitation, University of Kerala is organizing a “Two day National workshop on CHNS Analyser And Simultaneous Thermal Analyser (TGA-DTA-DSC)” on December 17 and 18 of 2019. This workshop aims to cover recent progress in the area as well as introducing the PerkinElmer CHNS Analyser and TGA-DTA-DSC.

This event is expected to be an open platform for research students, Teachers and academicians to interact and utilize the facility to its optimum output.

The applicants are requested to go through the registration process mentioned below.

## Registration

Interested candidates shall confirm their participation by register in link <https://kusicc.ac.in/events/chns/> on or before 11.12.2019. Confirmation will be sent by 12.12.2019. Seats are limited to 20, providing as per “FIRST COME FIRST SERVE “basis. Kindly register soon.

## Registration Fee and Mode of Payment

University Department Students/Teachers : Rs. 500/-

Other Participants : Rs. 1000/-

The registration fee shall be paid in “Registration and Material Distribution” session on day 1.

## Coordination Committee

1. Dr. G Prasad, Hon. Director, CLIF, University of Kerala
2. Mr. Aneesh Mohamed A S, Instrumentation Engineer, CLIF, University of Kerala
3. Mrs. Beena L, Administrative Officer
4. Mr. Vishnu G, Technical Officer, CLIF
5. Ms. Arya Senan M C, Technical Assistant, CLIF
6. All technical and Administrative staffs, CLIF

## Programme Schedule

### Day -1 (17/12/2019)

- 9.30-10.00 - Registration and Material Distribution  
10.00 - Welcome & brief introduction of CLIF  
**Dr. G Prasad, Hon. Director, CLIF**  
**University of Kerala**
- 10.20 - Workshop Inauguration  
**Dr. Ajayakumar P P, Pro. Vice Chancellor**  
**University of Kerala**
- 10.30-10.45 - Tea Break
- 10.45-12.00 - Principle and Instrumentation of CHNS ANALYSER  
**Ms. Vijaya Jyothi, Product specialist, PERKINELMER**  
**Mr. Jagadish Naidu, General Manager Spectroscopy, PERKINELMER**
- 12.00-12.45 - Lecture on ELEMENTAL ANALYSIS  
**Dr. Mahesh Hariharan, Associate Professor (Chemistry), IISER TVM**
- 12.45-1.45 - Lunch Break
- 1.45- 3.45 - CHNS Analyser Lab session and EA-2400 DATA MANAGER Software Handling  
**Mr. Harishankar, Senior Field Support Manager PERKINELMER**  
**Mr. ArunKumar, Service Engineer PERKINELMER**
- 3.45-4.00 - Tea Break
- 4.00-4.45 - CHN-Environmental Applications  
**Ms. Niyathi Vijay, Research Scholar.**  
**Dept. of Environmental Sciences, University of Kerala**

### Day -2 (18/12/2019)

- 10.00-10.45 - Introduction to Thermal Analysis  
**Dr. Suneesh C V, Assistant Professor, Dept. of Chemistry, University of Kerala**
- 10.45-11.00 - Tea Break
- 11.00-12.30 - Principle and Instrumentation of Simultaneous Thermal Analyser  
**Ms. Vijaya Jyothi, Product specialist PERKINELMER**  
**Mr. Jagadish Naidu, General Manager Spectroscopy, PERKINELMER**
- 12.30-1.30 - Lunch Break
- 1.30-3.00 - Simultaneous Thermal Analyser Lab session and PYRIS MANAGER Software Handling  
**Mr. Harishankar, Senior Field Support Manager PERKINELMER**  
**Mr. ArunKumar, Service Engineer PERKINELMER**
- 3.00-3.15 - Tea Break
- 3.15-4.00 - TGA and DSC for the characterization of Rubber for Automobile Applications  
**Mr. Sudheer B, Assistant Professor Dept. of Chemistry, Govt College Kariavattom**
- 4.00-4.45 - CLIF LAB VISIT
- 4.45-5.00 - Feedback form filling and Certificate distribution
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- For queries mail us in [siccuok@gmail.com](mailto:siccuok@gmail.com) with CHNS workshop as Subject.  
Contact Person- Ms. Arya Senan M C, 8301058757