

**Seminar cum Workshop on**  
**Modern Methods of Chemical**  
**Analysis - Future Trends**  
**[MMCA-2013]**



**November 20-22, 2013**

***Venue:***

**CSIR-National Metallurgical Laboratory, Jamshedpur**



***Organized by:***  
**CSIR-NML, Jamshedpur**  
**In association with**

**Atomic Minerals Directorate for Exploration  
and Research (AMD), Hyderabad**





AMD, Jamshedpur

# Preamble

Rapid developments in structural and component materials used in metallurgical, space, nuclear, biomedical and transport sectors has put up a tremendous demand for the rapid and accurate methods of chemical analysis.

Analytical Chemistry (ANC) Division at CSIR-National Metallurgical Laboratory (CSIR-NML) Jamshedpur, for the last sixty years is shouldering the challenging responsibility of not only developing basic protocols on metals and materials analysis but has also provided yeomen services to the researchers and metallurgical industries with accurate and reliable analytical results. Over the years, ANC Division has also carved out a research niche for itself in the mitigation of water related pollution issues. ANC Division is preparing a range of indigenous Certified Reference Materials (CRMs) of metals, alloys and ores with a competitive and economic price tag, which also serve as import substitutes. ANC division is proud of having a broad range of sophisticated analytical facilities, a quality conventional wet chemical laboratory and a group of qualified, experienced and dedicated personnel under the same roof.

Atomic Minerals Directorate for Exploration and Research (AMD), Department of Atomic Energy (DAE), is the premier institution in exploration of uranium, thorium and other atomic minerals used in the nuclear industry. AMD plays a vital role in the nuclear power programme, both in the front and rear end of the Nuclear Fuel Cycle and it has a network of exploration and research centres located throughout the country and supported by the multi-disciplinary work force comprising of geologists, chemists, physicists, geophysicists and engineers, etc. AMD has seven chemical laboratories with its headquarters at Hyderabad and other regional centres at New Delhi, Jaipur, Nagpur, Jamshedpur, Bangalore and Shillong.

The analytical chemists at AMD during last 55 years have acquired analytical expertise in the field of analytical geochemistry, for over 70 elements, using variety of instrumental techniques like AAS (flame/graphite/ hydride), ICP-OES, ICP-MS, Fluorimetry, Ion-Chromatography, UV-Visible spectrometry, Total organic carbon analyser etc. in chemical characterization of different geological samples. The minerals like Monazite, Xenotime, Zircon, Garnet, Ilmenite, Rutile, Siliminite, Beryl, Niobates and Tantalates have been analysed for U, Th, rare earth elements (La-Lu), Be, Nb, Ta, Ti, Zr etc. for providing excellent analytical support to exploration geoscientists of AMD.

In an effort to harness the strengths of both the laboratories in a complementary mode, Analytical Chemistry Divisions of CSIR-NML and Chemistry Group of AMD have joined hands to organize a Seminar cum Workshop on Modern Methods of Chemical Analysis-Future Trends (MMCA -2013). The primary objective of this event is to bring the fraternity of analytical chemists from industry and academia in the same platform for exchange and dissemination of ideas and to provide a "touch and feel" exposure of sophisticated analytical facilities.

The seminar will broadly focus on :

- Importance of conventional analytical chemistry
- Sample preparation, separation & preconcentration
- Chemical analysis using sophisticated techniques, namely, ICP-OES, ICP-MS, XRF, DRS, AAS, IC, polarography
- Rare Earth Elements (REEs) separation & analysis, and related issues
- Analytical Geochemistry and data interpretation
- Environmental issues and their redressal
- Laboratory accreditation for better product realization and traceability, and
- Safety in analytical chemistry and good laboratory practices.
- Interdisciplinary subject with considerable use of above mentioned equipment(s).

## Date & Venue

MMCA-2013 is scheduled to be held from November 20<sup>th</sup> to 22<sup>nd</sup>, 2013 at CSIR-National Metallurgical Laboratory, Burmamines, Jamshedpur.

## Target Group

Analytical chemists from industry, academia and research institutes.

## Registration

Registration charges will be Rs. 6000/- (Rupees six thousand only) per delegate which will include course material, seminar participation, lunches, dinners and tea during three days of seminar. Charges for research scholars/project fellows/project assistants is Rs. 4000/-. Registration fee should be remitted by DD drawn in favor of MMCA-2013 payable at Jamshedpur.

## Call for Papers

The organizing committee of MMCA-2013 invites you to submit full research papers for oral presentation. All the received papers will be peer reviewed and selected ones will be published in the special issue of the "Journal of the Indian Chemical Society" to be released during the seminar. Some of the selected papers will also be published in "Journal of Metallurgy & Material Science" and "Exploration and Research for Atomic Minerals (EARFAM)". Abstracts of all the papers will be published in the seminar souvenir. Full papers along with the abstracts (maximum 500 words) prepared in MS WORD should be sent electronically by e-mail to [jks@nmlindia.org](mailto:jks@nmlindia.org). The papers should be properly formatted as required by "Journal of the Indian Chemical Society" ([www.indianchemsoc.org](http://www.indianchemsoc.org)). **Last date for submission of full papers is 15<sup>th</sup> July, 2013.**



# About Jamshedpur



Jamshedpur is well connected with all major cities of the country through railways. Air connectivity is available via Kolkata. Alternatively one may arrive at Ranchi by Air and proceed for Jamshedpur on road. For travel plan Convener, MMCA-2013 may be contacted. During third week of November winter just sets in at Jamshedpur with average temperature in between 10°C (Min) to 22°C (Max).

## Accommodation

Registration fee does not include lodging charges which should be separately borne by the participants. Jamshedpur is having good hotels with reasonable charges. Organizing committee can help delegates in hotel reservation on request. Convener may be contacted for more details.

## Advertisement Tariff

A souvenir will be released to commemorate MMCA - 2013. Advertisements in the souvenir are welcome with the tariffs indicated below.

Outside back cover	: Rs. 40,000/-	Inside Front cover	: Rs. 30000/-
Inside back cover	: Rs. 30,000/-	Full page inside	: Rs. 24,000/-
Full page (B/W)	: Rs. 20,000/-		



Certified Reference Materials prepared at CSIR-NML, Jamshedpur

# Organizing Committee

## Patrons :

Dr. S. Srikanth, Director, CSIR-NML  
Shri P.S. Parihar, Director, AMD, Hyderabad

## Advisory Committee :

Shri V.J. Katti, Regional Director, AMD, Jamshedpur  
Dr. S. Bhattacharjee, Head Analytical Chemistry, CSIR-NML  
Shri Pramod Kumar, Dy. Regional Director, AMD, Jamshedpur  
Dr. G. Chakrapani, Head Chemistry Group, AMD, Hyderabad

## Convener :

Dr. J.K. Sircar, Chief Scientist, CSIR-NML, Jamshedpur

## Co-Convener :

Dr. P.K. Tarafder, In-Charge, Chemistry, AMD, Jamshedpur

## Working Committee :

Dr. Sanchita Chakravarty, CSIR-NML  
Dr. Ashok Kumar Mohanty, CSIR-NML  
Dr. Jayanta Konar, CSIR-NML  
Dr. A.K. Upadhyay, CSIR-NML  
Shri Manjit Singh, CSIR-NML  
Mrs. Rupa Das Biswas, CSIR-NML  
Shri J.N. Patel, CSIR-NML  
Shri M.K. Mahato, CSIR-NML  
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Shri P.K. Ghosh, AMD, Jamshedpur  
Shri S.K. Pradhan, AMD, Jamshedpur  
Shri R. Thakur, AMD, Jamshedpur

## Publication Secretary :

Dr. N.G. Goswami, Head, IMDC, CSIR-NML, Jamshedpur  
[www.nmlindia.org](http://www.nmlindia.org)



# Registration Form

Name of the Delegate : .....

Name of the Organization : .....

Complete postal Address with PIN number :

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Telephone number with STD code : .....

Contact Mobile No. : .....

E-mail : .....

Registration money remittance detail :

DD No. ....Dated .....

Bank .....

## Correspondence

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