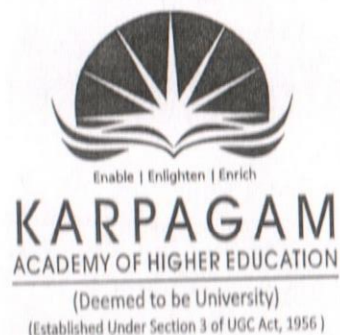


9<sup>th</sup> National Workshop On  
"INTERPRETATION OF SPECTRAL DATA AND  
IDENTIFICATION OF  
PHYTOCONSTITUENTS"  
26<sup>th</sup> & 27<sup>th</sup> SEPTEMBER 2018

Organized by  
DEPARTMENT OF CHEMISTRY



KARPAGAM ACADEMY OF HIGHER EDUCATION  
(Deemed to be University)  
(Established under section 3 of UGC Act 1956)  
Eachanari Post, Pollachi Main Road  
Coimbatore – 641 021, Tamil Nadu, India

Phone : +91-422-2980011-15.

Fax : +91-422-2980022, 2980023.

Email: [info@karpagam.com](mailto:info@karpagam.com)/ Web : <http://kahedu.edu.in>

### About –Karpagam Academy of Higher Education

The Karpagam Academy of Higher Education is located in a sprawling, green, lush campus extending 26 acres. It has emerged from Karpagam Arts & Science College (Autonomous) a unit under the Karpagam Charity Trust established in 1989 founded by the great philanthropist, industrialist and educationist Dr.R.Vasanthakumar with the vision of instilling originality in the learning minds, impart quality and value-based education and engage in Research and Development with the noble objective of creating unique men and women to serve and lead the society.

Karpagam Academy of Higher Education (KAHE) was conferred Deemed to be University status by the Ministry of Human Resource Development in August 2008 under section 3 of the UGC Act 1956. It is a recognised Deemed University by the UGC. It is a member of the Association of Indian Universities. The KAHE has been accredited by the NAAC in 2015. It has been Ranked 120<sup>th</sup> place by NIRF, MHRD and Government of India in 2018.

The KAHE has 4 Faculty - Faculty of Arts, Science and Humanities, Faculty of Engineering, Faculty of Architecture and Faculty of Pharmacy. It has 25 Departments offering a wide range of 78 academic programmes from graduation to doctorate levels. The KAHE has more than 5,000 students on campus, with a strong contingent of more than 350 teaching faculty, well supported by an almost equal number of administrative and support staff. Faculty have got good number of research projects with financial support from various funding agencies like DBT / DST / ICMR and have filed more than 65 patents. As many as 2002 Research papers have been published by our faculty in SCOPUS and Peer Reviewed Journals. The KAHE has entered collaboration with foreign Universities, Industries, and Research bodies for mutual benefit. The Institute ensures that education epitomizes excellence in every sphere and students are prepared to take on the challenges of the day and become the next generation leaders.

### DEPARTMENT OF CHEMISTRY

The Department is running Undergraduate (UG), Postgraduate (PG), M.Phil. and Ph.D. programmes. The Department is equipped with sophisticated

instruments like UV-Visible spectrometer, IR Spectrometer, Gas Chromatographic analyzer, Microwave oven, etc. The main objective of the department is to impart knowledge among the students in basic areas of Chemistry. Apart from the core papers knowledge about the latest trends in Chemistry including Green Chemistry, Medicinal Chemistry, Nano Chemistry are also included in the regular curriculum. Further the Department provides training to the students in the sophisticated instruments like UV-Visible, IR Spectrometer, Gas Chromatography, Microwave synthesizer, etc. to the Undergraduate and Postgraduate students to fit them to Industries and to research organizations like CSIR, DAE, etc.

### About the Workshop

The Department of Chemistry at KAHE invites students and Faculty members in Coimbatore and surrounding regions to join this workshop Programme. Also this workshop will focus on the emerging trends on the interpretation of spectral data and identification of phytoconstituents.

Some of the emerging analytical techniques being used in the pharmaceutical and chemical industries are IR, 2D NMR and Mass spectral techniques. In order to fully prepare students for future employment, it is important to train the students on IR, 2D NMR and Mass spectral techniques.

This workshop will provide the students/researchers with a systematic guidance to find the structural information from the IR/NMR/MS spectra of unknown compounds.

### Proceeding of the workshop

A brief introduction will be given on the basic and elementary instrumental techniques of IR/NMR/MS. This is followed by instructional strategy and tactical advice on this workshop will be translation of spectra into meaningful structural information. Also it will provide the student with several spectra of complexity. These are designed to challenge the student's problem-solving abilities by the introduction of new concepts with each group of problems, followed by possible solutions and full explanations.



## Thrust areas of the Workshop

1. FT-IR Spectral data
2.  $^1\text{H}$ -NMR and  $^{13}\text{C}$ - NMR spectral data (1D and 2D data)
3. DEPT, SEFT and INEPT Techniques
4. HSQC/HMQC data
5. HOMO COSY and HETERO COSY data
6. NOESY and HMBC data
7. Mass Spectral data
  - a. EIMS, FAB, MALDI techniques
  - b. ESI-MS/APCI-MS

## Participation

UG/PG students, Research Scholars, Faculty Members, Industrial Persons and Scientists.

## Venue

The workshop will be held at KAHE, Pollachi Main Road, Eachanari Post, Coimbatore – 641 021, which is about 10 km from Coimbatore on Coimbatore – Pollachi Main Road.

## Registration fee

**For all delegates: Rs. 400/-**

The registration form, along with a crossed DD towards registration fee, drawn in favour of "Karpagam Academy of Higher Education", payable at Coimbatore, may be sent to:

## The Convener

9<sup>th</sup> National workshop on "Interpretation of spectral data and identification of phytoconstituents"  
Department of Chemistry,  
Karpagam Academy of Higher Education,  
Pollachi Main Road, Eachanari Post,  
Coimbatore-641 021, Tamil Nadu, India.  
E-mail : chemistry.hod@kahedu.edu.in  
Mobile: +91 9047174142

## ORGANIZING COMMITTEE

### CHIEF PATRON

**Dr. R. VASANTHAKUMAR**  
President, Karpagam Educational Institutions,  
Coimbatore-641 021.

### PATRONS

**Shri. K. MURUGAIAH**  
Chief Executive Officer  
Karpagam Educational Institutions, Coimbatore-641 021.

**Dr. S. SUDALAIMUTHU**  
Vice Chancellor, KAHE,  
Coimbatore-641 021.

**Dr. R. SUNDARARAJAN**  
Registrar, KAHE,  
Coimbatore-641 021.

**Dr. M. PALANISWAMY**  
Dean (FASH), KAHE,  
Coimbatore-641 021.

### INVITED SPEAKER

**Dr. S. MUTHUSUBRAMANIAN**  
CSIR- Emeritus Professor,  
Department of Organic Chemistry,  
School of Chemistry, Madurai Kamaraj University,  
Madurai - 625 021.

### CONVENER

**Dr. S. RAVI**  
Professor & Head, Department of Chemistry, KAHE,  
Coimbatore-641 021.

### ORGANIZING SECRETARY

**Dr. A. THANGAMANI**  
Assistant Professor, Department of Chemistry, KAHE,  
Coimbatore-641 021.

### ORGANIZING MEMBERS

**Dr. M. R. EZHILARASI**, Assistant Professor  
**Dr. K. SUNDARAM**, Assistant Professor  
**Dr. M. MAKESWARI**, Assistant Professor  
**Ms. B. PRABHA**, Assistant Professor  
**Mr. R. KUMAR**, Assistant Professor  
**Mrs. H. REVATHI**, Assistant Professor  
**Dr. M. GOPALAKRISHNAN**, Assistant Professor  
**Dr. G. AYYANNAN**, Assistant Professor  
**Ms. K. SATHYA**, Assistant Professor  
**Dr. K. MANICKASUNDARAM**, Assistant Professor  
**Dr. E. KARTHIKEYAN**, Assistant Professor

## REGISTRATION FORM

9<sup>th</sup> National Workshop On  
"INTERPRETATION OF SPECTRAL DATA  
AND IDENTIFICATION OF  
PHYTOCONSTITUENTS"  
26<sup>th</sup> & 27<sup>th</sup> SEPTEMBER 2018

Name :

Designation :

Institutional Address :

Residential Address :  
(Mobile and E-mail)

Registration fee enclosed: Yes / No

DD No. and Date :

Amount : Rs.

Name of the Bank :

Accommodation  
Required : Yes /No

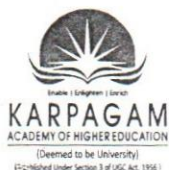
Date :

Place:

(Photostat copies of the Registration form are also accepted)

Signature





**KARPAGAM ACADEMY OF HIGHER EDUCATION**

(Deemed to be University)

(Established Under Section 3 of UGC Act, 1956)

Coimbatore-641 021, Tamilnadu, India.

**DEPARTMENT OF CHEMISTRY**

*Cordially Invites You For The*

*9<sup>th</sup> National Workshop*

*on*

**"INTERPRETATION OF SPECTRAL  
DATA AND IDENTIFICATION OF  
PHYTOCONSTITUENTS"**

**26<sup>th</sup> & 27<sup>th</sup> September, 2018**

**Dr. S. Sudalaimuthu**

*Vice Chancellor*

**Presides**

**Dr. S. Muthusubramanian**

*CSIR-Emeritus Professor*

*Department of Organic Chemistry*

*School of Chemistry*

*Madurai Kamaraj University, Madurai*

**Inaugurates**

**Dr. S. Ravi**

*Professor & Head*

*Department of Chemistry*



**Venue : Bharathi Hall, Sivam Block**



**Time : 10.00 a.m.**

## **PROGRAMME**

Prayer : **Ms. S. Anusha**

Welcome Address : **Dr. S. Ravi**  
Professor & Head  
Department of Chemistry  
Karpagam Academy of Higher Education  
Coimbatore

*Lighting the Bhadradeepam*

Presidential Address : **Dr. S. Sudalaimuthu**  
Vice Chancellor  
Karpagam Academy of Higher Education  
Coimbatore

Inaugural Address : **Dr. S. Muthusubramanian**  
CSIR-Emeritus Professor  
Department of Organic Chemistry  
School of Chemistry  
Madurai Kamaraj University, Madurai

Felicitation : **Dr. M. Palaniswamy**  
Dean-FASH  
Karpagam Academy of Higher Education  
Coimbatore

**KARPAGAM ACADEMY OF HIGHER EDUCATION  
COIMBATORE-21  
DEPARTMENT OF CHEMISTRY**

**A brief Report on the workshop Programme entitled "Interpretation of spectral data and identification of phytoconstituents" conducted on 26<sup>th</sup> & 27<sup>th</sup> of September 2018, for the 9<sup>th</sup> year in Karpagam Academy of Higher Education.**

Department of Chemistry has organized a workshop Programme on "Interpretation of spectral data and identification of phytoconstituents" on 26<sup>th</sup> & 27<sup>th</sup> of September 2018 for the 9<sup>th</sup> year. About 156 participants have participated in the workshop from different Educational Institutions. (Annexure-1). The programme was conducted in the Bharathi Hall, Karpagam Academy of Higher Education (10.00 am. to 4.00 pm.) on 26<sup>th</sup> & 27<sup>th</sup> of September 2018. The inaugural address was given by **Dr. S.Muthusubramanian, CSIR-Emeritus Scientist, Madurai Kamaraj University, Madurai**. Then he gave a talk on the recent trends in the spectroscopic techniques. Then workshop was handled by **Dr.S.Ravi, Professor & Head, Department of Chemistry, Karpagam Academy of Higher Education, Coimbatore**.

The following trust areas were covered in two days Workshop Programme.

1. IR spectral data
2. <sup>1</sup>H-NMR and <sup>13</sup>C- NMR spectral data ( 1D and 2D- data)
3. DEPT, SEFT and INEPT Techniques
4. HSQC/HMQC data
5. Homo COSY and Hetero COSY data.
6. NOESY and HMBC data
7. Mass Spectral data
  - a. EIMS, FAB, MALDI techniques
  - b. ESI-MS/APCI-MS
  - c. GC-MS, LC-MS/MS data.

All the Faculty members, Research Scholars and Students were involved in forming the Committees to look into the various meticulous aspects of the workshop.

The participants were provided with a Workshop Manual which contains the important notes and features of the above said spectroscopy, examples of Spectra for interpretation and problems to work out during the programme. In addition to that a workshop kit which consists of a file cover, note pad, and pen was provided to facilitate the participants in the programme. Lunch and refreshments were also provided on both the days. There was an active interaction

between the speakers and the participants. The participants worked out many spectral problems in the workshop. There were few video shows also in the programme. The programme went on well both the days.