

National Level
SHORT TERM TRAINING PROGRAMME
ON
Advances in Chemical Analysis (ACA-2015)
July 6-10, 2015



Sponsored by
TEQIP-II

PRINCIPAL COORDINATOR
Dr. (Mrs.) Fahmida Khan
Professor & Head

CO-ORDINATORS
Dr. Santhosh Penta Dr. S.P. Mahapatra



ORGANIZED BY
Department of Chemistry
National Institute of Technology
Raipur (C.G.) - 492 010, INDIA

About the Institute



National Institute of Technology, Raipur (Formerly Government Engineering College Raipur), situated in the capital of a newly incepted state of Chhattisgarh, has proven to be 'avant-grade' in the field of science and

technology over past few decades in this region. With sweet memory of foundation ceremony by former president Hon'ble Dr. Rajendra Prasad on 14th September 1956. The institute started with two departments namely Metallurgical and Mining Engineering. Later the inauguration of the Institute building was done by our Prime Minister Hon'ble Pt. Jawahar Lal Nehru on 14th March 1963. From 1st December 2005, the institute has become the National Institute of Technology. It is well connected with Mumbai, Delhi, Hyderabad, Kolkata, Bhopal, Ahmedabad, Bangalore, Chennai and Chandigarh by regular flights and railway route.

About Department

Department of Chemistry came in existence since 1956. The department provides an outstanding research environment and offers academic program leading to the award of Ph.D. degree. Apart from this, department taking care of all 1st year B.Tech branches and training them in basic fundamentals of applied chemistry, Environment & Ecology, Physical & organic chemistry (IV Sem) and Geochemistry practicals (M.Tech)

Introduction

"Chemistry is the centre of science". Indeed, chemistry is associated with other fields of science and is known to have numerous applications. Basic and applied aspects of science are dealt in chemistry. Recently the application of chemistry has gained so much importance and scientific studies have focused in this direction. The application of chemistry to other sciences also has been increased remarkably.

Analytical chemistry is the field of chemistry that deals with the fractionation, isolation, and identification of the chemical constituents present in a sample. The identification can be qualitative (nature of the component) or quantitative (precise amount of the component), or both.

Modern analytical chemistry is dominated by instrumental analysis. Many analytical chemists focus on a single type of instrument. Academics tend to either focus on new

applications and discoveries or on new methods of analysis is backbone of chemistry.

Analytical Chemistry includes Material chemistry, Pharmaceutical Chemistry, Biochemistry, Forensic chemistry, Environmental Chemistry, Organic Chemistry and Inorganic chemistry, etc..

For example, the discovery of a chemical present in blood that increases the risk of cancer would be a discovery that an analytical chemist must have been involved in it. Many methods, once developed, are kept purposely static so that data can be compared over long periods of time. This is particularly true in industrial quality assurance (QA), forensic and environmental applications.

Newer analytical methods include spectroscopy (Ultraviolet, Infrared, Nuclear magnetic resonance, Atomic absorption, Fluorescence, etc.) and chromatography (thin layer chromatography, gas chromatography, high pressure liquid chromatography, electrophoresis, etc.), with refinements that allow ever smaller samples to be analyzed. Other methods include diffraction studies (Single Crystal X-ray and Powder Xrd) and SEM, TEM etc. Analytical chemistry has played critical roles in the understanding of basic science to a variety of practical applications in our day to day life such as biomedical applications, environmental monitoring, quality control of industrial manufacturing, forensic science and so on.

Objective

The objective of this program is to train the faculty members, research scholars, young scientists, and post graduates students of various organizations. The objectives of workshop is to provide a platform for interaction and exchange of ideas in the field of Advanced Chemical Analysis & applications from national academic institutes, research laboratories, and industries. This workshop involves invited lectures by distinguished experts in the field of Advanced Chemical Analysis.

Venue

E-Class Room
NIT Raipur (CG) – 492 010, INDIA

Objectives:

- To highlight the current advances in the fields of Chemical Analysis.
- To discuss recent developments on analytical techniques.
- To provide a common platform for the interaction of academic and industrial researchers.
- To provide a knowledge about the various applications of Characterization techniques.

Topics to be covered:

- Advances in the Chemical Analysis: characterization and its applications.
- Current information about Analytical Techniques.
- Characterization techniques of various complex materials.
- Important basic principles that cover basic analytical instrumentation techniques.

IMPORTANT DATES

Last date of receipt of application: 01.07.2015
Notification about confirmation (By Email): 03.07.2015

Eligibility

Participation in this Short Term Training Programme (STTP) is open to the Faculty members, Research scholars, and Post graduate students of Science and Engineering streams. It is also open to the Chemists and Scientists who are working in the R&D organizations, industry and who wish to gain basic understanding of the Advanced Chemical Analysis and their applications.

Selection

Since the number of seats are limited to 30, the selection will be made on first cum first basis and intimation will be sent to the candidates by email as per the schedule. Certificates will be issued to the participants only after attending the complete course. Accommodation may be provided on payment basis in institute hostels of NIT provided request is made in the registration form.

CHIEF PATRON
Prof. Sudarshan Tiwari
Director, NIT Raipur

PATRON
Dr. S. Sanyal
Dean Research and Consultancy, NIT Raipur

Address for Correspondence

Coordinators
Dr. Santhosh Penta
spenta.che@nitrr.ac.in
91-8305654728

Dr. S.P. Mahapatra
om_spm@yahoo.com
91-9098411198

ORGANIZING COMMITTEE

Prof. P.Y. Dhekne, Registrar, NIT Raipur
Dr. Kavita Tapadia, NIT Raipur
Dr. T.Maharana, NIT Raipur
Dr. Kafeel A. Siddiqui
Dr. Sonalika Agrawal, NIT Raipur
Dr. Arti Rastogi, NIT Raipur
Mr. Vipin Soni, NIT Raipur

REGISTRATION FEE

For Industry Delegates	Rs. 2000/-
For Faculty members	Rs. 1500/-
For Students / Research Scholars	Rs. 1000/-
<u>[D.D in favor of Director NIT Raipur, Payable at SBI, GCET Raipur]</u>	

Note:

- (i) Only Breakfast, Lunch and Tea will be provided.
- (ii) Fee is non-refundable.

REGISTRATION FORM

National Level
Short Term Training Programme
On
“Advances in Chemical Analysis”
(ACA-2015)
July 6-10, 2015
Sponsored by
TEQIP-II
Organized by
Department of Chemistry
NIT, Raipur

Full Name (Block Letter):

Name of College/Institution/Organization:

Qualification:

Designation:

Address:

Pin code:

Phone No.:

Mobile No.:

E-mail:

Do you need accommodation: (Yes/ No):

I have enclosed the registration fee of Rs.....by D.D. No
Dated.....in favour of “**Director, NIT, Raipur**” payable at **SBI, GCET Branch, Raipur**.

Place:

Date:

Signature of the participant

Name:

Duly filled registration form must reach to Department of Chemistry, NIT-Raipur before last date of registration by post/by hand along with registration fee in form of D.D.