

EXCURSION

Dehradun, the capital city of Uttarakhand is a complete blend of city and hill culture and is ideally located for short day trip to several places of tourist interest. It is perhaps one of the oldest cities in India and was occupied in turns by the Sikhs, Mughals and Gurkhas before coming under the reigns of the British. Dehradun is today proud of its having important R&D organizations & educational institutions like IIP, FRI, Doon School, Welham Schools, ONGCL, IMA, WII, WIHG, Survey of India and Botanical Survey of India. Dehradun is well connected to Delhi by Rail, Road and by Two Daily Flights.

Some of the major attractions in and around Dehradun are Sahastra Dhara, Tapkeshwar Temple, Buddha Temple, Prakasheshwar Temple, Lakshman Siddha Temple, Lachhiwala, Museums of IMA/ FRI/ ONGC, Sai-Baba Temple, Mussorie and Kempty Fall. Haridwar and Rishikesh located on the banks of the river Ganges are well known sacred places of worship and pilgrimage.

Special Excursion Trips to above places can be arranged for Delegates and their family members during the weekend on November 21 and 22, 2009, on getting sufficient number of prior requests received up to the first day of seminar.

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IIP GOLDEN JUBILEE CELEBRATIONS

Seminar
on
**ANALYTICAL SCIENCES
IN
ENERGY AND ENVIRONMENT**

November 19 - 20, 2009

at
**INDIAN INSTITUTE OF PETROLEUM
Dehradun**



Organisers

INDIAN INSTITUTE OF PETROLEUM
(Council of Scientific & Industrial Research)
Dehradun

<http://www.iip.res.in>

and

**Indian Society of Analytical Scientists
Delhi Chapter**

<http://www.isasdelhi.org>

PREAMBLE

Today, no other area is attracting as much attention as the Environment and Energy sectors, as both are vital for the sustainable development of society. In order to meet the growing energy demands of the global economy, all sources of energy, including conventional, non-conventional and other forms of renewable energy have to be utilized in the most efficient manner possible.

Analytical sciences play a very dominant role in assessing the outcome of various steps being taken to address the Environment and Energy related issues by way of effective monitoring of the parameters, which are of importance in reaching decisions on environmental protection and control, as well as for the choice of energy source suitable for a society. Protection of the environment continues to present new analytical challenges, as government and regulatory authorities require industry to meet ever tighter environmental standards, and also use the data to develop approaches for sustainable development.

With the aim of highlighting the significance and applications of various analytical techniques in the areas of Energy and Environment, a two-day Seminar having the theme **“Analytical Sciences in Energy and Environment”**, is being organized during November 19 - 20, 2009, in the premises of Indian Institute of Petroleum Dehradun, which is currently celebrating its Golden Jubilee Year. The seminar is being organized jointly by the Delhi Chapter of Indian Society of Analytical Scientists (ISAS) and the Indian Institute of Petroleum.

The seminar will cover the applications of various analytical techniques in the areas of Environment and Energy such as Fossil Fuels, Lubricants, Alternative Energy, Solar Energy, Wind Energy, Biotechnology, Nanotechnology, Lubricants, Catalysts, Petrochemicals, Environmental Regulations and Metrology.

The main emphasis of the seminar will be to assess the major challenges and exciting opportunities that lie ahead in the following analytical techniques :

- Atomic Spectroscopy (ICAP, ICP-MS, AAS)
- Chromatography Techniques (GC, HPLC, GPC, SFC)
- FTIR, FTNIR and Raman Spectroscopy
- NMR (Liquid and Solid), EPR Techniques
- Surface Characterization Techniques
- Light Scattering Techniques
- Mass spectrometry (EIMS, FIMS, FDMS, FAB, CIMS, MALDI)
- Electro-analytical Techniques
- Bio-analytical Techniques
- Microscopy and Imaging Techniques (SEM, TEM,

- Thermal Analytical Techniques (TGA, DSC, DTA, DMA)
- UV-Visible and Fluorescence Spectroscopy
- Hyphenated Techniques (GC-MS, GC-IR, ICP-MS, LC-NMR)
- X-Ray Techniques (XRD, XRF, XPS)
- Radio Analytical Techniques
- Metrology

SCIENTIFIC PROGRAMME

The seminar shall have Ten Invited Lectures by eminent scientists involved in the development of analytical sciences in the areas of Energy and Environment. Besides, there will be 24 oral presentations by young researchers and students in the seminar. Interested researchers are required to submit a one-page abstract of their paper by e-mail to Shri Basant Kumar at bkumar@iip.res.in, latest by October 15, 2009. The abstract shall be evaluated by an Expert Committee, which shall select 24 papers for Oral Presentations and the selected authors will be informed by October 25, 2009. There shall be six Best Oral Paper Awards.

REGISTRATION

Members and non-members may kindly register for the seminar by 15th October and pay in advance the following registration fee :

Life Members : Rs. 600/-, Non-Members: Rs 1000/-, Students : Rs 300/.

The Demand Draft in favour of “ISAS-Delhi Chapter”, payable at Faridabad and may be sent to Dr. G S Kapur, Secretary, ISAS-DC, R&D Centre, IOCL, Faridabad or Sh. Basant Kumar, Convenor, LOC.

ACCOMMODATION

Accommodation will be arranged on request in the Guest Houses /Hotels at concessional rates on payment basis for delegates and their family.

ORGANISERS

ISAS-DC

Indian Society of Analytical Scientists-Delhi Chapter (ISAS-DC) with its Head Office at IndianOil, R&D, Faridabad, is a multidisciplinary body, whose major functions are to organize seminars on various topics on analytical sciences relevant to academics and industry. The society provides a common platform for Analytical Scientists to exchange ideas, keep themselves abreast of

the latest developments in this field, thus promoting growth of analytical sciences in the country. In the past it has organized a series of seminars/workshops (more than 40) on different topics covering major analytical techniques with an emphasis to create awareness about the importance of Analytical Sciences among the students/scholars, academicians, industrialists and instrument suppliers. The latest in the series were 3-days seminar at HP University, Shimla (April, 2007); NMR workshop at Jamia Hamdard, New Delhi (August, 2006); Summer School Workshop on Chromatographic Techniques at Jamia Millia Islamia (September, 2007); Nanotechnology at Jamia Hamdard, Delhi (November, 2007); Application of Analytical Techniques for Biomolecules, Lucknow University (August, 2008); 2nd National Symposium at IHBT, Palampur (November, 2008) and Application of XRF, Delhi (May, 2009). It has strength of ~ 1000 life members from the Northern part of India.

IIP

The Indian Institute of Petroleum (IIP), an institution accredited with ISO-9001 Certification is celebrating 50 years of its existence in the current year as Golden Jubilee Year. It is one of the constituent laboratories of the Council of Scientific and Industrial Research (CSIR), and is dedicated to multi-disciplinary areas of Research and Technology Development in the down stream sector of hydrocarbon and related industry. The Institute has continued its efforts to grow into an internationally renowned R&D organisation, providing quality research and innovative technologies for the national and international market place and to provide technical support to the industry. The institute has developed considerable number of process technologies and implemented know-how for various Refineries / Petrochemical industry of the country. It has won several prestigious National Awards.



FT-IR with Microscope