



# **International Conference on Research Reactors: Safe Management and Effective Utilization**

Rabat, Morocco 14-18 November 2011

Organized by the
International Atomic Energy Agency

Hosted by the Government of the Kingdom of Morocco

through the
National Centre for Nuclear Energy, Sciences and Technology
(CNESTEN)

# ANNOUNCEMENT AND CALL FOR PAPERS

#### 1. BACKGROUND

The IAEA has promoted and fostered the exchange of scientific and technical information on research reactors for many years. An important mechanism for this exchange has been the organizational role the IAEA has undertaken in periodic meetings, seminars, symposia and conferences. In recent years, the IAEA has organized major international conferences every four years on topics of interest to the research reactor community. The last such meeting was the International Conference on Research Reactors: Safe Management and Effective Utilization in Sydney, Australia, in November 2007.

Significant issues still being faced by the research reactor community are primarily related to operation, utilization and safety, ageing, decommissioning and waste management. More recent challenges, such as initiatives for new RR facilities, securing isotope production, human resources and infrastructure capacity building, and sustainability of RR programmes, are receiving greater attention. In view of the continuing interest in these topics and in a wide range of additional issues, it is timely to convene another in the series of international conferences to discuss the issues, report progress and plans, exchange information and foster cooperation among the worldwide research reactor community.

#### 2. OBJECTIVE

The objective of this conference is to foster the exchange of information on current and new research reactors and to provide a forum for reactor users, operators, managers, regulators, designers and suppliers to share experience, exchange opinions and to discuss common challenges, options and strategies.

#### 3. THEMATIC SCOPE

The conference will have a number of technical sessions dealing with specific topical areas. Sessions are expected to include papers from invited speakers as well as contributions by participants. While most papers will focus on one of the principal areas below, authors are encouraged to consider integration with the other areas, as appropriate.

The topical areas are grouped below under **five** major headings:

# (1) Utilization and Applications of RRs:

- Issues for utilization and applications of RRs
  - o Materials research and fuel testing
  - o Neutron beam research and applications
  - o Production of medical and industrial isotopes
  - Other applications
- Utilization programmes for critical and subcritical assemblies
- Accelerator driven systems (ADS)
- Education and training programmes
- Strategies for enhanced utilization through networking, coalitions and regional cooperation

#### (2) Operation and Maintenance:

- Operating experience and lessons learned
- Integrated management systems, including configuration management
- Ageing, maintenance and recent major repair/refurbishment projects
- Fuel management experience, related issues and lessons learned
  - o Fuel performance, corrosion issues
  - o Oualification of new fuels for RRs
  - o Fuel storage and transportation
- New core conversion programmes

# (3) New RR Projects:

- Status reports on new RR projects in progress
- Strategy for new RR acquisitions including support of nuclear power programmes
- Infrastructure requirements for new RR projects

#### (4) Safety of RRs:

- Application of the Code of Conduct on the Safety of RRs and IAEA Safety Standards
- Safety management including:
  - o Developing and maintaining safety culture
  - o Application of graded approach
  - o Training and qualification of reactor operating personnel
  - o Design, safety and operational documentation
  - o Periodic safety reviews
  - o Safety of RRs in extended shutdown
  - o Safe operation of irradiation and experimental facilities

- Regulatory aspects and experience, including developing and maintaining regulatory capability
- Core safety calculation and measurements, including verification and validation of computer codes
- Synergy of safety and security related issues

# (5) Spent Fuel Management, Waste and Decommissioning:

- Operational waste management and disposal
- Strategies for spent fuel disposition, including fuel return programmes
- Decommissioning strategies
- Ongoing and recently completed decommissioning projects

#### 4. PROGRAMME STRUCTURE

The conference programme will consist of an opening session, technical sessions with invited and contributed papers, parallel satellite meetings, poster sessions and a closing panel session.

Invited papers will address issues of special interest. The closing panel session will summarize the principal observations made during the conference and address important issues raised by the audience. At the end, summary conclusions and recommendations will be presented and discussed.

A technical tour to the CNESTEN Nuclear Research Center facilities in Maamora is planned on Friday afternoon. Additional information about the tour can be found as it becomes available on the IAEA web site, as specified in Section 14.

#### 5. PARTICIPATION

All persons wishing to participate in the conference are asked to **register in advance on-line** via the conference web site (see Section 14). **In addition**, they are required to **complete a Participation Form (Form A)** and to send it to their competent national authority (e.g. Ministry of Foreign Affairs or national atomic energy authority) or an invited organization, for subsequent transmission to the IAEA. **A participant will be accepted only if the Participation Form A is transmitted through the competent national authority of his or her Member State of the IAEA or is submitted by an organization invited to take part in the conference.** 

Participants whose official designations have been received by the IAEA will receive further information on the conference at least three months before the meeting. This information will also be available at the conference web site.

#### 6. CONTRIBUTED PAPERS AND POSTERS

Papers on issues falling within the topics defined in Section 3 may be submitted as contributions to the conference. All papers — other than invited papers — must present **original** work and must not have been published elsewhere.

The number of papers that can be accepted for oral presentation is limited. Therefore, three poster sessions will be arranged for the remaining accepted papers. Authors may indicate if they prefer to present their contribution as an oral presentation or a poster.

#### (a) Submission of Extended Synopses

Persons wishing to present a paper or poster during the conference must submit an extended synopsis of maximum 800 words (not exceeding 2 pages including figures and tables) directly to the IAEA on one of the subjects/topics listed under Section 3. The template available at the conference web site should be used for this purpose. The synopses (in Microsoft Word

Document Format) should be submitted electronically (no paper copies should be submitted) using the following email address: *physics@iaea.org* by **1 March 2011.** 

It is the responsibility of the author to ensure that the extended synopsis has received any necessary clearance by their relevant government authorities.

Authors must submit the following forms to their appropriate government authority (see Section 13) for transmission to the IAEA, also by 1 March 2011:

- Participation **Form A** (attached)
- Form B for Submission of a Paper (attached)

The synopsis should give enough information on the contents of the proposed paper to enable the Programme Committee to evaluate it. Introductory and general matters should not be included.

The extended synopsis will be considered by the Programme Committee **only** if at the same time the Participation Form A and Paper Submission Form B have been received by the IAEA through official government channels.

# (b) Acceptance of papers

Authors will be informed by **August 2011** whether their papers have been accepted for oral presentation or as a poster on the basis of the extended synopsis. After the review process, the authors will be asked to prepare the final papers, taking into account the reviewer's comments and recommendations.

The IAEA, however, reserves the right to refuse the presentation and publication of any paper that does not meet expectations based on the information given in the extended synopsis.

# (c) Submission of full papers

Specifications for the layout and electronic format (Microsoft Word Document) of the full manuscripts and for the preparation of posters will be sent to all main authors of accepted papers. These specifications will also be posted on the conference web site when available. The full manuscripts must be submitted in the same way as the extended synopsis, i.e. electronically, using the following email address: <code>physics@iaea.org</code> by 1 November 2011.

It is the responsibility of the author to ensure that the submitted paper has received any necessary clearance by the relevant authorities.

#### 7. EXPENDITURES

#### No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of designated participants to the conference. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of selected specialists from Member States eligible to receive technical assistance under the IAEA's technical cooperation programme. Such assistance may be offered, upon specific request, provided that in the IAEA's view the participant will make an important contribution to the meeting. In general, not more than one grant will be awarded to any one country.

If governments wish to apply for such a grant, they should make specific requests to the IAEA. Governments' applications for grants must be:

- (a) Submitted by 1 March 2011.
- (b) Accompanied by a completed Grant Application Form (Form C).
- (c) Accompanied by a completed Participation Form (Form A)
- (d) Paper Submission Form (Form B).

Applications that do not comply with the conditions stipulated in (a), (b), (c) and (d) cannot be considered.

All these forms must reach the IAEA by 1 March 2011 at the latest. Travel grant requests will only be considered for authors of accepted papers. Incomplete or late applications will not be considered. The grants will be lump sums usually covering only part of the cost of attendance.

#### 8. CONFERENCE PROCEEDINGS

The proceedings of the meeting will be published by the IAEA in an unedited form as a CD-ROM and on the IAEA Physics Section web site as soon as possible after the meeting. All participants will receive a free copy of the proceedings.

#### 9. WORKING LANGUAGE

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

#### 10. DISTRIBUTION OF DOCUMENTS

A preliminary programme of the conference will be posted on the conference web site and sent to participants before the meeting. The final programme and the book of extended synopses will be distributed during registration for the conference.

#### 11. ACCOMMODATION

Detailed information on accommodation and other conference related information will be sent to all designated participants well in advance of the meeting and will also be available on the conference web site.

#### 12. VISAS

Designated participants who require a visa to enter Morocco should submit the necessary application(s) to the nearest diplomatic or consular representative of Morocco as early as possible. Further advice/instructions will be available on the conference web site.

#### 13. CHANNELS OF COMMUNICATION

Correspondence on scientific matters should be sent to the Scientific Secretaries and correspondence on administrative matters to the IAEA Conference Services Section.

#### 14. CONFERENCE WEB SITE

Please visit the web page regularly for any new and/or updated information regarding the conference: http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=38299

# 15. DEADLINES / TIME SCHEDULE

1 March 2011 Electronic submission of two page synopses

1 March 2011 Submission of Form A and if applicable, Forms B and C

to the IAEA through official channels

1 August 2011 Notification to authors on acceptance of papers

1 August 2011 Notification to authors on financial support

1 November 2011 Electronic submission of final papers

14–18 November 2011 Conference

#### 16. EXHIBITIONS

Space will be available for commercial vendors' displays/exhibits during the conference. Further information will be posted soon at the conference web site.

#### 17. CONFERENCE SECRETARIAT

International Atomic Energy Agency PO Box 100

Wagramer Strasse 5 1400 Vienna, Austria

Tel.: (+43 1) 2600 21314 / 21751

Fax: (+43 1) 2600 7

Email: Official.Mail@iaea.org

Email address for extended synopses

submission:

physics@iaea.org

#### Scientific Secretariat of the Conference

# Mr. D. Ridikas (Lead Scientific Secretary)

Division of Physical and Chemical Sciences International Atomic Energy Agency

Tel.: (+43 1) 2600 21751 Fax: (+43 1) 2600 7

Email: D.Ridikas@iaea.org

# Mr. H. Abou Yehia

Division of Nuclear Installation Safety International Atomic Energy Agency

Tel.: (+43 1) 2600 22400 Fax: (+43 1) 2600 7

Email: H.Abou-Yehia@iaea.org

# Mr. P. Adelfang

Division of Nuclear Fuel Cycle and Waste Technology International Atomic Energy Agency

Tel.: (+43 1) 2600 22770 Fax No: (+43 1) 2600 7 Email: *P.Adelfang@iaea.org* 

# **Administration and Organization:**

# Ms. M. Neuhold

Division of Conference and Document Services Conference Services Section IAEA-CN-188

Tel.: (+43 1) 2600 21314 Fax: (+43 1) 2600 7

Email: M.Neuhold@iaea.org