

Status of tritium modeling in IFIN-HH

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*RADIONUCLIDES IN THE ENVIRONMENT, Chapter
- TRITIUM, Edited by David A. Atwood, Copyright
2010, John Wiley & Sons Ltd., West Sussex,
England, pp. 47-65, ISBN 978-0-47071434-8*
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- 1 Introduction
- 2 Occurrence
- 3 Chemistry and Physics: Specific Examples for Tritium
- 4 Analytical Characterization Techniques
- 5 Speciation
- 6 Potential Human Exposure
- 7 Separation Techniques
- 8 Remediation
- 9 Conclusions

Energy metabolism used as a tool to model the transfer of ^{14}C and ^3H in animals

A. Melintescu, D. Galeriu

Radiation and Environmental Biophysics, 2010, DOI: 10.1007/s00411-010-0302-4

*Measured and Modelled Tritium Concentrations in Freshwater Barnes Mussels (*Elliptio complanata*) Exposed to an Abrupt Increase in Ambient Tritium Levels*

T.L. Yankovich, S.B. Kim, F. Baumgärtner, D. Galeriu, A. Melintescu, K. Miyamoto, M. Saito, F. Siclet and P. Davis

accepted to Journal of Environmental Radioactivity

Retention of tritium in reference persons: a metabolic model. Derivation of parameters and application of the model to the general public and to workers

D. Galeriu, A. Melintescu

- IOP PUBLISHING JOURNAL OF RADIOLOGICAL PROTECTION
- J. Radiol. Prot. **30** (2010) 445–468
doi:10.1088/0952-4746/30/3/003

Tritium profiles in Snowpacks

D. Galeriu, P Davis, W. Workman

Journal of Environmental Radioactivity 101 (2010) 869e874

Rain Scavenging of Tritiated Water Vapour: A Numerical Eulerian Stationary Model

D. Atanassov , D. Galeriu

accepted to Journal of Environmental Radioactivity

Dynamic model for tritium transfer in aquatic food chain

A. Melintescu*, D. Galeriu

B. Submitted to Radiation and Environmental Biophysics

On going

- **Exchange velocity approach and the role of photosynthesis for tritium transfer from atmosphere to plants**
 - A. Melintescu,* and D. Galeriu
 - TRITIUM 2010, Nara , this Octomber

On going

- Using ^{14}C experimental data in order to fix some tritium dynamic processes ????
 - ^{14}C in rice and potato- in progress, wheat to be considered
 - fix, model para with exp data for dry matter production and partition to plant parts, depending on crop genotype specific para and environment para
- Need time and budget to finalize (1/2 done)