

WORKSHOP ON THERMAL & ELEMENTAL ANALYSIS OF SOLIDS 21ST DECEMBER 2015

THERMAL GRAVIMETRIC ANALYSIS

TGA is the best tool to find the proximate analysis of any solid materials. Other than fuel samples it can also be used to find the thermal characteristics of any solid materials. This kind of information is highly required for fuel/material research and also for industrial applications such as compositional analysis of materials, rate of degradation, product lifetime, oxidative stability, evaluation of polymer flammabilities, thermal stabilities, and competitive product evaluation.

DIFFERENTIAL SCANNING CALORIMETRY

DSC is a thermo analytical technique in which difference in the amount of heat required to increase the temperature of a sample and reference is measured as a function of temperature. Generally the temperature program for a DSC analysis is designed such that the sample holder temperature increases linearly as a function of time. Application of DSC includes detection of impurity, study of polymorphism, degree of crystallinity, study of phase diagram, drug excipient compatibility study.

CHNS/O ANALYSER

Elemental composition is highly required to find the energy content of the material and safe disposal of waste with respect to environment. Polymers, organic or inorganic chemicals, metals, semiconductors, metals and other common class of materials can be characterized.



About NIT Trichy

The National Institute of Technology (Formerly known as Regional Engineering College) Tiruchirappalli, situated in the heart of Tamil Nadu, was started as a joint and co-operative venture of the Government of India and the Government of Tamil Nadu in 1964 with a view to catering needs of man-power in technology for the country. The institute aims to provide valuable resources for industry and society through excellence in technical education and research

About CEESAT

Centre for Energy & Environmental Science and Technology (CEESAT), established in 1997 is among the premier research centre engaged in exploring the various energy opportunities in the country and transformed into Department of Energy & Environment (DEE). The department aims in providing energy efficient technology to industry as well as to the domestic sector. Emphasis is given to the identification of appropriate technologies for the efficient production, distribution and use of energy

WORKSHOP ON SPECTROSCOPIC ANALYSIS OF SOLID AND LIQUID SAMPLES

22ND DECEMBER 2015

FOURIER TRANSFORM INFRARED SPECTROSCOPY

FTIR spectrometers (Fourier Transform Infrared Spectrometer) are widely used in organic synthesis, polymer science, pharmaceutical industry, polymer dielectrics, inorganic thin films, descuming, patterning, photo litho metallization, plasma etching, petrochemical engineering, sputtering, food analysis and rapid qualification of nutraceuticals.



UV/VIS/NIR SPECTROSCOPY

Double-beam, double-monochromator design provides the highest stability coupled with the highest accuracy. Extension of the measurement range into the Near-IR region provides richer and complementary spectral information for compounds and materials. Integrating spheres, in combination with UV/Vis/NIR spectrophotometers are versatile accessories for reflectance and scattered transmittance measurements for solid or liquid. Application areas range from surface characterization of solids to the photometric analysis of turbid, colloidal, transparent and translucent samples. Typical uses encompass quality assurance testing and product development measurements on textiles, dyes, paper and glass. Also used to test total solar reflectance of paint panels.

PROGRAM DETAILS

Sessions will be handled by experts from leading institutes and Industrial persons. Theoretical sessions will be followed by demonstration of the instruments.

HOW TO REGISTER

Candidates to submit application along with DD to the following address before 15th December 2015

Dr.M.Premalatha

HOD

Department of Energy and Environment
National Institute of Technology, Trichy – 620 015.

Eligibility

Persons from Industries, academic and research institutions are eligible.

FOR DETAILS

email : solarajnitt@gmail.com

Ph No: 99436 99952

Application form available in nitt.edu

Accommodation not available

Registration Fee for Each Program

Rs. 300 - Research scholars & Teaching Staff

Rs. 500 -Industrial Participants

Registration fee must be paid in the form of DD in favour of "The Director, NIT Trichy" payable at SBI, NIT, Trichy.

REGISTRATION FORM

Workshop on

THERMAL & ELEMENTAL ANALYSIS OF SOLIDS

21ST DECEMBER 2015

Name:

Qualification:

Designation:

Department:

Organization:

Application (Sample Details):

Phone:

Email:

Declaration by the applicant:

The above mentioned information is true to the best of my knowledge and belief. I shall attend the course for the entire duration.

Signature of the Applicant

Signature from Head of the Institute with Seal

Place:

Date:

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Workshop on

SPECTROSCOPIC ANALYSIS OF SOLID AND LIQUID SAMPLES

22ND DECEMBER 2015

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