

7th International Symposium on Medical Radioisotopes

The Changing Landscape

May 9, 2019

**Val Benoit, Bâtiment du Génie Civil,
Quai Banning 6, BE-4000 Liège, Belgium**

Programme

08:45 – 09:15 Registration and welcome coffee

09:15 – 09:30 Opening: Frank Deconinck, PC Chair

- Short welcome and introductory address

09:30 – 10:30 Session 1: Radioisotope production / Chairs: Bernard Ponsard, SCK•CEN and Lucia Popescu, SCK•CEN

Lecture 1: Which (new) supply sources for Mo-99/Tc-99m ? – JM Geets, Co-chairman of the AIPES Innovation Working Group and IBA RadioPharma Solutions.

- Apart from existing or planned research reactors, such as BR2, HFR, Maria, JHR, PALLAS, ... new approaches are being developed: cyclotron production, the Lighthouse project, NorthStar, Shine, BWXT-Bruce collaboration, ...

Lecture 2: PET and targeted radionuclide therapy isotopes production in Belgium: the Ge-68 (PET), Lu-177 (beta) and Ac-225 (alpha) theragnostic trio – Dennis Elema, SCK•CEN, and Jean Bonnet, IRE & IRE-ELiT

- In October 2018, SCK•CEN, IRE and Global Morpho Pharma announced a major initiative on the supply of those very important isotopes for the future of nuclear medicine.

Lecture 3: MINERVA – first phase of MYRRHA and potential contribution to medical radioisotopes – Hamid Aït Abderrahim, SCK•CEN

- The funding of the first phase (100 MeV) of the linear accelerator for MYRRHA is now approved by the Belgian Government. It opens new perspectives for medical isotope production.

10:30 – 11:00 Coffee break and poster session

11:00 – 12:00 Session 2: Radioisotope Transport and Good Distribution Practice / Chairs: Kristel Vermeersch, EITA & KVS & Partners – Dangerous Goods Consulting, and Yvan Bruynseraede, KULeuven

Lecture 4: Perspectives in Integrated Supply Chains Performance Management. – Alassane B. Ndiaye, ULB

- Transport systems modelling and supply chain management, including urban mobility management, become important tools to streamline isotope transport.

Lecture 5: The changing European landscape in the isotope transport sector – Pierre Dejonckheere, Transrad

- Several changes among actors in the field of radioisotope transport and the Brexit may strongly affect isotope transports within and between the EU and the UK.

Lecture 6: Lessons learned since the new transport regulations came into effect – Rony Dresselaers, FANC/AFCN

- During the last symposium, FANC/AFCN explained the new regulatory framework. Now, feed-back is available.

12:00 – 12:20 Crisis Communication / Chair: Michel Giot, UCLouvain

Lecture 7: A crisis resilient nuclear organisation – Wim Uyttenhove, The Binding Energy and PM Risk-Crisis-Change

- Better later than sooner, but one day, crisis management will be required in every sector dealing with complex technological risks. In particular for the nuclear sector, rigid plans do not guarantee a successful crisis management (for e.g. a transport accident, environmental pollution, isotope shortage). Today, effective crisis communication turns out to be essential, seen the polarised nuclear debate.

12:20 – 14:00 Lunch and poster session

14:00 – 15:00 Session 3: Radiopharmaceuticals / Chairs: André Luxen, ULiège and Vicky Caveliers, VUB

Lecture 8: The Brussels RadioTheranostics Platform – Zéna Wimana, IJBordet, and Tony Lahoutte, VUB

- A major project started between VUB and IJBordet on GMP RadioTheranostics. The platform will be unique in Europe.

Lecture 9: Cold kits for radiopharmaceuticals - beyond SPECT – Sam Voccia, ANMI

- Part of the success of Tc-99m based radiopharmaceuticals is due to the availability of cold kits. Several cold kits for use with Ga-68 are being developed and may lead to a strong increase in Ga-68 based procedures.

Lecture 10: EU Regulations: practical impacts for radiopharmaceuticals – Joël Aerts, Luxembourg Hospital Center

- GMP, MA, IMPD etc. are expressions becoming part of nuclear medicine practice and vocabulary, but not everyone knows what they mean or imply.

15:00 – 16:00 Session 4: Medical Radioisotope Applications / Chairs: Nadia Withofs, ULiège and Thierry Vander Borgh, UCLouvain

Lecture 11: The safety, feasibility and optimization of multiple prolonged breath-holds (> 5 minutes) in radiotherapy – Michael Parkes, University of Birmingham

- Imaging and external beam radiotherapy in the thorax or abdomen suffer from organ movement due to breathing. Gating may help but strongly increases the length of the procedures. It would be great if conscious and unmedicated cancer patients from “7 to 77” could hold their breath for over 5 minutes. This is exactly what the speaker achieves by adequate oxygenation and hyperventilation (hypocapnia) achieved using a mechanical ventilator.

Lecture 12: Total body PET - from mice to man – Stefaan Vandenberghe, UGent

- In a Total Body PET scanner, a large part of the patient body is surrounded with solid-state detectors. For the same dose that is currently given, a much larger signal is collected. This enables to either drastically reduce the examination time, to perform dynamic studies or to reduce the dose by a factor up to 40.

Lecture 13: Impact of nuclear medicine on personalised patient management – Kristoff Muylle, UZ Brussel

- Personalised medicine tailors the therapy to individual patients as opposed to methods based on standard statistical procedures. Appropriate nuclear imaging can induce important savings by avoiding useless therapies and point to efficient ones.

16:00 – 16:15 Poster prize ceremony

- Traditionally 3 prizes are given for the best posters, respectively 500, 350 and 150 €

16:15 – 16:30 Conclusions and closure

- Isotopes in medical imaging: past, present and future? – Pieter De Bondt, President of BelNuc

16:30 – 17:30 Reception