

Preliminary

Programme

IRIS 2026

International Radioisotope Supply Chain Meeting

20 – 21 April 2026

Leiden, The Netherlands



EUROPEAN NUCLEAR SOCIETY

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The logo for PSI, which consists of a circular arrangement of black dots of different sizes, creating a textured, sun-like appearance. To the right of this graphic, the letters "PSI" are written in a bold, black, sans-serif font.

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Belgian Nuclear Research Centre

The International Radioisotopes Supply Chain Meeting

IRIS

Monday 20 April 2026

9am – 11am Opening Session: From Innovation to Implementation

Chair: J.B. Zonneveld, NRG Pallas, The Netherlands

Welcome Address and Introductory notes by P. Luijten, NRG Pallas, The Netherlands

Interdependencies and challenges along the radioisotope supply chain

N. Mario, NucAdvisor, France

From PRISMAP to PRISMAP+: introducing emerging radionuclides for medical applications

U. Koester, ILL, France

Radionuclide production from bench to bedside – the example of Terbium 161

N. van der Meulen, PSI, Switzerland

The challenges of developing a radioisotope supply chain – Actinium-225

S. Van den Berghe, PanTera, Belgium

Establishing a reliable supply chain for Lutetium 177

N. Quigley, ITM Radiopharma, Germany

11am – 11.30am Coffee Break

11.30am – 1.00pm Expanding Horizons

Chair: R. Eloirdi, JRC

Introductory notes by the Chair

Radionuclides in industrial, agricultural, civil society and environmental applications

Tor Bjornstad, University of Oslo, Norway

Radioisotope Use for Space Exploration and Developing a European Capability
Stephanie Barron, ESA

Extraction of isotopes from waste – turning by-products into valuable resources
Marion Poupinel-Descambres, ORANO, France

1.00pm – 2.00pm Lunch Break

2.00pm – 3.40pm Stable Isotope Separation Technology & Innovation in Infrastructure

Chair: S. Van den Berghe, PanTera, Belgium

Advancing Stable Isotope Separation – Technologies and Applications
L. Ashton, Urenco, UK

Building a Reliable Stable Isotopes Supply Chain for Quantum and Healthcare
L. Bigot, ORANO, France

- Combined Q & A and Discussion -

Development and Characterisation of the ISOLPHARM Radionuclide Implantation Station at SPES

Serafini, D. (1); Chen, D. (2); Martello, M. G. (3); Corradetti, S. (3); Leso, A. (4); Li, Z. (5); Valli, G. S. (1); Arzenton, A. (2); Ballan, M. (3); Donzella, A. (6); Monetti, A. (3); Lunardon, M. (2); Moretto, S. (2); Mariotti, E. (1); Margotti, A. (7); Andriguetto, A. (3)

1 – University of Siena, Department of Physical Sciences, Earth and Environment, Italy

2 – University of Padua, Department of Physics and Astronomy, Italy

4 – University of Ferrara, Department of Physics and Earth Science, Italy

5 – INFN Padua, Italy

6 – University of Brescia, Department of Mechanical and Industrial Engineering, Italy

7 – INFN Bologna, Italy

Current and Planned Improvements to Radioisotope Production at Oak Ridge National Laboratory

Bryan, C. (1)
1 – Oak Ridge National Laboratory, United States

Isotope Harvesting at FRIB: Unique Infrastructure for Radionuclide Production

Vyas, C. (1); Severin, G. (1); Severin, G. (2)
1 – Facility for Rare Isotope Beams, Michigan State University, United States
2 – Department of Chemistry, Michigan State University, East Lansing, United States

3.40pm – 4.10pm Coffee Break**4.10pm – 5.50pm Target Production**

Chair: B. Stepnik, Framatome, France

Target Preparation, Cross Section Reactions, and Side Products – Implications for the Supply Chain

F. Haddad, Arronax, France

Radiometal production with hybrid targets	Szikra, D. (1) 1 – Syniq Ltd, Hungary
Development of a process for recovering Ra 226 from legacy sources : a matter of sustainability and sovereignty for a European production of Ac225, a very promising radioisotope for cancer treatment	Moreau, C. (1); Feydi, P. (1); Brillon, A. (1); Celier, M. (1); Wagner, C. (1); Morlaes, I. (1); Morel, B. (1) 1 – ORANO, France
Separation and purification of Ag-111 from neutron-irradiated Pd targets	Karantoumanis, F. (1); Rovan Stiplošek, L. (1); Jaćimović, R. (1); Štrok, M. (1) 1 – Jožef Stefan Institute, Slovenia
Neutronic Evaluation of Ir-192 in SAFARI-1 research reactor	Chinaka, E. (1); Bonnanye, G. (1); Tchonang Pokaha, M. (1); Jacobs, C. (1) 1 – The South African Nuclear Energy Corporation (Necsa) SOC Ltd, South Africa

6.30pm – 9.00pm Evening Reception***Joint IRIS/RRFM Walking Dinner***

A registration desk for arriving RRFM participants will be open from 5.00pm

Tuesday 21 April 2026

9am – 10.30am Opening Session RRFM 2026

Host Country Presentation: Newbuilt in the Netherlands – on the brink of a new nuclear era

G.J.L.M. de Haas, Chairman of the Netherlands Nuclear Society

ERVI: European Radioisotope Valley Initiative to secure the supply of medical radioisotopes in the European Union

G. Simeonov, European Commission

The DOE Isotope Programme

C. Landers, DOE (tbc)

10.30am – 11.00 am Coffee Break

11.00am – 12.40pm Irradiation (IRIS)

Chair : S. Van Dyck, SCK-CEN, Belgium

Particle Accelerator for Radioisotope Production – Building Global Supply Chains for a Growing Demand

J.M. Geets, IBA, Belgium

Simulation of Concrete Activation by a Cyclotron Source and the Economic Impact on Waste Disposal	Storms, J. (1); Vangansbeke, E. (1) 1 – Tractebel Engineering S.A., Belgium
Design of Research Reactors and Radioisotope Processing Facilities from a Radioisotope Supply Chain Perspective	Menbrie, M. E. (1); Cruz, M. L. (1); Wilkinson, M. V. (1) 1 – INVAP, Argentina
Moderator Assembly Design for Multi-isotope Production using high-yield D-T Neutron Generator	Saxena, A. (1); Swami, H. L. (1); Abhangi, M. (1); Vashi, V. (1); Vala, S. (1); Kumar, R. (1) 1 – Institute for Plasma Research, India
Establishing a Reactor-Based Radioisotope Program in Korea: Opportunities with the New Research Reactor	Lee, S.-K. (1) 1 – KAERI, Korea, Republic of

12.40pm – 1.40pm Lunch Break

1.40pm – 3.00pm

Target Processing and infrastructure (IRIS)

Chair :

Enabling Efficient Radioisotope Production and Supply – Field Lab

M. Bogert, NRG Pallas, The Netherlands

Industrial Manufacturing Process of AmO ₂ Powder from a Pu Solution: Separation, Conversion and Calcination	Prevost, T. (1); Kauric, G. (1); Bahri, M. (1); Brachon, C. (1) 1 – Orano Recycling, France
Parcoval project: Pd recovery from Spent Nuclear Fuels	Berenguer-Besnard, P. (1); Ropp, A. (2); Bahri, M. (3); Rougeaux, I. (4) 1 – Orano Recyclage, France 2 – Orano Support DRD, France 3 – Orano Recyclage, France 4 – CEA LITEN, France
Downstream Pb-212 purification for radiolabeling of Targeted Alpha Therapy (TAT) compounds	Marshall, S. (1); Villas Boas, C. (1); Henk, T. (1); Bushman, G. (1); Schmitz, J. (1); Verma, S. (1) 1 – TAGI, United States

3.00pm – 3.30pm Coffee Break

3.30pm – 4.30pm

Reduction of the A2 value in the transportation of radioisotopes (IRIS)

Chair: R. Baranczyk, European Supply Agency

The Scientific Background

N.N., IAEA

An Industry View

N.N. NMEU

- Combined Q & A and Discussion –

4.30pm – 5.10pm

Poster Session – IRIS

Multi-Location Chemical Characterization of Argan Kernel in Morocco by Neutron Activation Analysis: Application and Calibration of HPGe Detector via MCNP Simulation	Badague, A. (1); Bounouira, H. (2); Aarab, I. (1); Elmahjoub, C. (1); Amsil, H. (2) 1 – ibn Tofail University, Morocco 2 – CNESTEN, Morocco
Toward Isotope Sovereignty: Transforming Jordan's JRTR into a Premier Regional Hub for I-131, Ir-192, and Ho-166 Production and Distribution to Europe	Harahshah, K. (1) 1 – Jordan Nuclear Reactor for Research and Training, Jordan

On Proton irradiation and transmutation implementation on PyNE-Python library.

Natali, G. (1); Velazquez, D. (2); Plata, C. (2);
Pille, G. (1)
1 - Apollo Generators, France
2 - Salomea Solutions, United States

5.10pm – 6.30pm **Transport (IRIS)**

Chair :

Connecting the Dots – Transportation as the Backbone of the Radioisotope Supply Chain

H. Van De Maele, PHSE International, Belgium

Challenges and Opportunities for Automation and Data Analytics in the Radioisotope Supply Chain.	Alcala, C. L. (1); Massera, J. R. (1) 1 - INVAP, Argentina
COMPARATIVE EVALUATION OF DEPLETED URANIUM CASKS FOR THE TRANSPORT OF LUTETIUM-177	Jacobs, C. (1); Bedhesi, L. (1); Chinaka, E. (1); Setlhare, A. (2) 1 - South African Nuclear Energy Corporation (Necsa), South Africa 2 - North West University, Potchefstroom Campus, South Africa
Optimal Production Scheduling and Distribution of a Medical Radioisotope Under Uncertainty	Nguyen, T. (1); Arts, J. (2); Seranilla, B. K. (2) 1 - SCK CEN, Belgium 2 - University of Luxembourg, Luxembourg



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