International Conference on Fuel Supply Chain for Sustainable Nuclear Power Development

Tuesday 13 October 2026 - Thursday 15 October 2026

Scientific Programme

The IAEA welcomes high quality contributions that fall under the umbrella of the following tracks:

Track 1. Industry Prospects and Challenges Facing Raising Fuel Supply Demand

Challenges in supply and front-end services to meet the increasing infrastructure requirements for conversion, enrichment and fuel fabrication:

Market fluctuations impacting supply chains.

Political support: policies and strategies.

Expansion of conversion enrichment and fuel fabrication facilities to meet growing demand.

Technological advancements improving processes' efficiency and sustainability.

Track 2: Supply and Demand of Raw Materials for Nuclear Fuel Supply

Innovations in the front-end of the nuclear fuel cycle, from exploration to mining:

New uranium exploration and mining projects.

Innovative advancements in uranium exploration and mining.

Uranium and thorium resources, processing and mining and the circular economy.

Track 3: Advanced Nuclear Fuels for Innovative Reactor Technologies

Advanced technology fuels and fuels for advanced reactors:

Design, qualification and operation of ATFs, LEU+ and HALEU fuels, TRISO fuels, fuels for fast reactors and multiple recycling in all types of reactors, including molten salt reactors.

Advances in nuclear fuel fabrication processes and quality control (automation, additive manufacturing and use of artificial intelligence).

Track 4: Industrial and Innovative Technologies for Recycling Nuclear Materials

Industrial operating experience and lessons learned in reprocessing for recycling:

Experience of uranium (U) and plutonium (Pu) recycling and requirements for multirecycling U and Pu in Thermal and Fast Reactors.

Prospects for reprocessing of spent fuels from advanced reactors, including the management of minor actinides.

Infrastructure development and implementation for reprocessing and managing nuclear materials to be recycled.

Life cycle of reprocessing and recycling and impacts on the final wastes to be disposed of.