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Formation

B.Sc. chimie, Université Laval, 1998
M. Sc. Chimie, Université Laval (Prof. Claude Barbeau), 2000
Ph.D. Sciences environnementales, Trent University (Prof. R. Douglas Evans), 2005
Postdoctorat, Bureau de la Radioprotection, Santé Canada (Dr. R. Jack Cornett), Ottawa 2005-2007

1. Contribution à la recherche**1. Articles dans des publications spécialisées**

20. Chen J., Larivière D., Timmins R. et Verdecchia K. (2011) estimation of uranium GI absorption fractions for children and adults, *Radiation Protection Dosimetry*, sous presse
19. Milliard A., Durand-Jézéquel M., et Larivière D. (2011) Sequential Automated Fusion/Extraction Chromatography Methodology for the Dissolution of Uranium in Environmental Samples for Mass Spectrometric Determination, *Analytica Chimica Acta*, 684:31-37
18. St-Amand N., Rousseau M.-E., Larivière D., Whyte, J.C., Ungar K.R., et Johnson S. (2011) Radiostrontium and radium analysis in Low-Level Environmental Samples following a Multi-Stage Semi-Automated Chromatographic Sequential Separation, *Applied Radiation and Isotopes*, 69:8-17
17. Guérin N., Langevin M.-A., Nadeau K., Labrecque C., Gagné A., et Larivière D. (2010) Determination of neptunium in environmental samples by extraction chromatography after valence adjustment, *Applied Radiation and Isotopes*, 68:2132-9
16. Larivière D., Benkhedda K., Kiser S., Johnson S., et Cornett R.J., (2010) Rapid and automated sequential determination of ultra-trace long-lived actinides in air filters by inductively coupled plasma mass spectrometry, *Analytical Methods*, 2:259-267
15. Li C., Larivière D., Kiser S., Moodie G., Falcomer R., Elliot N., Burchart L., Paterson L., Epov V.N., Evans R.D., Pappas R.S., Smith J. et Cornett R.J. (2008) Method intercomparison for the analysis of 239/240Pu in human urine, *Journal of Analytical and Atomic Spectrometry*, 23:521-526
14. Larivière D., Cumming T.A., Kiser S., Li C., et Cornett R.J., (2008) Automated flow injection system using extraction chromatography for the determination of plutonium in urine by inductively coupled plasma mass spectrometry, *Journal of Analytical and Atomic Spectrometry*, 23:352-361
13. Packer A.P., Larivière D., Li C., Chen M., Fawcett A., Nielsen K., Mattson K., Chatt A., Scriver C., et Erhardt L., (2007) Validation of an ICP-MS method for the determination of Ce, Sr, and Ti in ceramic materials used in radiological dispersal devices (RDD), *Analytica Chimica Acta*, 588:166-172

12. Larivière D., Brownell D.K., Epov V.N., Cornett R.J., et Evans R.D., (2007) Determination of ^{226}Ra in sediments by ICP-MS, a comparative study of three sample preparation approaches, *Journal of Radioanalytical and Nuclear Chemistry*, 273:337-344.
11. Larivière D., Packer A.P., Marro L., Li C., Chen. J., et Cornett R.J., (2007) Age dependence of natural uranium and thorium concentrations in bone, *Health Physics*, 92:119-126.
10. Larivière D., Taylor V.F., Evans R.D., et Cornett R.J., (2006) Review - Radionuclide determination in environmental samples by inductively coupled plasma mass spectrometry, *Spectrochimica Acta B*, 61: 877-904.
9. Larivière D., Reiber K.M., Evans R.D., et Cornett R.J., (2005) Determination of ^{210}Pb at ultra-trace levels in water by ICP-MS, *Analytica Chimica Acta*, 549: 188-196.
8. Benkhedda K., Larivière D., Scott S., et Evans R.D., (2005) Hyphenation of flow injection on-line preconcentration and ICP-MS for the rapid determination of Ra-226 in natural waters, *J. Anal. Atom. Spectrom.*, 20: 523-528.
7. Larivière D., Epov V.N., Reiber K.M., Cornett R.J., et Evans R.D., (2005) Micro-extraction procedures for the determination of Ra-226 in well waters by SF-ICP-MS, *Analytica Chimica Acta*, 528:175-182.
6. Epov V.N., Larivière D., Reiber K.M., Evans R.D., et Cornett R.J., (2004) Extraction and determination of Cs in Natural waters by ICP-MS after ion exchange separation, *Journal of Analytical and Atomic Spectrometry*, 19: 1225-1229.
5. Epov V.N., Larivière D., Epova E.N., et Evans R.D., (2004) Polyatomic interferences produced by macroelements during direct multi-elemental ICP-MS hydrochemical analysis, *Geostandards Geoanalytical Resources*, 28:213-224.
4. Epov V.N., Taylor V.F, Larivière D., Evans R. D., et Cornett R. J., (2003) Collision cell chemistry for the analysis of radioisotopes by inductively coupled plasma mass spectrometry. *Journal of Radioanalytical and Nuclear Chemistry*, 258: 473-482.
3. Larivière D., Epov V.N., Evans R.D., et Cornett R.J., (2003) Determination of radium-226 in environmental samples by inductively coupled plasma mass spectrometry after sequential selective extraction, *Journal of Analytical and Atomic Spectrometry*, 18: 338-343.
2. Epov V.N., Larivière D., Li C., Cornett R.J., et Evans R.D., (2003) Direct determination of ^{226}Ra in environmental matrices using collision cell inductively coupled plasma - mass spectrometry, *Journal of Radioanalytical and Nuclear Chemistry*, 256: 53-60.
1. Larivière D., Epov V.N., Evans R.D., et Cornett R.J., (2002) Application of di(2-ethylhexyl) orthophosphoric acid for the separation and pre-concentration of radium-226 from ores and biological samples from uranium-mining regions, *Canadian Journal of Analytical Sciences and Spectroscopy*, 47: 119-124.

2. Chapitres de livres

2. Larivière D., et Guerin N., *Chapter I: Natural Radioactivity*, in D. Atwood (Ed), *Handbook of*

Radionuclides in the Environment, John Wiley & Sons Ltd, **2010**.

1. Larivière D., Whyte, J.C., Zhang W., Hoffman I., Ungar R.K, et Johnson S., *Rapid and automated analytical technologies for radiological/nuclear emergency preparedness*, in A.N. Koskinen (Ed), *Nuclear Chemistry: New Research*, Nova Science Publishing, **2009**.

3. Compte-rendu de conférence

7. Chen J., Larivière D., Timmins R., et Verdecchia K. (**2010**) *Estimation of uranium GI absorption coefficients for children and adults*, European Conference on Individual Monitoring of Ionizing Radiation, 8-12 mars, Athènes, Grèce, 9 pages.
6. Chen J., Larivière D., Timmins R., et Verdecchia K. (**2008**) *Uranium GI absorption coefficients for young children*, 12th International Radiation Protection Association, 19-24 octobre, Buenos Aires, Argentine, 6 pages.
5. Erhardt, L., Brousseau, P., Faucher, D., Roy, G., Li, C., Packer, A.P., Li, W., Larivière, D., Cornett, R.J., Hogue, R., Chakrabarti, C., Murimboh, J., Andrew, B., Waller, E., Troczynki, T., et Chen, M., (**2007**) *CRTI-03-0018RD – Experimental characterization of risk for radiological dispersal devices*, Proc. of the summer symposium : Building Resiliency : from concept to operations, 11-14 Juin, Gatineau, Canada, p. 49-50.
4. Li, C., Larivière, D., Epov, V.N., Vais, V., Grindberg, P., Willie, S., Evans, R.D., Cornett, R.J., Sturgeon, R., et Tanner, S., (**2006**) *CRTI – 103RD- New technologies for the rapid assessment of radioactive contamination*, Proc. of the summer symposium, 13-16 Juin, Gatineau, Canada p. 23-24.
3. Epov, V.N., Benkhedda, K., Grindberg, P., Vais, V., Li, C., Willie, S., Larivière, D., Evans, R.D., Cornett, R.J., et Sturgeon, R., (**2005**) *CRTI – 103RD- New technologies for the rapid assessment of radioactive contamination*, Proc. of the summer symposium, 20-23 Juin, Gatineau, Canada p. 48-49.
2. Larivière D., Epov V.N., Evans R.D., et Cornett R.J., (**2002**) *Chemical separation and preconcentration of radium-226 in environmental samples using Ln resin*, Proceedings of the Fourth Biennial International Conference on Monitoring and Measurement of the Environment, Toronto, Canada p. 335-339.
1. Epov V.N., Larivière D., Evans R.D., et Cornett R.J., (**2002**) *Direct determination of ²²⁶Ra in ores and biological samples using collision cell ICP-MS*, Proceedings of the Fourth Biennial International Conference on Monitoring and Measurement of the Environment, Toronto, Canada p. 367-372.

4. Présentations (* indique les présentations orales)

41. Guérin N., Johnson T., et Larivière D., (**28/05/2010-02/06/2010**) Separation of actinides by valence adjustment for their measurement in environmental samples, 93th *Canadian Chemistry Conference and Exhibition*, Toronto, ON
40. Milliard A., Durand-Jézéquel M., et Larivière D. (**28/05/2010-02/06/2010**) A rapid and automated fusion method for the dissolution of actinides in environmental samples for mass spectrometry detection, 93th *Canadian Chemistry Conference and Exhibition*, Toronto, ON
39. *Milliard A., Durand-Jézéquel M., et Larivière D. (**27/05/2010-28/05/2010**) Analyse de l'uranium particulaire dans l'air de la région de Québec par spectrométrie de masse, après fusion automatisée. 14^e *colloque du Chapitre Saint-Laurent (SETAC-SRA)*, Québec, QC

38. *Guérin N., Langevin, M.-A., Labrecque C., Nadeau, K., Gagné A., et Larivière D., (16/08/2009-20/08/2009), Radiochemical Automated Separation of Neptunium via Valence Adjustment, 238th American Chemical Society meeting, Washington, DC
37. *Milliard A., Durand-Jézéquel M., et Larivière D. (09/08/2009-12/08/2009) New and rapid method for the dissolution of actinides by automated fusion designed for ICP analysis, 55th International Conference on Analytical Sciences and Spectroscopy, Kingston, ON
36. *Johnson S., et Larivière D. (27/10-31/10/2008) Laboratory testing for emergency preparedness – a Canadian perspective, Annual Radiobioassay and Radiochemical Measurements Conference (RRMC), San Destin, FL
35. Kochermin V., Larivière D., et Johnson S. (27/10-31/10/2008) Levels of radioactivity in bottled drinking water produced in Canada, RRMC, San Destin, FL
34. *Larivière D., (21/07-25/07/2008) Biological expression and physical evidence – linking people to radiological materials, places, and events, US-Canada Nuclear Forensic Workshop, Chicago, IL

Autres présentations à des conférences: 2002 (6), 2003 (8), 2004 (2), 2005 (3), 2006 (11), 2007 (3) total (33)

Présentations invitées

12. Larivière D., (29/06/2010) Radioactivité: Aspects Théoriques & Techniques, Institut National de Santé Publique du Québec, Québec, QC.
11. Larivière D., (04/06/2010) Urgence Nucléaire : Aspects Analytiques, Rencontre PMUNE-G2 : Plan des mesures d'urgence nucléaire externe à Gentilly-2, Trois-Rivières, QC.
10. Larivière D., (19/03/2010) Radiochemical automation: New challenges in analytical chemistry, Chemistry Department, Queen's University, Kingston, ON.
9. Larivière D., (16/06/2009) New Radiochemical tools for actinides detection in the environment, Candu Onwer's Group Symposium, Hamilton, ON.
8. Larivière D., (07/05/2009) de nouveaux outils radiochimiques et analytiques pour l'étude de la radioécologie, France-Quebec Collaborative Effort in Radioecology/Radiochemistry Workshop, Cadarache, France.
7. Larivière D., (11/02/2009) La spectrométrie de masse: un nouvel outil pour la mesure environnementale des radionucléides, Institut national de la recherche scientifique – Eau, Terre et Environnement, Québec, QC.
6. Larivière D., Kiser S., Whyte J.C., Mifflin C., and Johnson S. (21/09-24/09/2008) Automated ion-exchange and extraction chromatography separation for radiological/nuclear emergency response, International Ion Chromatography Symposium, Portland, État-Unis.
5. Larivière D., (19/08/2008) Nouveaux outils radiochimiques et analytiques pour l'étude de la radioécologie, France-Quebec Collaborative Effort in Radioecology/Radiochemistry Workshop, Quebec City, QC.

4. Larivière D., Kiser S., Li C., Johnson S., and Cornett R.J. (**19/08-23/08/2007**) Beyond traditional radioanalytical chemistry: Automated separation/pre-concentration and ion-counting instruments, 234th *ACS National Meeting*, Boston, États-Unis.
3. Larivière D., (**12/03/2007**) ICP-MS: a complete method for radionuclides analysis, *Defence Research and Development Canada (DRDC)*, National Defence, Ottawa, ON.
2. Larivière D., Packer A.P., Li C., Epov V.N., Evans R.D., and Cornett R.J. (**27/05-31/05/2006**) Extraction chromatography for the separation of actinides in environmental samples at ultra-trace levels, 89th *Canadian Chemistry Conference and Exhibition*, Halifax, NS.
1. Larivière D., Epov V.N., Benkhedda K., Kiser S., Li C., Cornett R.J., and Evans R.D. (**26/03-30/03/2006**) Automated measurements of actinides in environmental samples by ICP-MS in case of nuclear emergency: Developments and performances, 231st *American Chemical Society National Meeting*, Atlanta, États-Unis.