

# Chile

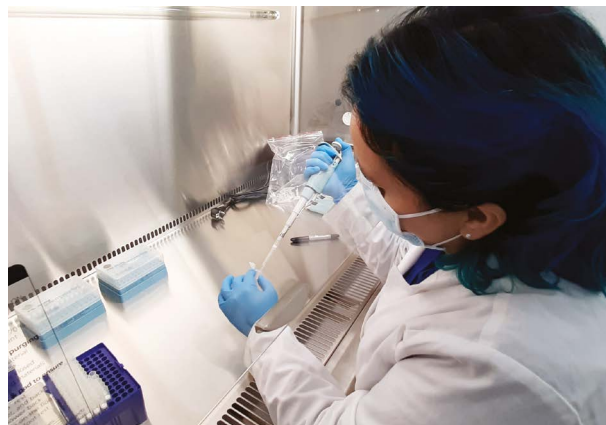
IAEA Member State since September 1960

## Selected achievements

**2023:** Chile participates in the launch of the regional network of research reactors and related institutions of Latin America and the Caribbean (RIALC), which aims to address increasing regional demand for research reactor services.

**2022:** The INFOR research institute of the Ministry of Agriculture establishes a genomics laboratory for the mutation breeding of tree species resilient to climate change.

**2022:** Capabilities in early diagnosis are enhanced at MATER Children's Renal Corporation, a non-profit organization dedicated to preventing and treating kidney disease in underprivileged children throughout the country.



The IAEA dispatched equipment to countries around the world to enable them to rapidly detect the coronavirus that causes COVID-19. Here, biochemists in Chile's Hospital Claudio Vicuña perform tests for detecting SARS-CoV-2 in patients. (Photo: Hospital Claudio Vicuña)

## Project successes

### Energy and industry

Instrumentation for Chile's RECH-1 research reactor, located at the La Reina Nuclear Centre in Santiago, was upgraded with IAEA support.

With IAEA assistance, neutron imaging at the centre was improved, enabling the facility to support tasks such as identifying internal structures in cultural heritage items.

Chile joined the regional network of research reactors in Latin America and the Caribbean in 2023, reflecting the country's commitment to meeting regional demand for reactor services. The RECH-1 reactor focuses on neutron generation and facilitates research, development, education and training.

### Nuclear and radiological safety and security

In 2022–2023, an operation to remove 31 disused cobalt-60 sources was successfully concluded with IAEA support.

The process took two rounds and was coordinated with relevant government agencies in a safe and efficient manner. Each round included package preparation, transportation and shipment to Gamma Service Recycling in Germany.

The completion of the project has markedly improved safety in the country.

## National priorities

- Climate change
- Nuclear and radiological safety and security
- Pest control
- Agricultural advancements adaptable to climate change
- Food safety
- Nutritional monitoring
- Treatment and diagnosis of cancer
- Water resource management
- Marine and coastal environment management
- Air, water and soil pollution prevention
- Use of the RECH-1 reactor
- Nuclear knowledge management

## Main areas of IAEA support

- Nuclear technology
- Radioisotopes and radio-pharmaceuticals

## Health and nutrition

In 2023, Chile hosted the fourth iteration of the Master's Degree in Advanced Radiotherapy, supported by the IAEA in collaboration with the Arturo López Pérez Foundation (FALP) and the University of the Andes.

The postgraduate course aims to enhance radiotherapy capacity and increase the number of skilled professionals able to treat cervical cancer in the region.

So far, 27 radiotherapists from Latin America and the Caribbean have been trained through this course. A further eight students from the region are currently enrolled.



The IAEA has worked with Chile's Environmental and Food Chemistry Laboratory for many years to strengthen food safety and ensure that Chilean food products meet export standards. (Photo: L. Potterton/IAEA)

## Participation in the major initiatives

- NUTEC Plastics
- Rays of Hope
- ZODIAC

## IAEA support received in the 21st century



## Contributions to South-South and triangular cooperation

