



International Symposium on Quality Assurance for Analytical Methods in Isotope Hydrology

**25–27 August 2004
Vienna, Austria**

Announcement and Call for Papers

1. INTRODUCTION

Scarcity of fresh water, degradation of its quality and increasing demand have fostered international interest in isotope methods as tools to characterize and manage freshwater resources. Isotope hydrology is the term for the scientific discipline applying various isotope methods to achieve this goal.

Analytical measurements are the backbone of any isotope hydrology study. These measurements have to be performed at a constant high quality level, which should be assessable in an objective manner. The current trend throughout the whole analytical community is to give high importance to quality assurance/quality control (QA/QC) measures, as related to accreditation requirements for laboratories and using general guidelines such as ISO 17025. However, despite the fact that basic principles of quality assurance and quality control have been established in most isotope hydrology laboratories, no systematic collection of practical guidelines on principles and recommended procedures is available so far for the different analytical methods. Therefore in the field of isotope hydrology many new laboratories experience some difficulties in establishing their own QA/QC measures. This symposium is intended to close the gap between general guidelines and practical applications of quality assurance measures.

There is a long tradition of IAEA symposia on the use of isotope techniques in water resources development and management, focusing on the scientific interpretation of data. This symposium is dedicated to the laboratory techniques used and to a comprehensive review of the state of the art and recent advances in analytical quality assurance and quality control. This is in response to an increasing number of requests to the IAEA from laboratories worldwide posing questions on issues of quality assurance and laboratory quality systems.

2. AUDIENCE AND TOPICS

The symposium will cover the main aspects of quality assurance for analytical methods used in the field of isotope hydrology. The focus will be the performance of analytical methods and how to keep it at a high quality level in routine laboratory operation, and not the scientific application as such. Analytical methods for stable isotope analysis of light elements (H, C, N, O, S) should be covered as well as analysis methods for radioactive elements at the environmental level (^3H , ^{14}C , $^3\text{H}/^3\text{He}$, ^{85}Kr). Measurements of CFCs, SF_6 and other chemical and isotopic tracers closely related to hydrology investigations should also be included. The participation of isotope specialists, laboratory managers, laboratory technical personnel, quality assurance officers and environmental scientists with an interest in laboratory techniques is welcomed. The organizers further encourage the participation of staff from recently established laboratories. The IAEA welcomes high quality contributions that demonstrate the use of best laboratory practices in the following fields:

- Calibration of measurements and traceability
- Interlaboratory comparisons
- Best laboratory practices for daily analyses of samples
- Statistical evaluation of results and quality control
- Calculation of uncertainty budgets
- New analytical techniques
- Improvements in precision and accuracy of analytical methods
- Laboratory information management, databases and sample handling
- Laboratory quality systems and international guides

It is expected that the symposium will stimulate the international exchange of information and ideas that will contribute to further improved reliability and enhanced use of isotope techniques in water resources investigations and related fields.

3. PAPERS AND POSTERS

Concise papers on issues falling within the topics outlined in Section 2 above may be submitted as contributions to the symposium. All papers, apart from invited review papers, must present original work; they should not have been published elsewhere.

(a) Submission of synopses

Persons who wish to present a paper or poster at the symposium must submit an extended synopsis (in English) 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 **25 March 2004**. In addition, the synopsis should be sent electronically to the IAEA Scientific Secretariat, e-mail: confisohis@iaea.org. Authors are urged to make use of the Extended Synopsis Template in Word 2000 on the symposium webpage. The specifications and instructions for preparing the synopsis and how to use the synopsis template are given in the attached Instructions on How to Prepare the Extended Synopsis and How to Submit It Electronically. Attached to this announcement is a sample extended synopsis.

The synopsis 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 the official governmental channels.

(b) Acceptance of papers/posters

Authors will be informed whether their paper has been accepted by the Programme Committee on the basis of the extended synopsis submitted. At the same time authors will be advised if their paper has been accepted for oral presentation or for presentation as a poster. Furthermore, they will receive guidelines for the preparation of papers and will be informed of the deadlines for their submission, the assigned paper number and the session of presentation. The accepted synopses will be reproduced in unedited form in the Book of Extended Synopses.

(c) Proceedings

The proceedings will be published by the IAEA as soon as possible after the symposium in unedited form.

All participants will receive a free copy of the proceedings.

The IAEA reserves the right to refuse the presentation or publication of any paper that does not meet the expectations raised by the information originally given in the extended synopsis.

4. PARTICIPATION

All persons wishing to participate in the symposium must send a completed Participation Form (Form A) to the competent official authority (Ministry of Foreign Affairs or national atomic energy authority) for subsequent transmission to the IAEA. 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 symposium approximately two to three months before the meeting. This information will also be posted on the symposium webpage under:

<http://www-pub.iaea.org/MTCD/Meetings/Meetings.asp>

5. EXPENDITURES

No registration fee is charged to participants.

6. WORKING LANGUAGE

The working language of the meeting will be English. All communications, synopses, abstracts and papers must be sent to the IAEA in English.

7. DISTRIBUTION OF DOCUMENTS

A preliminary programme of the symposium will be sent to the participants before the meeting.

The final programme and the Book of Extended Synopses will be distributed at registration.

8. ACCOMMODATION

Detailed information on accommodation and other items will be sent directly to all designated participants approximately two to three months before the meeting.

9. VISA

Designated participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria as soon as possible. Please note that Austria is a Schengen State and therefore persons who require a visa will have to apply for a "Schengen visa" at least 14 days before entry into Austria. In States where Austria has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing Austria in the country in question. At present the Schengen States are: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Luxemburg, Netherlands, Norway, Portugal, Sweden and Spain.

10. SECRETARIAT

The address of the Secretariat is:

International Atomic Energy Agency
IAEA-CN-119
Vienna International Centre
P.O. Box 100
Wagramer Strasse 5
A-1400 Vienna
Austria

Telephone No.: (+43) - 1 - 2600 (0) plus extension
Telex No.: (+43) - 1 - 12645
Telefax No.: (+43) - 1 - 26007
Electronic mail: official.mail@iaea.org

The Scientific Secretary of the symposium is Mr. M. Groening, Isotope Hydrology Section, Division of Physical and Chemical Sciences (telephone number: +43 1 2600/ext. 21740; e-mail address: confisohis@iaea.org). Meeting organization is provided by Ms. R. Perricos, Conference Service Section, Division of Conference and Document Services (telephone number: +43 1 2600/ext. 21315/21311; e-mail address: r.perricos@iaea.org).

11. CHANNELS OF COMMUNICATION

The Participation Form (Form A) and, if applicable, the Form for Submission of a Paper (Form B), together with two copies of each synopsis should be sent to the competent official authority (Ministry of Foreign Affairs or national atomic energy authority) for transmission to the IAEA.

Subsequent correspondence on scientific matters should be sent to the Scientific Secretary and correspondence on administrative matters to the IAEA Conference Service Section.

12. SYMPOSIUM WEBPAGE

Please visit the IAEA symposium website regularly for new information regarding the symposium under: <http://www-pub.iaea.org/MTCD/Meetings/Meetings.asp>