



INTERNATIONAL ATOMIC ENERGY AGENCY

**INTERNATIONAL CONFERENCE ON  
ISOTOPIC AND NUCLEAR ANALYTICAL TECHNIQUES  
FOR HEALTH AND ENVIRONMENT**

**Vienna, Austria****10 - 13 June 2003**

**ANNOUNCEMENT AND CALL FOR PAPERS**

**1. INTRODUCTION**

Decision makers and stakeholders are becoming increasingly dependent on reliable chemical measurements that serve as a basis for decisions related to health, consumer safety, commerce, environment protection and compliance to regulations. Several millions of analytical results are produced annually, thus consuming appreciable amounts of resources. Reliability of these data is of major concern if cost – benefit figures are applied.

Nuclear and isotopic analytical techniques (NATs) have been supported by the IAEA as part of their mandate to foster the peaceful use of nuclear energy for many years. Nuclear analytical laboratories have been installed and upgraded through Technical Co-operation assistance in many Member State laboratories. These techniques, including INAA, XRF, PIXE, stable and radioisotopes,  $\alpha$ ,  $\beta$ ,  $\gamma$ -spectrometry, Mössbauer spectrometry, etc. have been applied to a wide range of subjects with varying success. Nuclear analytical techniques, featuring some intrinsic quality control aspects, such as multi-nuclide analysis, frequently serve as ‘reference methods’ to cross-check critical results. As nuclear properties of elements are targeted, matrix problems seem to be negligible to a great extent.

**2. OBJECTIVE**

The main purpose of this Conference is to bring together scientists, technologists, representatives of industry and regulatory authorities to exchange information and review the status of current developments and applications of isotopic and nuclear analytical techniques, and to discuss future trends and developments. A further objective is to identify potential opportunities for developing countries for applying isotopic and nuclear analytical

techniques in health and environmental studies, and to consider the promotion and transfer of such technology. International developments and trends in health care, nutrition, and environmental monitoring will be addressed in order to identify future fields of application for isotopic and nuclear analytical techniques.

### **3. TOPICS**

The programme of the Conference consists of invited lectures and contributed papers. Papers on the following topics will be considered for oral or poster presentation at the Conference.

#### **3.1. Isotopic and Nuclear analytical techniques (general)**

- Instrumentation/automatisation
- Software and data processing
- Quality assurance/accreditation
- On-line analysis

#### **3.2. Environmental Studies**

- Radiation and radionuclide surveys
- Radionuclide analysis in environmental samples
- Radon monitoring
- Nuclear methods for trace analysis and fingerprinting
- Characterisation of radioactive particles
- Radionuclide and trace element migration
- Radionuclide speciation and bioavailability
- Radioecology and radionuclide transfer studies
- Radionuclide monitoring in mining and process industries

#### **3.3. Human and Animal Health and Nutrition**

- Advances in human nutrition studies
- Nutritional Metrology
- Radionuclide monitoring in food
- Energy metabolism and body compositional studies
- Nutrient fortification of foods
- Nutrition monitoring, toxicology and food safety
- Food and nutritional reference methods and reference materials
- Advances in animal nutrition studies
- Tracer techniques in human diagnostics and preventive health care
- Radioimmunoassay

#### **3.4. Future trends**

- New developments in nuclear analytical and radiochemical techniques
- New applications for isotopic and radioactive tracers
- Nuclear techniques in cultural heritage studies, authentication and art preservation
- New developments in nuclear diagnostic techniques
- Socio-economic impacts

- Improved sampling strategies

#### 4. PARTICIPATION

All persons wishing to participate in the Conference are required to send a completed Participation Form (**Form A**) to the competent national authority (Ministry of Foreign Affairs or national atomic energy authority) for subsequent transmission to the IAEA (see Section 11). A participant will be accepted only if the Participation Form is transmitted through the competent official authority of a Member State of the IAEA or by an organization invited to participate.

Participants whose official designation has been received by the IAEA will receive further information on the arrangements for the Conference approximately two months before the Conference. This information will also be posted on the Conference web page under: <http://www.iaea.org/worldatom/Meetings/>.

#### 5. SUBMISSION OF ABSTRACTS

Concise papers on issues falling within the topics outlined in Section 3 may be submitted as contributions to the Conference. All papers, apart from invited review papers, must present original work; they should not have been published elsewhere.

##### (a) Submission of Abstracts

Persons who wish to present a paper or poster for the Conference must submit an abstract in English of 200-300 words, together with the completed Form for Submission of a Paper (**Form B**), and the Participation Form (**Form A**) to the competent national authority for official transmission to the IAEA in time for them to be received by the IAEA by **18 December 2002**. At the same time, the abstract must be sent electronically to the IAEA Scientific Secretariat, e-mail: [INAT2003@iaea.org](mailto:INAT2003@iaea.org). Authors are urged to make use of the Synopsis Template in Word 2000 on the Conference web page. The specifications and instructions for preparing the abstracts and how to use the template are given in the attached "Instructions on how to prepare the abstract and how to submit it electronically". Also attached is a "Sample Abstract".

The abstracts will be considered by the Programme Committee only if the Participation Form A and Paper Submission Form B have been received by the IAEA through official government channels.

##### (b) Acceptance of papers/posters

Authors will be notified **in February 2003** whether their paper(s) have been accepted by the Programme Committee for oral presentation or for presentation as a poster and will be informed of the assigned paper number and session of presentation. The abstracts, if accepted, will be reproduced in unedited form in the Book of Abstracts.

**(c) Submission of full manuscripts**

Instructions to authors of full papers as required by the publisher will be forwarded by the Scientific Secretariat at a later stage. The full manuscript must be sent electronically to the IAEA Scientific Secretariat, e-mail: [INAT2003@iaea.org](mailto:INAT2003@iaea.org), not later than

**6 June 2003.**

**(d) Publication of Proceedings**

It is intended that the proceedings will be published in the International Journal of Analytical and Bioanalytical Chemistry as soon as possible after the Conference.

For each contribution published in the journal the author teams will be provided with two complimentary copies of this special issue.

**6. EXPENDITURES**

The costs for the organization of the Conference are borne by the Agency. No registration fee is charged.

As a general rule, the Agency does not pay the cost of attendance, i.e. travel and living expenses, of participants. However, limited funds are available to help meet the cost of attendance of selected specialists mainly from Member States receiving technical assistance under the IAEA's Technical Co-operation Programme. Generally, not more than one grant will be awarded to any one country. To apply for a travel grant, a Grant Application Form (Form C) — typewritten or clearly printed — must be submitted through the competent national authority (see Section 11 below) for official transmission to the IAEA, together with Forms A and B, and other relevant material in time to reach the IAEA by **18 December 2002.** The grants awarded will be in the form of lump sums and usually cover only part of the cost of attendance.

**7. WORKING LANGUAGE**

The working language of the meeting will be English. All communications must therefore be sent to the IAEA in English.

**8. DISTRIBUTION OF DOCUMENTS**

A preliminary programme of the Conference will be sent to all participants before the meeting. The final programme and the Book of Abstracts will be distributed upon registration.

**9. ACCOMMODATION**

Detailed information on accommodation and other relevant information will be sent to all designated participants about two months before the meeting.

## 10. VISA

If you need a visa to enter Austria (the ‘Schengen visa’), please submit the necessary applications to the nearest diplomatic or consular representative of Austria as early as possible (please note that this procedure may take up to three weeks).

## 11. CHANNELS OF COMMUNICATION

The Participation Form (Form A) and, if applicable, the Form for Submission of a Paper/Poster (Form B), a paper copy of the abstract, as well as the Grant Application Form (Form C), should be sent to the competent national authority (Ministry of Foreign Affairs or national atomic energy authority) for official transmission to the IAEA.

Subsequent correspondence on scientific matters should be addressed to the Scientific Secretary; correspondence on administrative matters should go to the IAEA Conference Service Section.

## 12. SECRETARIAT

The following persons may be contacted for further information or assistance:

### (a) Administrative issues — Conference Organizer (IAEA)

Ms. E. Janisch  
Division of Conference and Document Services  
Conference Service Section

International Atomic Energy Agency  
IAEA-CN-103  
P.O. Box 100, Wagramer Strasse 5  
A-1400 Vienna, Austria  
Telephone No.: (+43) 1-2600-21312 (or -21311)  
Telefax No.: (+43) 1-26007  
E-mail: [e.janisch@iaea.org](mailto:e.janisch@iaea.org)

General mail for IAEA: [official.mail@iaea.org](mailto:official.mail@iaea.org)

### (b) Scientific Committee, Department of Nuclear Sciences and Applications (IAEA)

Mr. G.V. Iyengar  
Division of Human Health

Mr. M. Rossbach  
Division of Physical and Chemical Sciences

Mr. P. De Regge  
Agency’s Laboratories, Seibersdorf

Mr. S.W. Fowler  
Agency's Laboratories, Monaco

Mr. A. Ambrus  
Agency's Laboratories, Seibersdorf

Mr. A. Diallo  
Agency's Laboratories, Seibersdorf

International Atomic Energy Agency  
IAEA-CN-103  
P.O. Box 100, Wagramer Strasse 5  
A-1400 Vienna, Austria

Telephone No.: (+43) 1-2600

Telefax No.: (+43) 1-26007

E-mail: [INAT2003@iaea.org](mailto:INAT2003@iaea.org)

(Please make sure to use this e-mail address for all communications concerning scientific matters)

### 13. CONFERENCE WEB PAGE

Please visit the IAEA conference webpage regularly for information regarding this Conference under:

<http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=103>