

## REPROLAM WEBINAR

### STATUS OF RADIOLOGICAL PROTECTION IN NORM INDUSTRIES

November 25- 12:00 HS Brasilia

In this webinar there will be a tour of the main aspects that the Radiological Protection (PR) of workers must contemplate in terms of industries called NORM (English acronym for Naturally Occurring Radioactive Material) and what is the current status in Latin America.

Juan Carlos Mora, Officer of the Radiation Safety and Radiation Monitoring Program at the IAEA, will make an introduction presenting the main requirements of the International Atomic Energy Agency on this issue, including standards already developed and under development within the Agency.

On the other hand, Mario Bárcenas, Head of the Radiological Protection Department, and Beatriz Hernandez from the Environmental Sciences Management, both from the ININ of Mexico, will present the Mexico experience regarding Occupational PR in NORM industries - with special emphasis on the oil extraction - including your vision of the needs in the country.

Finally, José Marcus Godoy, from the Chemistry Department of the PUC / RJ of Brazil, will present the current state of the issue in Brazil, presenting as an example the state of the phosphate industry in the country.

Isis M<sup>a</sup> Fdez. Gómez, Head of the Environmental Radiological Surveillance Laboratory of the CPHR in Cuba, will act as moderator.



**José Marcus Godoy**  
Dept. Chemistry  
PUC / RJ



**Juan Carlos Mora Canadas**  
Radiation Safety Program  
Officer  
and Monitoring of  
Radiations- IAEA



**Mario Bárcenas Robles**  
Head of the Department of  
Radiological Protection  
ININ-MX



**Beatriz Hernández Méndez**  
Researcher in Environmental  
Sciences  
ININ-MX



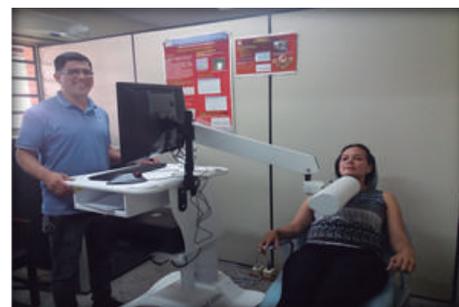
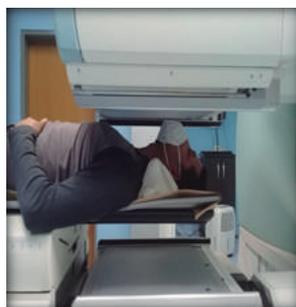
**MODERATING**  
**Isis María Fernández Gómez**  
Head of the Environmental  
Radiological Surveillance  
Laboratory  
CPHR

Inscription: <https://forms.gle/iAtSPV498ngFiwT5A>

## REPROLAM

### VIRTUAL COURSE FOR IN SITU CONTROL OF THE INTERNAL EXPOSURE TO I-131 IN THE SERVICES OF NUCLEAR MEDICINE

NOVEMBER 30 AND DECEMBER 3  
18-20 (Argentine Time, UTC-3H)



The purpose of this course is to provide the necessary tools to allow the responsible physician, nuclear medicine technician, medical physicist or other suitable professional, to use the detection systems available in their service: gamma camera or iodine collector, to investigate whether the Potential I-131 incorporated activity and the potential committed effective dose of its Occupationally Exposed Workers (TOEs) is  $\geq 1$  mSv / year

Course teachers:



**Omar Arias**  
Coordinator of the  
Department of Medical  
Physics of the New Hospital  
of Curaçao

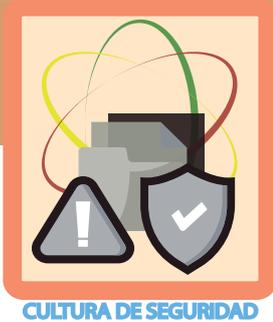


**Dayana Ramos**  
Technical Manager of the  
Internal Dosimetry  
Laboratory of the CPHR



**Nancy Puerta Yepes**  
Head of the Department of  
Internal RNA Dosimetry

IFree subscriptions until November 29: <https://forms.gle/b1miTTWzXCdfqRV48>



## SAFETY FIRST

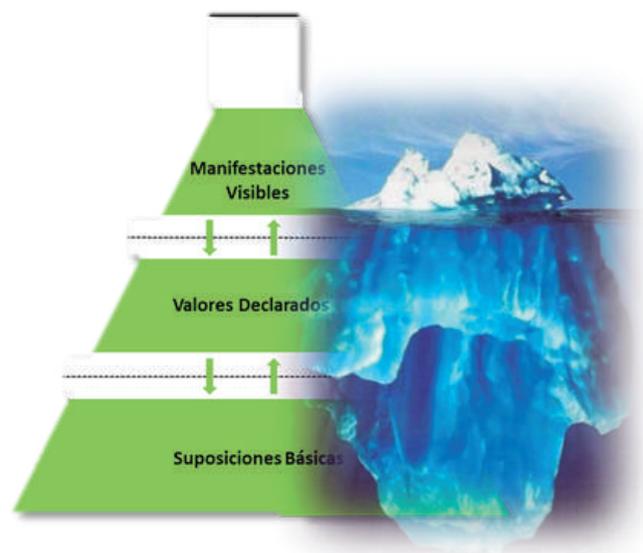
Space dedicated to common understanding and the promotion of Safety Culture through information, analysis, dissemination of experiences and related news.

### VISIBILIZING THE CULTURE OF SAFETY: WHY AND HOW TO DO IT?

The development of the Safety Culture in an organization can be considered as a complex or abstract matter, since it refers to behaviors of both the organization itself and the individuals that make it up, in whatever position they occupy. Any effort in this area must begin with understanding what culture is, and then bring it to the field of security.

Culture is a complex concept. However, its simplest definition defines it as “the way we do things”. And the way we do things will be determined by our beliefs, values, knowledge, habits and traditions, among other factors. According to Edgar Schien, culture operates on three levels, similar to an iceberg, where what is observed of it is made up of a very small portion, its visible manifestations. On a second level, less visible, are the declared values, that is, the part of the culture that is reflected through what is said or expressed. Finally, a large portion, which lies in the depths and is not observable, contains the basic assumptions or beliefs, a fundamental component of culture, with the greatest capacity to modify it.

They are the basic assumptions of an individual, which will determine his behavior, through what he says and what he shows (doing or reflecting). Hence the close relationship between these three levels of culture.



Consequently, undertaking safety culture development requires an understanding of basic assumptions about different aspects of safety held by an organization and its individuals. This will allow knowing “the whys” of their behaviors or attitudes and acting on them, without detriment to other actions that must be carried out at those levels that may have a regulatory or modifying effect on the Culture, that is, in the visible manifestations and declared values. .

If you are a manager and have decided to start working on the Safety Culture of your organization, remember: You are going to work on the culture of your organization, to produce a cultural change in your staff towards a better attitude and behavior regarding safety and for this you need to understand the “whys” of current behaviors, that is, the basic assumptions of the existing culture. Only then will you achieve the desired result.

#### References used:

1. FORUM Guide on Safety Culture of Organizations, Facilities and Activities with ionizing radiation sources, 2015.

## IAEA WEBINAR CALIBRATION OF BRACHITHERAPY IN A SSDL



Date: December 2, 2021 - 12: 00h- Brasilia

Registration deadline: November 30, 2021

The Webinar will be held in Spanish.

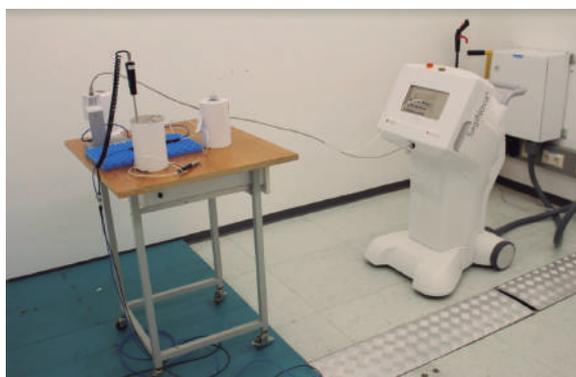
Brachytherapy is an essential component of the curative treatment of cervical cancer, a disease with a high incidence in many developing countries. High dose rate (HDR) brachytherapy is also used in other common cancers such as breast, lung, esophagus, and prostate. Knowing the dose administered to patients is essential for the expected outcome of treatment. This requires that the equipment used for dosimetry be calibrated. All radiation monitoring instruments must be calibrated regularly as recommended by internationally.

### Objectives

The purpose of the webinar is to provide a technical basis for brachytherapy calibrations in SSDL for participants of Secondary Standards Dosimetry Laboratories (SSDL). This will help SSDLs to perform brachytherapy calibrations. This webinar will comprise lectures and question and answer sessions.



**Dr. Ernesto Mainegra-Hing**  
*Head of Research at NRC Metrology, National  
Research Council of Canada  
Government of Canada*



### Webinar program:

- Basics of brachytherapy calibrations
- Primary standards
- Secondary standards
- Use of calibration in the clinic

Register for the webinar using the following links:

[https://teams.microsoft.com/registration/kxTyotGkf0utB4Gc-gk9cSg,OGoMQZxNhkuVagh\\_SdQ97g,ZI7n4PdKOUOMuBHgaY80UQ,jfxZdpc\\_tUaFY5wm4Y2svg,yoTdgNasbkrygLRDEHMcLw,fcwgRPUul0uGXxkavDkHGA?mode=read&tenantId=a2f21493-a4d1-4b7f-ad07-819c824f5c4a](https://teams.microsoft.com/registration/kxTyotGkf0utB4Gc-gk9cSg,OGoMQZxNhkuVagh_SdQ97g,ZI7n4PdKOUOMuBHgaY80UQ,jfxZdpc_tUaFY5wm4Y2svg,yoTdgNasbkrygLRDEHMcLw,fcwgRPUul0uGXxkavDkHGA?mode=read&tenantId=a2f21493-a4d1-4b7f-ad07-819c824f5c4a)

## **WORKSHOP ON THE RELEASE OF RADIONUCLIDES FROM WASTE DISPOSAL: MECHANISMS, RATE ESTIMATION AND LONG-TERM MODELING**

VIRTUAL

06-10 DECEMBER 2021

12 AM - 4 PM (BRASÍLIA); 4 PM - 8 PM (VIENNA)

**DEADLINE FOR INSCRIPTIONS: 10 NOVEMBER 2021**



This workshop aims to provide technical training on the different processes involved and ways of estimating radionuclide releases from radioactive wastes and NORM materials.

The training will be process-oriented and can be applied to different types of wastes or materials, such as low and intermediate-level wastes immobilized in different matrix types (cement, bitumen, polymers), nonimmobilized (very low-level waste, decommissioning waste), NORM materials, or contaminated soils.

The main aspects that will be covered are:

- Radionuclide release mechanisms: liquid, gaseous, dust, root uptake, direct exposure;
- Conceptual models of radionuclide release for different matrices and geometries;
- Radionuclide release models for long-term estimation;
- The role of the engineered barriers in the near field (containers, waste form, backfill, covers) and how to consider them in the release models;
- Laboratory test methods for parameter estimation related to release models;
- Modeling for test interpretation and parameter estimation;
- Applying release models for long-term, post-closure safety assessments for repositories and contaminated sites.

Inscriptions procedure: Registration requests (names, affiliation and e-mail contacts) must be sent until November 10 2021 by e-mail to [stela.cota@cdtn.br](mailto:stela.cota@cdtn.br)