

HEIR 2018 CONFERENCE AGENDA



Monday, October 8, 2018

Opening ceremony

9:30 am to 10:00 am

F. Menetrier

J.M. Bertho

F. Jacq

J.C Niel

Epidemiology

Chairmans: O. Laurent and L. Zablotska

10:00 am to 10:35 am

Invited speaker : **David B. Richardson**

Tritium and cancer risk: incorporating informative priors from experimental research into epidemiology

M. Tirmarche : Cancer risk from exposure to alpha emitters : a view from the ICRP

E. Rage : Pooled Uranium miners analysis (PUMA) : the setting up of an International Occupational Cohort

10:35 am to 12:35 pm

T. Azizova : Risk of chronic obstructive pulmonary disease in a cohort of workers occupationally exposed to ionizing radiation

N. Fenske : Mortality from cancer (other than lung) and radon exposure in German uranium miners, 1946-2013

M. Sokolnikov : Lung, liver and bone cancer lifetime risk after intake of ^{239}Pu

12:35 pm to 14:00 pm

Lunch

Biokinetics

Chairmans: L. Bertelli and A. Giussani

14:00 pm to 14:35 pm

Invited speaker : **F. Paquet**

The new ICRP biokinetic and dosimetric models

A. Melintescu : OBT and human tritium dosimetry

14:35 pm to 15:55 pm

S. Romanov : Microdistribution of plutonium in human skeleton. Should we change the ICRP model?

D. Melo : Americium systemic model for rats

S. Lamart : Influence of the physico-chemical form on americium biodistribution after wound contamination

15:55 pm to 16:25 pm

Coffee break

Biokinetics

Chairmans: F. Paquet and J. F. Angulo

L. Bertelli : A method for tracking a case under chelation using urinary excretion measurements

J. Klumpp : Mobility, solubility and biokinetics of ^{238}Pu
Young investigator award

16:25 pm to 18:05 pm

A. Van Der Meeren : From in vivo to in vitro models to assess bioavailability properties of Plutonium compounds

M. Avtandilashvili : Biokinetics of soluble Plutonium after wound injury treated with Ca-DTPA

K. Tani : Biokinetics analyses for dose assessment after an accidental inhalation of plutonium in Oarai, Japan *Young investigator award*

End of the first day

Tuesday, October 9, 2018

Dose assessment

Chairmans: E. Blanchardon and B. Madas

A. Maier :Inhomogeneous distribution of radon in different types of tissue in the human body

9:00 am to 10:20 am **J. Marsh** :Effective dose coefficients for inhaled radon and its progeny: ICRP's approach

S. Medici : In vivo screening measurements with common radiation protection instruments *Young investigator award*

M. Saily : Evaluation of internal exposure in French nuclear power plants based on whole body counting

10:20 am to 10:50 pm

Coffee break

Dose assessment

Chairmans: J. Marsh and M. Akashi

E. Ellis : Comprehensive dosimetry for seven exposure sources at the earliest US uranium processing facility

10:50 am to 12:35 pm **M. Lopez Ponte** : Dose Assessment of workers long term exposed to chronic intakes of enriched uranium

E. Davesne : Internal dose assessment for the French cohort of uranium workers

S. Tolmachev : Case studies in brain dosimetry for internal emitters: Is more detail needed for epidemiology?

V. Deffner : Uncertainties in radiation exposure assessment in the Wismut cohort: a preliminary evaluation

12:35 pm to 13:50 pm

Lunch

Biological effects

Chairmans: A. Van der Meeren and K. Tack

Invited speaker : **M. Avtandilashvili**

13:50 pm to 14:25 pm

The United States Transuranium and Uranium Registries: Fifty-year History of Actinide Biokinetic Research.

A. Miller : Radiation exposure from depleted uranium: the radiation bystander effect

14:25 pm to 15:45 pm

G. Carle : Effect of natural uranium on bone cells

S. Toklayeva : Effect of radiotoxic effect of uranium ore dust on the reproductive system of rats

A. Bontemps: In vivo comparison between two nephrotoxic agents, sodium fluoride and uranyl nitrate *Young investigator award*

15:45 pm to 16:15 pm

Coffee break

Biological effects

Chairmans: S. Le Hir and R. Guilmette

C. Mothersill : Delayed and non-targeted effects of chronic exposure in vivo and in vitro to radium-226

16:15 pm to 17:15 pm

B. Madas : Radon induced hyperplasia may provide an explanation for inverse exposure rate effect

P. Ostheim : Using mRNA and small RNA gene expression changes in peripheral blood for easy detection of Ra-223 *Young investigator award*

Epidemiology

Chairmans: M. Tirmarche and Z. Carr

17:15 pm to 18:35 pm

S. Bouet : Association analysis between mortality and ionizing radiation exposure in French uranium workers

K. Kelly-Reif : Cancer incidence and mortality among uranium miners in the Příbram region of the Czech Republic *Young investigator award*

L. Tomasek : Risk of Leukaemia in Czech Uranium Miners

L. Zablotska : Analysis of histological subtypes of incident lung cancer among Eldorado uranium workers

End of the second day

Wednesday, October 10, 2018

Medical countermeasures

Chairmans: F. Menetrier and G. Phan

9:00 am to 9:35 am

Invited speaker : **O. Gremy**

Medical countermeasures against radionuclide contamination: An overview

9:35 am to 10:15 pm

L. Miccoli : Liposomal DTPA as a good strategy for enhancing Pu decorporation regardless of treatment regimen.

M. Kastl : Modelling DTPA decorporation of Am in rats

10:15 am to 10:45 pm

Coffee break

Medical countermeasures

Chairmans: F. Menetrier and G. Phan

10:45 pm to 11:45 pm

J. Wang : Solid-liquid exchange between uranium and a synthetic apatite: towards U decorporation from bone

P. Delangle: Uranyl-chelating peptides to help understanding uranium toxicity at a molecular level

G. Phan : Pharmacological study of stable potassium iodide (KI) repeated prophylaxis in adult rats

Biological effects

Chairmans: S. Le Hir and R. Guilmette

11:45 pm to 12:45 pm

D. Lebsir : Effect of repetitive potassium iodide on elderly rat's thyroid
Young investigator award

D. Cohen : Systems Biology described Sodium/Iodide Symporter mechanism during repetitive stable iodide intake

M. Mezaguer : Histological long-term effects in relevant tissues after ¹³¹I contamination of two Wistar rat models

12:45 pm to 14:00 pm

Lunch

Biological effects

Chairmans: A. Van der Meeren and K. Tack

14:00 am to 14:40 pm **V. Malard** : Toxicity mechanisms of cobalt oxide particles (Co₃O₄P) on human lung cells: impact of solubilization

S. Mokrani: Differential responses to tritiated thymidine in mouse embryonic neural stem cells and fibroblasts *Young investigator award*

Dose assessment

Chairmans: E. Blanchardon and B. Madas

14:40 pm to 15:40 pm **K. Yajima** : A reliable and robust method for monitoring large populations to assess thyroid internal exposure

K. Manabe: Development of a function calculating internal dose coefficients based on ICRP 2007 Recommendations

A. Giussani : Preliminary outcomes of the ICIDOSE exercise and impact of the new models for occupational intakes

15:40 pm to 16:10 pm

Coffee break

Dose assessment

Chairmans: J. Marsh and M. Akashi

16:10 pm to 17:10 pm **M. Jacquemin** : Multi-cellular dosimetry of β^+ -emitting radionuclides used for cell labeling *Young investigator award*

E. Kim: Dose assessment for workers involved in an internal contamination accident with Pu at JAEA's Oarai

L. Hetrick : Localized Instantaneous Dose Rates from Inhaled Particles of Pu-239

Shuttle to the site of the Gala Giner at 18:30 pm

Gala dinner at the Pré Catelan

Thursday, October 11, 2018

Nuclear medicine

Chairmans: M. Bardies – L. Lebaron – Jacobs

9:00 am to 9:35 am

Invited speaker : **M. Bardies**

Relevance and implementation of patient-specific dosimetry in targeted radionuclide therapy

A. Forbes: 90Y glass microspheres radionuclide therapy: robustness analysis with a dosimetry software. *Young investigator award*

9:35 am to 10:35 pm

D. Broggio: Radio-iodine therapy of Graves' disease: is there a dose-effect relationship?

M. Mezaguer : Absorbed dose evaluation at different organs after ¹³¹I oral contamination of two Wistar rat models

10:35 am to 10:55 pm

Coffee break

What's next?

Chairmans: J.M. Bertho and N. Griffiths

N. Griffiths Comments on actinide radiotoxicology research and the 3Rs remit - Replace, Reduce and Refine

B. Madas: FAIRing the radiation science commons

10:55 pm to 12:40 pm

S. Tolmachev : USTUR: Expanding horizons for actinide biokinetics and dosimetry

J-M. Bertho: Internal exposure in post-accidental situations: a multi-pollution to take into account?

C. Hrdina & J. Jones: More effective use = more lives saved: MCM response strategies for radiological incidents.

Closing ceremony

Chairmans: F. Menetrier and J-M. Bertho

With J.C. Gariel and J.R. Jourdain

12:40 pm to 13:10 pm

Young Investigator Award

Poster Award

Next HEIR Announcement

Acknowledgements and Farewell

End of the meeting