



Atoms for Peace and Development

الوكالة الدولية للطاقة الذرية

国际原子能机构

International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

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The Secretariat of the International Atomic Energy Agency (IAEA) presents its compliments to the IAEA's Member States and has the honour to draw their attention to the **Technical Meeting to Collect and Document Innovations in the Uranium Production Cycle** (hereinafter referred to as "event") to be held virtually via Cisco Webex from **6 to 10 June 2022**.

The purpose of the event is to share, disseminate and document recent innovations in the uranium production cycle that are being investigated or applied to make future low grade uranium deposits economically, technically and socially feasible.

The attached Information Sheet provides further details of the event.

The event will be held in English.

Member States are invited to designate one participant to represent the Government at this event. Member States are strongly encouraged to identify suitable women participants.

Designations should be submitted to the IAEA through the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) not later than **4 May 2022** using the attached Participation Form (Form A). Completed and authorized Participation Forms should be sent either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Copies should be sent by email to the Scientific Secretaries of the event, Mr Brett Moldovan (Email: B.Moldovan@iaea.org) and Mr Nils Haneklaus (Email: N.Haneklaus@iaea.org), both of the Division of Nuclear Fuel Cycle and Waste Technology, Department of Nuclear Energy, and to the Administrative Secretary, Ms Sakura Gyay De Goyaz (Email: S.Gyay-De-Goyaz@iaea.org) The Scientific Secretaries of the event will liaise with the participants directly concerning further arrangements, as appropriate, once the official designations have been received.

Should Governments wish, in addition, to appoint one or more observers to assist and advise the designated participants, they are kindly requested to inform the IAEA of the names and contact details of any such observers by the above date.

The IAEA takes no responsibility for, and the provider of the virtual meeting services has represented and warranted that the Services shall not contain, and that no end user shall receive from the software used to hold the virtual meeting, any virus, worm, trap door, back door, timer, clock, counter or other limiting routine, instruction or design, or other malicious, illicit or similar unrequested code, including surveillance software or routines which may, or is designed to, permit access by any person, or on its own, to erase, or otherwise harm or modify any data or any system, server, facility or other infrastructure of any end user (collectively, a "Disabling Code").

The Secretariat of the International Atomic Energy Agency avails itself of this opportunity to renew to the IAEA's Member States the assurances of its highest consideration.



2022-04-14

Enclosures: Information Sheet

Participation Form (Form A)



IAEA

International Atomic Energy Agency

Atoms for Peace and Development

Technical Meeting to Collect and Document Innovations in the Uranium Production Cycle

Virtual Event

6–10 June 2022

Ref. No.: EVT2201303

Information Sheet

Introduction

Global uranium mining is a highly innovative industry that provides the raw material responsible for approximately 10% of global low emission electricity production through the use of nuclear power. Through its history, and also currently, the uranium mining industry seeks to identify innovative techniques that improve recovery and purification of uranium to further increase safety, environmental and social acceptance as well as operational economics. Such innovations may be categorized in present or incremental innovations of existing uranium mining and processing facilities, near term innovations that constitute novel ideas presently being tested on pilot plant scale that show promise to be implemented on an industrial scale, as well as future innovations that are research and development intensive innovations currently tested on lab scale that show promise to be next implemented on a pilot plant scale. The IAEA has supported Member States in various aspects of the uranium production cycle and upholds this commitment.

Objectives

The purpose of the event is to share, disseminate and document recent innovations in the uranium production cycle that are being investigated or applied to make future grade uranium deposits economically, technically and socially feasible.

Target Audience

The Technical Meeting is intended to bring together mining and mineral processing experts from industry (mining and mineral processing facilities), research facilities such as national laboratories and universities, and other organizations involved in the mining and processing of uranium to identify and discuss present, near term and future innovations.

Working Language(s)

The working language of the meeting will be English with no interpretation provided. All communications and abstracts must be submitted in this language.

Expected Outputs

A meeting report will be prepared to summarise the main findings of this Technical Meeting. This report will be shared with all meeting participants and will be posted on the UPC-Net site.

Structure

This event will comprise of three main technical sessions and participants will be asked to identify a technical session to which they want to contribute. The different technical sessions are as follows:

Session 1: Incremental Innovations

(Innovations in current uranium mining and processing facilities)

Session 2: Near Term Innovations

(Innovations tested on a larger pilot plant scale that show promise to be implemented on industrial scale)

Session 3: Future Innovations

(Research and development intensive innovations that are currently tested on lab scale that show promise to be implemented on pilot plant scale)

Topics

The Technical Meeting will focus on uranium mining and hydrometallurgical processing for the production of uranium ore concentrate (UOC). Advanced exploration techniques and innovation as well as innovations in conversion and enrichment of uranium are outside the scope of this Technical Meeting.

Under Technical Sessions 1, 2 and 3, the following topics are suggested and may be discussed:

- (1) and (2) Innovation and applications for current and near-term uranium mines and processing facilities
 - a. Innovation and advancements in current new near-term uranium mines
 - i. Underground mining
 - ii. Open pit mining
 - iii. In-situ recovery
 - b. Innovation and advancements in current and near-term hydrometallurgical processing facilities
 - i. Beneficiation and pre-concentration of uranium-bearing ore
 - ii. Leaching including heap leaching and comprehensive extraction
 - iii. Purification (SX/IX/others)
 - iv. Precipitation
 - v. Drying/roasting
 - c. Innovation and advancements in environmental management for current and near-term mines and hydrometallurgical processing facilities
 - i. Reduction in waste rock generation
 - ii. Enhanced management of wastes including tailings, waste rock and effluent
 - iii. Reduction in emissions to air, ground or water
- (3) Research and development for uranium mines of the future
 - a. Enhanced applications of in-situ recovery to different structural geologies and ore grades/mineralogy
 - b. Recovery of uranium from low and very low-grade uranium deposits
 - i. Xenotime and monazite bearing ores
 - ii. Uranium-bearing phosphate rocks
 - iii. Lignite coal deposits
 - iv. Calcrete-type deposits

Participation and Registration

All persons wishing to participate in the event have to be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State, participants are requested to send the **Participation Form (Form A)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for onward transmission to the IAEA by **4 May 2022**. Participants who are members of an organization invited to attend are requested to send the Participation Form (Form A) through their organization to the IAEA by above deadline.

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and technical matters.

Participants are hereby informed that the personal data they submit will be processed in line with the [Agency's Personal Data and Privacy Policy](#) and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required.

IAEA Contacts

Scientific Secretaries:

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretaries and correspondence on other matters related to the event to the Administrative Secretary.

Participation Form

Technical Meeting to Collect and Document Innovations in the Uranium Production Cycle

Virtual Event

6–10 June 2022

To be completed by the participant and sent to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA) either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretaries B.Moldovan@iaea.org and N.Haneklaus@iaea.org, and to the Administrative Secretary S.Gyay-De-Goyaz@iaea.org.

Participants who are members of an invited organization can submit this form to their organization for subsequent transmission to the IAEA.

Deadline for receipt by IAEA through official channels: 4 May 2022

Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms
Institution:		
Full address:		
Tel. (Fax):		
Email:		
Nationality:	Representing following Member State/non-Member State/entity or invited organization:	
If/as applicable: Do you intend to submit a paper? Yes <input type="checkbox"/> No <input type="checkbox"/> Would you prefer to present your paper as a poster? Yes <input type="checkbox"/> No <input type="checkbox"/> Title:		

Participants are hereby informed that the personal data they submit will be processed in line with the [Agency's Personal Data and Privacy Policy](#) and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required.