

Jukka Lehto
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Curriculum vitae

1. **Full name:** Jukka Kalevi Lehto
2. **Date and place of birth:** 1st of October 1953, Nokia, Finland
3. **Current position:**

professor emeritus in radiochemistry, University of Helsinki 2018

4. Education and training:

M.Sc.	1981	University of Helsinki
Lic.Phil.	1985	University of Helsinki
Ph.D.	1987	University of Helsinki

5. Previous professional appointments:

part-time junior counselling officer, 1978-1979 (18 months), University of Helsinki, Faculty of Science
researcher, 1980-1988, University of Helsinki, Department of Radiochemistry
visiting researcher, 1981 (9 months) Isotope Institute of the Hungarian Academy of Sciences, Budapest, Hungary
visiting researcher, 1985-1986 (12 months), Department of Chemistry, Texas A&M University, College Station, USA
teaching assistant, 1988-1997, Department/Laboratory of Radiochemistry, University of Helsinki
senior scientist, 1995-2000, Academy of Finland
senior teaching assistant, 1998-2001, Laboratory of Radiochemistry, University of Helsinki
acting professor in radiochemistry, Laboratory of Radiochemistry, University of Helsinki, 2000-2002, 2004-2005
head of the Laboratory of Radiochemistry, University of Helsinki, 2000-2002
senior lecturer, (reader, dozent, associate professor) 2002-2004, Laboratory of Radiochemistry, University of Helsinki
docent in radiochemistry 1988-2004
professor in radiochemistry, University of Helsinki, 2005-2018
head of the Laboratory of Radiochemistry, University of Helsinki, 2004-2017

6. Research awards, research honours and major stipendiary support for research Research honours:

Professor Jorma K. Miettinen Award Medal 1993, Section of Radiochemists of the Finnish Union of Chemists

Golden Medal of the Al-farabi Kazakh National University, Almaty, Kazakhstan, 2013

Golden medal for 30 years in service of science, Federation of Finnish Learned Societies, 2016

Vladimir Majer Medal, Czech Chemical Society, 2018

Major research funding:

Academy of Finland, 30,000 €, 1990

Finnish Technology Development Agency, 150,000 €, 1992

University of Helsinki Research Foundation, 130,000 €, 1994

EU Brite-EuramIII, 317,000 €, 1996

Academy of Finland, 33,000 €, 1996

Finnish Technology Development Agency, 530,000 €, 1998

Academy of Finland, 100,000 €, 1998

Academy of Finland, 13,000 €, 1999

Maj ja Tor Nesslingin Säätiö, 15,000 €, 2000

Maj ja Tor Nesslingin Säätiö, 6,500 €, 2001

Private foundations, approximately 50,000 €, 1980-1999

Ministry of Environment, Finland, 100,000 €, 2004

Nordic Nuclear Safety Programme (NKS), 6,000 DKK, 2004

Euregio, 25,000€, 2006

Nordic Nuclear Safety Programme (NKS), 50,000 DKK, 2006

Posiva, 1.800.000€, 2008-2017

Ministry of Employment and Economy, 550.000 €, 2008-2017

Academy of Finland, 400.000€, 2009

EU CINCH projects, 300.000€, 2010, 2013

In total approximately 4,500,000 €

7. Editorial board memberships

guest editor of Reactive&Functional Polymers 1994-1995

8. Memberships in scientific societies

member of the Finnish Chemical Society

9. Other academic and professional activities

Coordinator of the project "Management and disposal of radioactive wastes generated in the cleanup of large areas contaminated in nuclear accidents" of the Nordic Nuclear Research Programme, 1990-1993.

Coordinator of the European Union BriteEuramIII Programme project "Development of advanced ion exchange materials and methods for the removal of toxic metals from metallurgical waste effluents", 1996-1999.

member in the International Atomic Energy Agency's coordination group responsible for planning and commitment of the comprehensive radiological survey of the Semipalatinsk nuclear test site, 2002-2006

National member of the Nuclear and Radiochemistry Division of the European Association of Chemical and Molecular Sciences, 1999-2019

Chairman of the European Network on Education and Training in Nuclear and Radiochemistry 2015-2016

Further academic and professional activities:

Finnish Union of Chemists, Section of Radiochemists, chairman 1983-1985 and 1987-1988, deputy chairman 1985-1986 and 1988-1989

member of the organising committee of ION-EX 1995, ICIE'03, IEX 2004, Mendeleev/Radiochemistry 2007 conferences
plenary lecturer in IOX-EX'93 and IEX'96 conferences (see publications 48 and 51)

referee in international journals: Journal of Environmental Radioactivity, Radiochimica Acta, Analytical Chemistry, Journal of Hazardous Materials, Langmuir, Applied Radiation and Isotopes, Separation Science and Technology, Reactive & Functional Polymers, Journal of Solid State Chemistry, Nukleonika, Separation and Purification Technology, Microchimica Acta, Adsorption, Journal of Alloys and Compounds, Journal of Nuclear and Radioanalytical Chemistry, Journal of Chemical Technology and Biotechnology, Boreal Environmental Research, Environmental Science and Technology, Journal of Nuclear Materials, Thermochimica Acta, Analytica Chimica Acta, RSC Advances, Chemical Physics, Physics and Chemistry of the Minerals, Environmental Science and Pollution Research, Minerals

deputy member of the steering group of the Department of Radiochemistry, University of Helsinki, 1992-1994

deputy member of the steering group of the Department of Chemistry, University of Helsinki, 1995-2000, 2011-2014, 2015-2017

member of the steering group of the Department of Chemistry, University of Helsinki, 2001-2003, 2007-2010

deputy council member of the Faculty of Science, University of Helsinki, 1998-2000

member of the evaluation committee of an organic chemistry professorship, 1999-2000, and an inorganic chemistry professorship 2007-2008

member of an advisory committee planning education strategy in nuclear sciences in Finland, Ministry of Trade and Industry, 2000

member of the Nuclear Waste Safety Section of the Finnish Advisory Committee on Nuclear Safety, appointed by the Ministry of Trade and Industry, 2001-2003

member of steering committee for the evaluation nuclear energy competence in Finland, 2011-2012

member of the steering committee for the planning of research strategy for nuclear energy research in Finland, 2013-2014

Chairman of the 9th International Conference on Nuclear and Radiochemistry, Helsinki, Finland, August 28 – September 2, 2016

Refereeing a docentship:

FT Jussi Paatero, docentship in radiochemistry, 2002

Ph.D. Daicing Cui, docentship in nuclear chemistry (KTH, Sweden), 2010

Supervising of doctor's theses:

Risto Harjula (1993), Ion Exchange and Hydrolysis Reactions in Zeolites

Heikki Leinonen (1999), Removal of Harmful Metals from Metal Plating Waste Waters Using Selective Ion Exchangers

Kaisa Vaaramaa (2003), Physico-chemical Forms of Natural Radionuclides in Drilled Well Waters and their Removal by Ion Exchange

Risto Koivula (2003), Inorganic Ion Exchangers for Decontamination of Radioactive Wastes Generated by the Nuclear Power Plants

Pia Vesterbacka (2005), ²³⁸U-Series Radionuclides in Finnish Groundwater-Based Drinking Water and Effective Doses

Matti Kaikkonen (2006), A Novel Assay Method for Measuring Added Plasma Caesium and Its Application in the Measurement of Short-Term Kinetics

Jussi Jernström (2006), Development of Analytical Techniques in Studies on Dispersion of Actinides in the Environment and Characterization of Environmental Radioactive Particles

Nina Huittinen (2013), Sorption of Trivalent Actinides onto Gibbsite, γ -Alumina and Kaolinite – A Spectroscopic Study of An(III) Interactions at the Mineral-Water Interfaces

Merja Lusa (2015), Sorption Behaviour of I^- , SeO_3^{2-} and Cs^+ in an Ombrotrophic Boreal Bog - A study on Microbial Effects

Hanna Tuovinen (2015), Mobilization of Natural Uranium Series Radionuclides at Three Mining Sites in Finland

Bagdat Satybaldiyev (2015), Application of ²³⁴U/²³⁸U isotope ratios to assess the physico-chemical processes of uranium leaching from ore

Mervi Söderlund (2016), Sorption and Speciation of Radionuclides in Boreal Forest Soil

At present one doctoral students in supervision

Supervising of licentiate thesis:

Airi Paajanen (2001), Kobolttin erottaminen konsentroidusta matala-aktiivisesta jätevedestä

Acting as an opponent for doctor's theses:

Jussi Paatero (2000), Deposition of Chernobyl-Derived Transuranium Nuclides and Short-Lived Radon-222 Progeny in Finland

Ole Christian Lind, Norwegian University of Life Sciences (2006), Characterisation of Radioactive Particles in the Environment Using Advanced Techniques

Jixin Qiao, DTU-Risø, Denmark (2011), Rapid and automated determination of plutonium and neptunium in environmental samples

Daniel Breitner, Eötvös Lorand University, Hungary (2011), Geochemical and mineralogical study of overburden profiles in glaciated terrain, Finland – implication for the assessment of radon emission

Päivi Roivainen, University of Eastern Finland (2011), Characteristics of soil-to-plant transfer of elements relevant to radioactive waste in boreal forest

Cato Wendel, Norwegian University of Life Sciences (2013), Source identification of Pu and ^{236}U deposited on Norwegian territories

Tiina Tuovinen, University of Eastern Finland (2016), Transfer of elements related to the nuclear fuel cycle – Evaluation of linearity in boreal ecosystems

Refereeing doctor's theses:

V.Narapareddy (1995), Studies on Some New Mixed Inorganic Exchangers for the Treatment of High Level Radioactive Liquid Wastes with Special Reference to Cs-137, Andhra University, India

Riitta Pilviö (1998), Methods for the determination of low-level actinide concentrations and their behaviour in the aquatic environment

Leena Pajo (2001), UO_2 Fuel Pellet Impurities, Pellet Surface Roughness and $n(^{18}\text{O})/n(^{16}\text{O})$ Ratios, Applied to Nuclear Forensic Science

Marja Siitari-Kauppi (2001), The Characterization of Low Porosity Media with the ^{14}C -polymethylmethacrylate (^{14}C -PMMA) Method – Application to Rocks in Geological Barriers of Nuclear Waste Storage

Teresa Möller (2002), Selective Crystalline Inorganic Materials as Ion Exchangers in the Treatment on Nuclear Waste Solutions

Pirkko Hölttä (2002), Radionuclide Migration in Crystalline Rock Fractures – Laboratory Study of Matrix Diffusion

Linlin Sun (2016), The Effects of Structural and Environmental Factors on the Swelling Behavior of Montmorillonite-Beidellite Smectites – a Molecular Approach

Refereeing licentiate theses:

Sinikka Pinnioja (1988), Ydinjätenuklidien pidättyminen kallioperään tutkittuna autoradiografista menetelmää käyttäen

Jussi Paatero (1997), Plutonium, Americium ja Curium maaympäristössä Suomessa Tshernobylin ydinvoimalaitosonnettomuuden jälkeen

Airi Paajanen (2001), Kobolttin erottaminen konsentroidusta matala-aktiivisesta jätevedestä

Research outputs

Effect of potassium for cesium replacement in atomic level structure of potassium cobalt hexacyanoferrate(II)

Puhakka, E., Ritala, M. & Lehto, J., Jun 2020, In: Radiochimica Acta. 108, 6, p. 451-457 7 p.

Batch sorption experiments of cesium and strontium on crushed rock and biotite for the estimation of distribution coefficients on intact crystalline rock

Lehto, J., Puukko, E., Lindberg, A. & Voutilainen, M., 13 Aug 2019, In: Heliyon. 5, 8, 9 p., 02296.

On the use of MnO₂ cartridges for the plutonium determination in seawater

Eriksson, M., Ämmälä, K., Levy, I., Gastaud, J., Lehto, J. & Scholten, J., Aug 2019, In: Journal of Environmental Radioactivity. 204, p. 66-75 10 p.

Removal of Radionuclides from Fukushima Daiichi Waste Effluents

Lehto, J., Koivula, R., Leinonen, H., Tusa, E. & Harjula, R., 3 Apr 2019, In: Separation and Purification Reviews. 48, 2, p. 122-142 21 p.

Release of base and potentially harmful metals from waste deposits at a former uranium mine in eastern Finland

Tuovinen, H., Vesterbacka, D., Kaksonen, K., Virkanen, J., Read, D., Solatie, D. & Lehto, J., 2019, In: International Journal of Environmental Monitoring and Analysis. 7, 4, p. 85-92 8 p.

The Sorption of alkaline earth metals on biotite

Söderlund, M., Ervanne, H., Muuri, E. & Lehto, J., 2019, In: Geochemical Journal. 53, 4, p. 223-234 12 p.

Electromigration experiments for studying transport parameters and sorption of cesium and strontium on intact crystalline rock

Puukko, E., Lehto, J., Lindberg, A. & Voutilainen, M., Oct 2018, In: Journal of Contaminant Hydrology. 217, p. 1-7 7 p.

Sorption competition and kinetics of trivalent cations (Eu, Y and Cm) on corundum (α -Al₂O₃): A batch sorption and TRLFS study

Virtanen, S., Meriläinen, S., Eibl, M., Rabung, T., Lehto, J. & Huittinen, N., May 2018, In: Applied Geochemistry. 92, p. 71-81 11 p.

Sorption of inorganic radiocarbon on iron oxides

Lempinen, J., Muuri, E., Lusa, M. & Lehto, J., May 2018, In: Journal of Radioanalytical and Nuclear Chemistry. 316, 2, p. 717-723 7 p.

Behaviour of Metals during Bioheap Leaching at the Talvivaara Mine, Finland

Tuovinen, H., Pelkonen, M., Lempinen, J., Pohjolainen, E., Read, D., Solatie, D. & Lehto, J., 1 Feb 2018, In: Geosciences. 8, 2, 13 p., 66.

Environmental Radioactivity Research in Finland

Lehto, J. K., 2018, p. 52-53.

Silver sorption on biotite of Olkiluoto bedrock

Söderlund, M. J., Ervanne, H. J. & Lehto, J. K., 2018, Olkiluoto: Posiva. 121 p. (Posiva Working Reports; no. 2017-33)

Upscaling of cesium and strontium sorption from crushed to intact rock

Puukko, E. J., Lindberg, A., Voutilainen, M. A. & Lehto, J. K., 2018, Olkiluoto: Posiva. 61 p. (Posiva Working Reports; no. 2017-25)

Effects of synthesis conditions on ion exchange properties of α -zirconium phosphate for Eu and Am

Wiikinkoski, E. W., Harjula, R. O., Lehto, J. K., Kemell, M. L. & Koivula, R. T., Dec 2017, In: Radiochimica Acta. 105, 12, p. 1033-1042 10 p.

Aerosol particle size distribution of atmospheric lead-210 in northern Finland

Paatero, J., Ioannidou, A., Ikonen, J. & Lehto, J., Jun 2017, In: Journal of Environmental Radioactivity. 172, p. 10-14 5 p.

Efficient and Selective Recovery of Trace Scandium by Inorganic Titanium Phosphate Ion-Exchangers from Leachates of Waste Bauxite Residue

Zhang, W., Koivula, R., Wiikinkoski, E., Xu, J., Hietala, S., Lehto, J. & Harjula, R., 20 Feb 2017, In: ACS Sustainable Chemistry & Engineering. 5, 4, p. 3103-3114 12 p.

Sorption and speciation of iodine in boreal forest soil

Söderlund, M., Virkanen, J., Aromaa, H., Gracheva, N. & Lehto, J., Jan 2017, In: Journal of Radioanalytical and Nuclear Chemistry. 311, 1, p. 549-564 16 p.

Determination of uranium in Egyptian granitic ore by gamma, alpha, and mass spectrometry

Khattab, M. R., Tuovinen, H., Lehto, J., El Assay, I. E., El Feky, M. G. & Abd El-Rahman, M. A., 2017, In: Instrumentation Science & Technology. 45, 3, p. 338-348 11 p.

Se uptake and reduction in two boreal Pseudomonas sp. strains

Lusa, M. J., Knuutinen, J. J., Lehto, J. K. & Bomberg, M., 2017, p. 49. 1 p.

Se uptake and reduction in two boreal Pseudomonas sp. strains

Lusa, M. J., Knuutinen, J. J., Lehto, J. K. & Bomberg, M., 2017, p. 479-481. 3 p.

Sorption of alkaline earth metals on biotite of Olkiluoto bedrock

Söderlund, M. J., Muuri, E. M., Lehto, J. K. & Ervanne, H. J., 2017, Eurajoki: Posiva. 56 p. (Posiva Working Reports; no. 41/2017)

Uptake of neptunium and technetium by bacteria isolated from a nutrient-poor boreal bog

Knuutinen, J. J., Bomberg, M., Lehto, J. K. & Lusa, M. J., 2017, p. 144. 1 p.

Uptake of neptunium and technetium by bacteria isolated from a nutrient-poor boreal bog.

Knuutinen, J. J., Bomberg, M., Lehto, J. K. & Lusa, M. J., 2017, p. 482-483. 2 p.

The specific sorption of Np(V) on the corundum (α -Al₂O₃) surface in the presence of trivalent lanthanides Eu(III) and Gd(III): A batch sorption and XAS study

Virtanen, S., Bok, F., Ikeda-Ohno, A., Rossberg, A., Lützenkirchen, J., Rabung, T., Lehto, J. & Huittinen, N., 1 Dec 2016, In: Journal of Colloid and Interface Science. 483, p. 334-342 9 p.

Sorption and speciation of selenium in boreal forest soil

Söderlund, M., Virkanen, J., Holgersson, S. & Lehto, J., Nov 2016, In: Journal of Environmental Radioactivity. 164, p. 220-231 12 p.

Rate of radiocarbon retention onto calcite by isotope exchange

Lempinen, J. & Lehto, J., Sep 2016, In: Radiochimica Acta. 104, 9, p. 663-671 9 p.

Sorption of cesium on boreal forest soil I: the effect of grain size, organic matter and mineralogy

Söderlund, M., Hakanen, M. & Lehto, J., Aug 2016, In: Journal of Radioanalytical and Nuclear Chemistry. 309, 2, p. 637-645 9 p.

Sorption of cesium on boreal forest soil II. The effect of time, incubation conditions, pH and competing cations

Söderlund, M., Virtanen, S., Välimaa, I., Lempinen, J., Hakanen, M. & Lehto, J., Aug 2016, In: Journal of Radioanalytical and Nuclear Chemistry. 309, 2, p. 647-657 11 p.

Uptake of radioiodide by Paenibacillus sp., Pseudomonas sp., Burkholderia sp. and Rhodococcus sp. isolated from a boreal, nutrient-poor bog

Lusa, M., Lehto, J., Aromaa, H., Knuutinen, J. & Bomberg, M., Jun 2016, In: Journal of Environmental Sciences. 44, p. 26-37 12 p.

The uptake of Ni²⁺ and Ag⁺ by bacterial strains isolated from a boreal nutrient-poor bog

Lusa, M., Lehto, J. & Bomberg, M., 9 May 2016, In: AIMS Microbiology. 2016, 2, p. 120-137 18 p.

Release of radionuclides from waste rock and tailings at a former pilot uranium mine in eastern Finland

Tuovinen, H., Pohjolainen, E., Vesterbacka, D., Kaksonen, K., Virkanen, J., Solatie, D., Lehto, J. K. & Read, D., 4 Feb 2016, In: Boreal Environment Research. 21, 5-6, p. 471-480 10 p.

Selenium sorption on clays in synthetic groundwaters representing crystalline bedrock conditions

Ervanne, H., Hakanen, M. & Lehto, J., Feb 2016, In: Journal of Radioanalytical and Nuclear Chemistry. 307, 2, p. 1365-1373 9 p.

Behaviour of radionuclides during microbially-induced mining of nickel at Talvivaara, Eastern Finland

Tuovinen, H., Pohjolainen, E., Lempinen, J., Vesterbacka, D., Read, D., Solatie, D. & Lehto, J., Jan 2016, In: Journal of Environmental Radioactivity. 151, 1, p. 105-113 9 p.

BASICS OF NUCLEAR PHYSICS AND OF RADIATION DETECTION AND MEASUREMENT: An open-access textbook for nuclear and radiochemistry students

Lehto, J. K., 2016, <https://nucwik.wikispaces.com>: University of Helsinki. 205 p.

The uptake of Se by two strains of Pseudomonas sp. isolated from a nutrient-poor boreal bog

Lusa, M. J., Knuutinen, J. J., Lehto, J. K. & Bomberg, M., 2016.

Uptake of nickel by bacteria and fungus isolated from a nutrient-poor boreal bog

Knuutinen, J. J., Bomberg, M., Lehto, J. K. & Lusa, M. J., 2016.

Sorption of niobium on boreal forest soil

Söderlund, M. J., Hakanen, M. E. & Lehto, J. K., Dec 2015, In: Radiochimica Acta. 103, 12, p. 859-869 11 p.

Radionuclide and heavy metal redistribution at the former pilot-scale apatite plant in Sokli, northern Finland

Tuovinen, H., Vesterbacka, D., Lempinen, J., Pohjolainen, E., Read, D., Solatie, D. & Lehto, J., 25 Jun 2015, In: Boreal Environment Research. 20, 3, p. 350-362 13 p.

Understanding sulphuric acid leaching of uranium from ore by means of U-234/U-238 activity ratio as an indicator

Satybaldiyev, B., Lehto, J., Suksi, J., Tuovinen, H., Uralbekov, B. & Burkitbayev, M., May 2015, In: Hydrometallurgy. 155, p. 125-131 7 p.

Cooperation in education and training in nuclear- and radiochemistry in Europe

John, J., Lehto, J., Koivula, T. & Omtvedt, J. P., Apr 2015, In: Journal of Radioanalytical and Nuclear Chemistry. 304, 1, p. 459-466 8 p.

Deposition of atmospheric Pb-210 and total beta activity in Finland

Paatero, J., Vaaramaa, K., Buyukay, M., Hatakka, J. & Lehto, J., Mar 2015, In: Journal of Radioanalytical and Nuclear Chemistry. 303, 3, p. 2413-2420 8 p.

Sorption processes of radiocesium in soil and bedrock

Lehto, J., Mar 2015, In: Radiochimica Acta. 103, 3, p. 213-218 6 p.

A comparison of analytical methods for determining uranium and thorium in ores and mill tailings

Tuovinen, H. P., Vesterbacka, D., Pohjolainen, E., Read, D., Solatie, D. & Lehto, J., 2015, In: Journal of Geochemical Exploration. 148, p. 174-180 7 p.

Factors affecting the sorption of cesium in a nutrient-poor boreal bog

Lusa, M. J., Bomberg, M., Virtanen, S. M., Lempinen, J. J., Aromaa, H., Knuutinen, J. J. & Lehto, J. K., 2015, In: Journal of Environmental Radioactivity. 147, p. 22-32 11 p.

The microbial impact on the sorption behaviour of selenite in an acidic, nutrient-poor boreal bog

Lusa, M., Bomberg, M., Aromaa, H., Knuutinen, J. & Lehto, J., 2015, In: *Journal of Environmental Radioactivity*. 147, p. 85-96 12 p.

Modeling of cesium sorption on biotite using cation exchange selectivity coefficients

Kyllönen, J., Hakanen, M., Lindberg, A., Harjula, R., Vehkamäki, M. & Lehto, J., Oct 2014, In: *Radiochimica Acta*. 102, 10, p. 919-929 11 p.

Modelling of niobium sorption on clay minerals in sodium and calcium perchlorate solutions

Ervanne, H., Hakanen, M. & Lehto, J., Sep 2014, In: *Radiochimica Acta*. 102, 9, p. 839-847 9 p.

Sorption of cesium in young till soils

Lusa, M., Lempinen, J., Ahola, H., Soderlund, M., Lahdenperä, A-M., Ikonen, A. T. K. & Lehto, J., Jul 2014, In: *Radiochimica Acta*. 102, 7, p. 645-658 14 p.

Distribution Coefficients of Caesium, Chlorine, Iodine, Niobium, Selenium and Technetium on Olkiluoto Soils

Söderlund, M., Lusa, M., Virtanen, S., Välimaa, I., Hakanen, M., Lehto, J. & Lahdenperä, A-M., 2014, Posiva. 150 p. (Posiva Working Report; vol. 2013, no. 68)

Heavy Metals and Natural Radionuclides in the Water of Syr Darya River, Kazakhstan

Satybalbiyev, B., Tuovinen, H., Uralbekov, B., Lehto, J. & Burkitbayev, M., 2014, *Uranium - Past and Future Challenges: Proceedings of the 7th International Conference on Uranium Mining and Hydrogeology*. Merkel, B. J. & Arab, A. (eds.). Heidelberg: Springer, p. 155-160 6 p.

Interaction of Radionuclides and Colloids Released from Materials Related to the Disposal of SNF

Hölttä, P., Niemiaho, S., Elo, O., Harjula, R. & Lehto, J., 2014, *WM2014 Conference Proceedings*. WM Symposia, Vol. 40 . 14273

Radiokemia Suomessa II-osa: Opetuksen, tutkimuksen ja sovellusten kehittyminen

Suksi, U. J. (ed.), Jaakkola, T. (ed.), Lehto, J. (ed.) & Suorsa, V. (ed.), 2014, Helsingin yliopisto, Radiokemian laboratorio. 167 p.

Stability of Silica Colloids Released from Injection Grout Silica Sol - 14130

Hölttä, P., Lehto, J. & Harjula, R., 2014, *WM2014 Conference Proceedings*. WM Symposia, 14130

The Variation of Microbial Communities in a Depth Profile of an Acidic, Nutrient-Poor Boreal Bog in Southwestern Finland

Tsitko, I., Lusa, M., Lehto, J., Parviainen, L., Ikonen, A. T. K., Lahdenperä, A-M. & Bomberg, M., 2014, In: *Open Journal of Ecology*. 2014, 4, p. 832-859 28 p.

Fractionation of U, Th, Ra and Pb from boreal forest soils by sequential extractions

Virtanen, S., Vaaramaa, K. & Lehto, J., Nov 2013, In: *Applied Geochemistry*. 38, p. 1-9 9 p.

Isotope exchange of ⁴⁵Ca and ¹⁴C on calcite

Lempinen, J., Kallio, S., Hakanen, M. & Lehto, J., 21 Oct 2013, *Russian-Nordic Symposium on Radiochemistry: 21-24 October 2013 - Moscow, Russia*. p. 126 1 p.

Isotopic exchange of ⁴⁵Ca and ¹⁴C on calcite

Lempinen, J., Kallio, S., Hakanen, M. & Lehto, J., 10 Sep 2013, *Migration 2013: The Brighton Centre, UK September 8 – 13, 2013*.

A H-1 and Al-27 NMR investigation of yttrium(III) and europium(III) interaction with kaolinite

Huittinen, N., Sarv, P. & Lehto, J., Aug 2013, In: *Applied Clay Science*. 80-81, p. 182-188 7 p.

Cs-137, Pu-239, Pu-240 and Am-241 in boreal forest soil and their transfer into wild mushrooms and berries
Lehto, J., Vaaramaa, K. & Leskinen, A., Feb 2013, In: Journal of Environmental Radioactivity. 116, p. 124-132 9 p.

Higher Level Academic Nuclear Engineering Education in Finland – Need of Post Graduates?

Salomaa, R., Ala-Heikkilä, J., Tuomisto, F., Kyrki-Rajamäki, R., Vihavainen, J., Lehto, J., Harjula, R., Olin, M., Vanttola, T., Aurela, J., Avolahti, J., Koskinen, K., Heikinheimo, L., Hyvärinen, J., Juurmaa, T. & Palmu, M., 2013, *Conference NESTet 2013, Nuclear Education and Training, 17-21 Nov. 2013, Madrid: Transactions of the Conference NESTet 2013, Nuclear Education and Training*. Brussels, Belgium: European Nuclear Society, p. 108-119 12 p.

Sorption of Cesium on Peat

Lusa, M., Virtanen, S., Lempinen, J., Ikonen, A. T. K., Lahdenperä, A-M. & Lehto, J., 2013, *Migration conference 2013: 14th International Conference on the Chemistry and Migration Behaviour of Actinides and Fission Products in the Geosphere*. Brighton

Sorption of Cesium on Peat

Lusa, M. J., Virtanen, S. M., Lempinen, J. J., Ikonen, A., Lahdenperä, A-M. & Lehto, J. K., 2013, *Unknown host publication*.

New insight into Cm(III) interaction with kaolinite: Influence of mineral dissolution

Huittinen, N., Rabung, T., Schnurr, A., Hakanen, M., Lehto, J. & Geckeis, H., 15 Dec 2012, In: *Geochimica et Cosmochimica Acta*. 99, p. 100-109 10 p.

Environmental Radioactivity in Central Asia

Butkitbayev, M. (ed.) & Lehto, J. (ed.), 2012, Almaty: Al-farabi Kazakh National University. 140 p.

Sorption of Molybdenum, Niobium and Selenium in Soils

Söderlund, M. J. & Lehto, J., 2012, Posiva. 97 p. (Posiva Working Report; no. 2012-38)

Speciation of I-129 in sea, lake and rain waters

Lehto, J., Rätty, T., Hou, X., Paatero, J., Aldahan, A., Possnert, G., Flinkman, J. & Kankaanpää, H., 2012, In: *The Science of the Total Environment*. 419, p. 60-67 8 p.

A proton NMR study on the specific sorption of yttrium(III) and europium(III) on gamma-alumina [γ -Al₂O₃]

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