

**Prof. Jussi Kukkonen, List of Publications****Academic Thesis**

TH-1 Syventävien opintojen tutkielma (MSc Thesis): Kasviplanktonin perustuotanto humuspitoisuudeltaan erilaisissa järvissä. Joensuun yliopisto, biologian laitos. Hyväksytty 25.9. 1985 arvosanalla *eximia cum laude approbatur* (3-/3).

TH-2 Lisensiaattitutkielma (Phil.Lic. Thesis): Liuenneen orgaanisen materiaalin vaikutus orgaanisten ympäristömyrkkyjen sitoutumiseen ja biosaatavuuteen luonnonvesissä. Joensuun yliopisto, biologian laitos. Hyväksytty 19.12. 1990 arvosanalla *laudatur* (3/3).

TH-3 Väitöskirja (PhD Thesis): Effects of Dissolved Organic Material in Fresh Waters on the Binding and Bioavailability of Organic Pollutants. University of Joensuu, Department of Biology. Accepted Jan. 10, 1992, with grade *eximia cum laude approbatur* (3-/3).

**Peer Reviewed Articles in Journals and Books**

- SA-1 **Kukkonen J.** and Oikari A. 1987: Effects of aquatic humus on accumulation and acute toxicity of some organic micropollutants. *Science of the Total Environment* 62: 399-402.
- SA-2 Oikari A. and **Kukkonen J.** 1988: Acclimatization of Roach, *Rutilus rutilus* (L.), to toxic components of kraft pulp mill effluents. *Ecotoxicol. Environ. Safety* 15: 282-288.
- SA-3 **Kukkonen J.** and Oikari A. 1988: Sulphate conjugation is the main route of pentachloro-phenol metabolism in *Daphnia magna*. *Comp. Biochem. Physiol.* 91C: 465-468.
- SA-4 Oikari A., Lindström-Seppä P. and **Kukkonen J.** 1988: Subchronic metabolic effects and toxicity of a simulated pulp mill effluent on juvenile lake trout, *Salmo trutta m. lacustris*. *Ecotoxicol. Environ. Safety* 16: 202-218.
- SA-5 **Kukkonen J.**, Oikari A., Johnsen S. and Gjessing E. 1989: Effects of humus concentrations on benzo(a)pyrene accumulation from water to *Daphnia magna*: comparison of natural waters and standard preparations. *Science of the Total Environment* 79: 197-207.
- SA-6 Johnsen S., **Kukkonen J.** and Grande M. 1989: Influence of natural aquatic humic substances on the bioavailability of benzo(a)pyrene to atlantic salmon. *Science of the Total Environment* 81/82: 691-702.
- SA-7 **Kukkonen J.**, McCarthy J.F. and Oikari A. 1990: Effects of XAD-8 fractions of dissolved organic carbon on the sorption and bioavailability of organic micropollutants. *Arch. Environ. Contam. Toxicol.* 19: 551-557.
- SA-8 Oikari A. and **Kukkonen J.** 1990: Bioavailability of benzo(a)pyrene and dehydroabietic acid from a few lake waters containing varying dissolved organic carbon concentration to *Daphnia magna*. *Bull. Environ. Contam. Toxicol.* 45: 54-61.
- SA-9 **Kukkonen J.** 1991: Effects of pH and natural humic substances on the accumulation of organic pollutants into two freshwater invertebrates. In: B. Allard, H. Borén and A. Grimvall (eds.): *Humic Substances in the Aquatic and Terrestrial Environment*. Springer-Verlag, Berlin, Germany. Lecture Notes in Earth Sciences 33: 413-422.
- SA-10 **Kukkonen J.** and Oikari A. 1991: Bioavailability of organic pollutants in boreal waters with varying levels of dissolved organic material. *Water Research* 25:455-463.
- SA-11 **Kukkonen J.**, McCarthy J.F. and Oikari A. 1991: Binding and bioavailability of organic micropollutants in natural waters: Effects of the quality and quantity of dissolved organic material. In: R. Baker (ed.): *Organic Substances and Sediments in Water: Volume 3, Biological*. Lewis Publishers Inc., Chelsea MI. p. 111-127.

- SA-12 Mäkelä T.P., Petänen T., **Kukkonen J.** and Oikari A.O.J. 1991: Accumulation and depuration of chloronated phenolics in the freshwater mussel (*Anodonta anatina* L.). *Ecotoxicol. Environ. Safety* 22: 153-163.
- SA-13 Oikari A., **Kukkonen J.** and Virtanen V. 1992: Acute toxicity of chemicals to *Daphnia magna* in humic waters. *Sci. Total Environ.* 117/118: 367-377.
- SA-14 **Kukkonen J.** and Oikari A. 1992: Effects of kraft lignin and chlorolignin on the bioavailability of benzo(a)pyrene to *Daphnia magna* Straus. *Bull. Environ. Contam. Toxicol.* 48: 781-788.
- SA-15 **Kukkonen J.** 1992: Effects of lignin and chlorolignin in pulp mill effluents on the binding and bioavailability of hydrophobic organic pollutants. *Water Research* 26: 1523-1532.
- SA-16 Pellinen J., **Kukkonen J.**, Herb A., Mäkelä P. and Oikari A. 1993: Bioaccumulation of pulp mill effluent-related compounds to aquatic animals. *Sci. Total Environ.* (Suppl. 1993): 499-510.
- SA-17 **Kukkonen J.** and Pellinen J. 1994: Binding of organic xenobiotics to dissolved macromolecules: Comparison of analytical methods. *Sci. Total Environ.* 152: 19-29.
- SA-18 Suffet I.H., Jafvert C.T., **Kukkonen J.**, Servos M.R., Spacie A., Williams L.L. and Noblet J.A. 1994: Influence of particulate and dissolved material on the bioavailability of organic compounds. In: J.L. Hamelink, P.F. Landrum, H.L. Bergman and W.H. Benson (eds.): *Bioavailability: Physical, Chemical, and Biological Interactions*. Lewis Publishers. Ann Arbor, USA. pp. 93-108.
- SA-19 Harkey G., Lydy M.J., **Kukkonen J.** and Landrum P.F. 1994: Feeding selectivity and assimilation of PAH and PCB in *Diporeia* spp. *Environ. Toxicol. Chem.* 13: 1445-1455.
- SA-20 **Kukkonen J.** and Landrum P.F. 1994: Toxicokinetics and toxicity of sediment-associated pyrene to *Lumbriculus variegatus* (Oligochaeta). *Environ. Toxicol. Chem.* 13: 1457-1468.
- SA-21 Landrum P.F., Dupuis W.S. and **Kukkonen J.** 1994: Toxicokinetics and toxicity of sediment-associated pyrene and phenanthrene in *Diporeia* spp.: Examination of equilibrium partitioning theory and residue based effects for assessing hazard. *Environ. Toxicol. Chem.* 13: 1769-1780.
- SA-22 **Kukkonen J.** and Landrum P.F. 1995: Effects of sediment-bound polydimethylsiloxane on the bioavailability and distribution of benzo(a)pyrene in lake sediment to *Lumbriculus variegatus*. *Environ. Toxicol. Chem.* 14: 523 - 531.
- SA-23 Penttinen S., **Kukkonen J.** and Oikari A. 1995: The kinetics of cadmium in *Daphnia magna* as affected by humic substances and water hardness. *Ecotoxicol. Environ. Safety* 30: 72-76.
- SA-24 Soimasuo R., Jokinen I., **Kukkonen J.**, Petänen T., Ristola T. and Oikari A. 1995: Biomarker responses along a pollution gradient: Effects of pulp and paper mill effluents on caged whitefish. *Aquat. Toxicol.* 31: 329-345.
- SA-25 **Kukkonen J.** and Landrum P.F. 1995: Measuring assimilation efficiencies for sediment-bound PAH and PCB congeners by benthic organisms. *Aquat. Toxicol.* 32: 75-92.
- SA-26 **Kukkonen J.** 1995: The role of natural organic material on the fate and toxicity of xenobiotics in aquatic environment. In: M. Munawar and M. Luotola (eds.): *The Contaminants in the Nordic Ecosystem: Dynamics, Processes & Fate*. Ecovision World Monograph Series. pp. 95 - 108.
- SA-27 Penttinen O.-P., **Kukkonen J.** and Pellinen J. 1996: Preliminary study to compare body residues and sublethal energetic responses in benthic invertebrates exposed to sediment-bound 2,4,5-trichlorophenol. *Environ. Toxicol. Chem.* 15: 160-166.
- SA-28 Landrum P.F., Harkey G.A. and **Kukkonen J.** 1996: Evaluation of organic contaminants exposure to aquatic organisms: The significance of bioconcentration and bioaccumulation. In: M.C. Newman and C.H. Jagoe (eds.): *Ecotoxicology: A Hierarchical Treatment*. Lewis Publishers, Ann Arbor, MI, USA, pp. 85-131.
- SA-29 Mackay D., Southwood J.M., **Kukkonen J.**, Shiu W.Y., Tam D.D., Varhaní\_kova D. and Lun R. 1996: Modelling the fate of 2,4,6-trichlorophenol in pulp and paper mill effluent in Lake Saimaa, Finland. In:

- M.R. Servos, K.R. Munkittrick, J.H. Carey and G. Van Der Kraak (eds.): *Environmental Fate and Effects of Pulp and Paper Mill Effluents*. St. Lucie Press, USA. pp: 219-228.
- SA-30 **Kukkonen J.** and Landrum P.F. 1996: Distribution of organic carbon and organic xenobiotics among different particle size fractions in sediments. *Chemosphere* 32: 1063-1076.
- SA-31 Ristola T., Pellinen J., Leppänen M. and **Kukkonen J.** 1996: Characterization of Lake Ladoga sediments. I. Toxicity to *Chironomus riparius* and *Daphnia magna*. *Chemosphere* 32: 1165-1178.
- SA-32 Ristola T., Pellinen J., Van Hoof P.L., Leppänen M. and **Kukkonen J.** 1996: Characterization of Lake Ladoga sediments. II. Toxic chemicals. *Chemosphere* 32: 1179-1192.
- SA-33 **Kukkonen J.V.K.**, Eadie B.J., Oikari A., Holmbom B. and Lansing M.B. 1996: Chlorophenolic and isotopic tracers of pulp mill effluent in sedimenting particles collected from Southern Lake Saimaa, Finland. *Sci. Total Environ.* 188: 15-27.
- SA-34 Vuori K.-M. and **Kukkonen J.** 1996: Metal concentrations in *Hydropsyche pellucidula* larvae (Trichoptera, Hydropsychidae) in relation to the anal papillae abnormalities and age of exocuticle. *Water Research* 30: 2265-2272.
- SA-35 Heinonen J., **Kukkonen J.**, Penttinen O.-P. and Holopainen I.J. 1997: Effects of hypoxia on valve-closure time and bioaccumulation of 2,4,5-trichlorophenol by the freshwater clam *Sphaerium corneum* [L.]. *Ecotox. Environ. Safety* 36: 49-56.
- SA-36 De Paolis F. and **Kukkonen J.** 1997: Binding of organic pollutants to humic and fulvic acids: influence of pH and structure of humic material. *Chemosphere* 34: 1693-1704.
- SA-37 Landrum P.F., Gossiaux D.C. and **Kukkonen J.** 1997: Sediment characteristics influencing the bioavailability of nonpolar organic contaminants to *Diporeia* spp. *Chem. Speciat. Bioavail.* 9: 43-55.
- SA-38 Sasaki E.K., Mikkola R., **Kukkonen J.V.K.** and Salkinoja-Salonen M.S. 1997: Bleached kraft pulp mill discharged organic matter in recipient lake sediment: Environmental and molecular properties. *ESPR - Environ. Sci. Pollut. Res.* 4: 194-202.
- SA-39 Lyytikäinen M., Pellinen J., Ruokolainen M., Suominen K., Uotila J. and **Kukkonen J.V.K.** 1997: Determination of chlorinated phenolics in freshwater sediments. *Toxicol. Environ. Chem.* 63: 199-214.
- SA-40 Nuutinen S. and **Kukkonen J.V.K.** 1998: The effect of selenium and organic material in lake sediments on the bioaccumulation of methylmercury by *Lumbriculus variegatus* (Oligochaeta). *Biogeochemistry* 40: 267-278.
- SA-41 Penttinen O.-P. and **Kukkonen J.** 1998: Chemical stress and metabolic rate in aquatic invertebrates: Threshold, dose-response relationships and mode of toxic action. *Environ. Toxicol. Chem.* 17: 883-890.
- SA-42 Leppänen M.T. and **Kukkonen J.V.K.** 1998: Relative importance of ingested sediment and pore water as bioaccumulation routes for pyrene to oligochaete (*Lumbriculus variegatus*, Müller). *Environ. Sci. Technol.* 32: 1503-1508.
- SA-43 **Kukkonen J.V.K.** and Landrum P.F. 1998: Effect of particle-xenobiotic contact time on bioavailability of sediment-associated benzo(a)pyrene by benthic amphipod, *Diporeia* spp. *Aquatic Toxicology* 42: 229-242.
- SA-44 Koponen K., **Kukkonen J.V.K.** and Lindström-Seppä P. 1998: Chemical accumulation and biotransformation enzyme activities of rainbow trout embryos in waterborne exposure to PCB-77. *Mar. Environ. Res.* 46: 475-478.
- SA-45 Leppänen M.T. and **Kukkonen J.V.K.** 1998: Relationship between reproduction, sediment type and feeding activity of *Lumbriculus variegatus* (Müller): Implications for sediment toxicity testing. *Environ. Toxicol. Chem.* 17: 2196-2202.
- SA-46 Leppänen M.T., Postma J.F., Groenendijk D., **Kukkonen J.V.K.** and Buckert-de Jong M.C. 1998: Feeding activity of a midge larvae (*Chironomus riparius*, Meigen) in metal polluted river sediments. *Ecotox. Environ. Safety* 41: 251-257.

- SA-47 Leppänen M.T. and **Kukkonen J.V.K.** 1998: Factors affecting feeding rate, reproduction and growth of an oligochaete *Lumbriculus variegatus* (Müller). *Hydrobiologia* 377: 183-194.
- SA-48 Penttinen S., Kostamo A. and **Kukkonen J.V.K.** 1998: Combined effects of aquatic humus and water hardness on the toxicity of cadmium to *Daphnia magna*. *Environ. Toxicol. Chem.* 17: 2498-2503.
- SA-49 Huuskonen S.E., Ristola T.E., Tuvikene A., Hahn M.E., **Kukkonen J.V.K.** and Lindström-Seppä P. 1998: Comparison of two bioassays, a fish liver cell line (PLHC-1) and a midge (*Chironomus riparius*), in monitoring freshwater sediments. *Aquatic Toxicology* 44: 47-67.
- SA-50 Ristola T., Pellinen J., Ruokolainen M., Kostamo A. and **Kukkonen J.V.K.** 1999: Effect of sediment type, feeding level and larval density on growth and development of a midge (*Chironomus riparius*). *Environ. Toxicol. Chem.* 18: 756-764.
- SA-51 Heinonen J., **Kukkonen J.V.K.** and Holopainen I.J. 1999: The effects of parasites and temperature on the accumulation of xenobiotics in a freshwater clam. *Ecol. Applicat.* 9: 475-481.
- SA-52 Oikari A., **Kukkonen J.V.K.**, Vuorikari P. 1999: Can biliary chlorophenolics represent their tissue residues in fish? *Toxicol. Environ. Chem.* 69: 49-60.
- SA-53 Ristola T., **Kukkonen J.V.K.** and Pellinen J. 1999: Body residues and responses of the midge *Chironomus riparius* to sediment-associated 2,4,5-trichlorophenol in subchronic and chronic exposures. *Arch. Environ. Contam. Toxicol.* 37: 42-49.
- SA-54 **Kukkonen J.V.K.** 1999: Toxicity and bioavailability of contaminants. In: J. Keskitalo and P. Eloranta (eds.): *Limnology of Humic Waters*. Backhuys Publishers, Leiden. pp: 117-129.
- SA-55 Landrum P.F., **Kukkonen J.**, Lydy M.J. and Lee II H. 1999: Measuring absorption efficiencies: Some additional considerations. *Environ. Toxicol. Chem.* 18: 2403-2404.
- SA-56 Nikkilä A., Penttinen S. and **Kukkonen J.V.K.** 1999: UV-B-induced acute toxicity of pyrene to the waterflea *Daphnia magna* in natural freshwaters. *Ecotox. Environ. Safety* 44: 271-279.
- SA-57 **Kukkonen J.V.K.**, Punta E., Koponen P., Paranko J., Leppänen H., Holopainen I.J. and Hyvärinen H. 1999: Biomarker responses by crucian carp (*Carassius carassius*) living in a pond of secondary treated pulp mill effluent. *Water Sci. Technol.* 40(11-12): 123-130.
- SA-58 Koponen K., Lindström-Seppä P. and **Kukkonen J.V.K.** 2000: Accumulation pattern and biotransformation enzyme induction in rainbow trout embryos exposed to sublethal aqueous concentrations of 3,3',4,4'-tetrachlorobiphenyl. *Chemosphere* 40: 245-253.
- SA-59 Leppänen H., **Kukkonen J.V.K.** and Oikari A.O.J. 2000: Concentration of retene and resin acids in sedimenting particles collected from a bleached kraft mill effluent receiving lake. *Water Research* 34: 1604-1610.
- SA-60 Kostamo A., Medvedev N., Pellinen J., Hyvärinen H. and **Kukkonen J.V.K.** 2000: Analysis of organochlorine compounds and extractable organic halogen in three subspecies of ringed seal from Northeast Europe. *Environ. Toxicol. Chem.* 19: 848-854.
- SA-61 **Kukkonen J.V.K.** 2000: Fate of organic xenobiotics in sediments: Bioavailability and toxicity. In: P. Heinonen, G. Ziglo and A. Van der Beken (eds.): *Hydrological and Limnological Aspects of Lake Monitoring*. John Wiley & Sons Ltd. pp. 185-193.
- SA-62 Leppänen M.T. and **Kukkonen J.V.K.** 2000: Fate of sediment-associated pyrene and benzo[a]pyrene in the freshwater oligochaete *Lumbriculus variegatus* (Müller). *Aquatic Toxicology* 49: 199-212.
- SA-63 Leppänen M.T. and **Kukkonen J.V.K.** 2000: Effects of sediment-chemical contact time on availability of sediment-associated pyrene and benzo[a]pyrene to oligochaete worms and semipermeable membrane devices. *Aquatic Toxicology* 49: 227-241.
- SA-64 Penttinen O.-P. and **Kukkonen J.V.K.** 2000: Metabolic responses of *Lumbriculus variegatus* to respiratory uncouplers in cold and anoxic water. *Environ. Toxicol. Chem.* 19: 2073-2075.

- SA-65 Kostamo A., Viljanen M., Pellinen J. and **Kukkonen J.** 2000: EOX and organochlorine compounds in fish and ringed seal samples from Lake Ladoga, Russia. *Chemosphere* 41: 1733-1740.
- SA-66 Heinonen J., **Kukkonen J.V.K.** and Holopainen I.J. 2000: Toxicokinetics of 2,4,5-trichlorophenol and benzo(a)pyrene in the clam *Pisidium amnicum*: Effects of seasonal temperatures and trematode parasites. *Arch. Environ. Contam. Toxicol.* 39: 352-359.
- SA-67 Lyttikäinen M., Sormunen A., Ristola T., Juvonen R. and **Kukkonen J.V.K.** 2001: Toxicity of freshwater sediments in the vicinity of an old sawmill: Application of three bioassays. *Arch. Environ. Contam. Toxicol.* 40: 318-326.
- SA-68 Nikkilä A. and **Kukkonen J.V.K.** 2001: Effects of dissolved organic material on binding and toxicokinetics of pyrene in the waterflea *Daphnia magna*. *Arch. Environ. Contam. Toxicol.* 40: 333-338.
- SA-69 Nikkilä A., Paulsson M., Almgren K., Blanck H. and **Kukkonen J.V.K.** 2001: Atrazine uptake, elimination, and bioconcentration by periphyton communities and *Daphnia magna*: Effects of dissolved organic carbon. *Environ. Toxicol. Chem.* 20: 1003-1011.
- SA-70 Mattsson K., Lehtinen K.-J., Tana J., Härdig J., **Kukkonen J.**, Nakari T. and Engström C. 2001: Effects of pulp mill effluents and restricted diet on growth and physiology of rainbow trout (*Oncorhynchus mykiss*). *Ecotox. Environ. Safety* 49: 144-154.
- SA-71 Haitzer M., Akkanen J., Steinberg C. and **Kukkonen J.V.K.** 2001: No enhancement in bioconcentration of organic contaminants by low levels of DOM. *Chemosphere* 44: 165-171.
- SA-72 Lyttikäinen M., Sormunen A., Peräniemi S. and **Kukkonen J.V.K.** 2001: Environmental fate and bioavailability of wood preservatives in freshwater sediments near an old sawmill site. *Chemosphere* 44: 341-350.
- SA-73 Häkkinen J., Pasanen S. and **Kukkonen J.V.K.** 2001: The effects of solar UV-B radiation on embryonic mortality and development in three boreal anurans (*Rana temporaria*, *Rana arvalis* and *Bufo bufo*). *Chemosphere* 44: 441-446.
- SA-74 Van Hoof P.L., **Kukkonen J.V.K.** and Landrum P.F. 2001: Impact of sediment manipulation on the bioaccumulation polycyclic aromatic hydrocarbons from field-contaminated and laboratory-dosed sediments by an oligochaete. *Environ. Toxicol. Chem.* 20: 1752-1761.
- SA-75 Ristola T., Parker D. and **Kukkonen J.V.K.** 2001: Life-cycle effects of sediment-associated 2,4,5-trichlorophenol on two groups of the midge *Chironomus riparius* with different exposure histories. *Environ. Toxicol. Chem.* 20: 1772-1777.
- SA-76 Honkanen J.O., Heinonen J. and **Kukkonen J.V.K.** 2001: Toxicokinetics of waterborne bisphenol A in landlocked salmon (*Salmo salar m. sebago*) eggs at various temperatures. *Environ. Toxicol. Chem.* 20: 2296-2302.
- SA-77 Akkanen J. and **Kukkonen J.V.K.** 2001: Effects of water hardness and dissolved organic material on bioavailability of selected organic chemicals. *Environ. Toxicol. Chem.* 20: 2303-2308.
- SA-78 Akkanen J., Penttinen S., Haitzer M. and **Kukkonen J.V.K.** 2001: Bioavailability of atrazine, pyrene and benzo(a)pyrene in European river waters. *Chemosphere* 45: 453-462.
- SA-79 Nikkilä A.K., **Kukkonen J.V.K.** and Oikari A. 2001: Bioavailability of sediment-associated retene to an oligochaete worm *Lumbriculus variegatus*: Effects of sediment organic carbon and retene concentration. *Journal of Soils and Sediments* 1: 137-145.
- SA-80 Heinonen J., **Kukkonen J.V.K.** and Holopainen I.J. 2001: Temperature and parasite-induced changes in toxicity and lethal body burdens of pentachlorophenol in the freshwater clam *Pisidium amnicum*. *Environ. Toxicol. Chem.* 20: 2778-2784.
- SA-81 Nieminen P., Mustonen A.-M., Lindström-Seppä P., Asikainen J., Mussalo-Rauhamaa H. and **Kukkonen J.V.K.** 2002: Phytosterols act as endocrine and metabolic disruptors in the European polecat (*Mustela putorius*). *Toxicol. Appl. Pharmacol.* 178: 22-28.

- SA-82 Nieminen P., Lindström-Seppä P., Mustonen A.-M., Mussalo-Rauhamaa H. and **Kukkonen J.V.K.** 2002: Bisphenol A affects endocrine physiology and biotransformation enzyme activities of the field vole (*Microtus agrestis*). *Gen. Comp. Endocr.* 126: 183-189.
- SA-83 Haitzer M., Höss S., Traunspurger W., **Kukkonen J.**, Burnison B.K. and Steinberg C.E.W. 2002. Effects of dissolved organic matter on bioconcentration of organic contaminants and reproduction in aquatic invertebrates. In: F.H. Frimmel, G. Abbt-Braun, G. Heumann, B. Hock, H.-D. Luedemann and M. Spiteller (Eds.): *Refractory Organic Substances in the Environment*, John Wiley & Sons. pp. 363-384.
- SA-84 Vuori K.-M. and **Kukkonen J.V.K.** 2002: Hydropsychid (Trichoptera, Hydropsychidae) gill abnormalities as morphological biomarkers of stream pollution. *Freshwater Biology* 47: 1297-1306.
- SA-85 Kostamo A., Hyvärinen H., Pellinen J. and **Kukkonen J.V.K.** 2002: Organochlorine concentrations in the Saimaa ringed seal (*Phoca hispida saimensis*) from Lake Haukivesi, Finland, 1981 to 2000 and, its diet today. *Environ. Toxicol. Chem.* 21: 1368-1376.
- SA-86 Heinonen J., Honkanen J., **Kukkonen J.V.K.** and Holopainen I.J. 2002: Bisphenol A accumulate to freshwater clam *Pisidium amnicum* at low temperatures. *Arch. Environ. Contam. Toxicol.* 43: 50-55.
- SA-87 Nieminen P., Lindsröm-Seppä P., Juntunen M., Asikainen J., Mustonen A.-M., Karonen S.-L., Mussalo-Rauhamaa H. and **Kukkonen J.V.K.** 2002: *In vivo* effects of bisphenol A on the polecat (*Mustela putorius*). *J. Toxicol. Environ. Health A* 65: 933-945.
- SA-88 Koponen P.S. and **Kukkonen J.V.K.** 2002: Effects of bisphenol A and artificial UVB radiation on the early development of the *Rana temporaria*. *J. Toxicol. Environ. Health A* 65: 947-959.
- SA-89 **Kukkonen J.V.K.** 2002: Lethal body residue of chlorophenols and mixtures of chlorophenols in benthic organisms. *Arch. Environ. Contam. Toxicol.* 43: 214-220.
- SA-90 Mäenpää K.A., **Kukkonen J.V.K.** and Lydy M.J. 2002: Remediation of heavy metal contaminated soils using phosphorus: Evaluation of bioavailability using an earthworm bioassay. *Arch. Environ. Contam. Toxicol.* 43: 389-398.
- SA-91 Holopainen I.J., Heinonen J., Penttinen O.-P. and **Kukkonen J.V.K.** 2002: Multiple stress - combined effects of natural and anthropogenic stress factors on organisms in boreal lakes. *Verh. Int. Ver. Limnol.* 28: 958-961.
- SA-92 Heinonen J., Penttinen O.-P., Holopainen I.J. and **Kukkonen J.V.K.** 2003: Sublethal energetic responses in *Pisidium amnicum* exposed to pentachlorophenol at two temperatures. *Environ. Toxicol. Chem.* 22: 433-438.
- SA-93 Petänen T., Lyttikäinen M., Lappalainen J., Romantschuk M. and **Kukkonen J.V.K.** 2003: Assessing sediment toxicity and arsenite concentration with bacterial and traditional methods. *Environ. Poll.* 122: 407-415.
- SA-94 Nikkilä A., Halme A. and **Kukkonen J.V.K.** 2003: Toxicokinetics, toxicity and lethal body residues of two chlorophenols in the oligochaete worm, *Lumbriculus variegatus*, in varying sediments. *Chemosphere* 51: 35-46.
- SA-95 Akkanen J. and **Kukkonen J.V.K.** 2003: Measuring the bioavailability of two hydrophobic organic compounds in the presence of dissolved organic matter. *Environ. Toxicol. Chem.* 22: 518-524.
- SA-96 Nieminen P., Mustonen A.-M., Lindström-Seppä P., Kärkkäinen V., Mussalo-Rauhamaa H. and **Kukkonen J.V.K.** 2003: Phytosterols affect endocrinology and metabolism of the field vole (*Microtus agrestis*). *Exp. Biol. Med.* 228: 188-193.
- SA-97 Lyttikäinen M., **Kukkonen J.V.K.** and Lydy M.J. 2003: Analysis of pesticides in water and sediment under different storage conditions using gas chromatography. *Arch. Environ. Contam. Toxicol.* 44: 437-444.
- SA-98 Nuutinen S., Landrum P.F., Schuler L.J., **Kukkonen J.V.K.** and Lydy M.J. 2003: Toxicokinetics of organic contaminants in *Hyalella azteca*. *Arch. Environ. Contam. Toxicol.* 44: 467-475.

- SA-99 Akkanen J. and **Kukkonen J.V.K.** 2003: Biotransformation and bioconcentration of pyrene in *Daphnia magna*. Aquatic Toxicology 64: 53-61.
- SA-100 Kostamo A. and **Kukkonen J.V.K.** 2003: Removal of resin acids and sterols from pulp mill effluents by activated sludge treatment. Water Research 37: 2813-2820.
- SA-101 Nieminen P., Mustonen A.-M., Asikainen J., **Kukkonen J.V.K.**, Lindström-Seppä P., and Kärkkäinen V. 2003: Effects of phytosterols on the endocrinology and metabolism of the female raccoon dog (*Nyctereutes procyonoides*). J. Toxicol. Environ. Health A. 66: 1475-1488.
- SA-102 Lyytikäinen M., Hirva P., Minkkinen P., Hämäläinen H., Rantalainen A.-L., Mikkelsson P., Paasivirta J. and **Kukkonen J.V.K.** 2003: Bioavailability of sediment-associated PCDD/Fs and PCDEs: relative importance of contaminant and sediment characteristics, and biological factors. Environ. Sci. Technol. 37: 3926-3934.
- SA-103 Lyytikäinen M., Rantalainen A.-L., Mikkelsson P., Hämäläinen H., Paasivirta J. and **Kukkonen J.V.K.** 2003: Similarities in bioaccumulation patterns of polychlorinated dibenz-p-dioxins and furans and polychlorinated diphenyl ethers in laboratory-exposed oligochaetes and semipermeable membrane devices, and in field-collected chironomids. Environ. Toxicol. Chem. 22: 2405-2415.
- SA-104 Ryökkynen A., Mustonen A.-M., Pykkönen T., Hänninen S., Asikainen J., **Kukkonen J.V.K.**, Mononen J., Nieminen P. 2003: Detection, analysis and interaction of plasma ghrelin, leptin and growth hormones in the mink (*Mustela vison*). Zoological Science. 20:1127-1132.
- SA-105 Mäenpää K., Sormunen A. and **Kukkonen J.V.K.** 2003: Bioaccumulation and toxicity of sediment associated herbicides (loxynil, Pendimethalin and Bentazone) in *Lumbriculus variegatus* (Oligochaeta) and *Chironomus riparius* (Insecta). Ecotox. Environ. Safety 56: 398-410.
- SA-106 **Kukkonen J.V.K.**, Landrum P.F., Mitra S., Gossiaux D.C., Gunnarsson J. and Weston D. 2003: Sediment characteristics affecting the desorption kinetics of select PAH and PCB congeners for seven laboratory spiked sediments. Environ. Sci. Technol. 37: 4656-4663.
- SA-107 Leppänen M.T., Landrum P.F., **Kukkonen J.V.K.**, Greenberg M.S., Burton G.A. Jr., Robinson S.D. and Gossiaux D.C. 2003: Investigating the role of desorption on the bioavailability of sediment-associated 3,4,3',4'-tetrachlorobiphenyl in benthic invertebrates. Environ. Toxicol. Chem. 22: 2861-2871.
- SA-108 Leppänen M.T. and **Kukkonen J.V.K.** 2004: Toxicokinetics of sediment-associated polybrominated diphenylethers (flame retardants) in benthic invertebrate (*Lumbriculus variegatus*, Oligochaeta). Environ. Toxicol. Chem. 23: 166-172.
- SA-109 Landrum P.F., Leppänen M., Robinson S.D., Gossiaux D.C., Burton G.A., Greenberg M., **Kukkonen J.V.K.**, Eadie B.J. and Lansing M.B. 2004: Effect of 3,4,3',4'-tetrachlorobiphenyl on the reworking behavior of *Lumbriculus variegatus* exposed to contaminated sediment. Environ. Toxicol. Chem. 23: 178-186.
- SA-110 Landrum P.F., Leppänen M., Robinson S.D., Gossiaux D.C., Burton G.A., Greenberg M., **Kukkonen J.V.K.**, Eadie B.J. and Lansing M.B. 2004: Comparing behavioral and chronic endpoints to evaluate the response of *Lumbriculus variegatus* to 3,4,3',4'-tetrachlorobiphenyl sediment exposures. Environ. Toxicol. Chem. 23: 187-194.
- SA-111 Mustonen A.-M., Nieminen P., Puukka M., Asikainen J., Saarela S., Karonen S.-L., **Kukkonen J.V.K.** and Hyvärinen H. 2004: Physiological adaptations of the raccoon dog (*Nyctereutes procyonoides*) to seasonal fasting - Fat and nitrogen metabolism and influence of continuous melatonin treatment. J. Comp. Physiol. B 174: 1-12.
- SA-112 Honkanen J., Holopainen I.J. and **Kukkonen J.V.K.** 2004: Bisphenol A induced yolk sac oedema and other adverse effects in landlocked salmon (*Salmo salar m. sebago*) yolk-sac fry. Chemosphere 55: 187-196.
- SA-113 Kostamo A., Holmbom B. and **Kukkonen J.V.K.** 2004: Fate of wood extractives in wastewater treatment plants at kraft pulp mills and mechanical pulp mills. Water Research 38: 972-982.

- SA-114 Mustonen A.-M., Nieminen P., Asikainen J., Saarela S., **Kukkonen J.V.K.** and Hyvärinen H. 2004: Continuous melatonin treatment and fasting in the raccoon dog (*Nyctereutes procyonoides*) - Vernal body weight regulation and reproduction. *Zoological Science* 21: 163-172.
- SA-115 Tkatcheva V., Hyvärinen H., **Kukkonen J.**, Ryzhkov L.P. and Holopainen I.J. 2004: Toxic effects of mining effluents on fish gills in a subarctic lake system in NW Russia. *Ecotox. Environ. Safety* 57: 278-289.
- SA-116 Mäenpää K.A., Penttinen O.-P. and **Kukkonen J.V.K.** 2004: Pentachlorophenol (PCP) bioaccumulation and effect on heat production on salmon eggs at different stages of development. *Aquatic Toxicology* 68: 75-85.
- SA-117 Nieminen P., Mustonen A.-M., Päiväläinen P. and **Kukkonen J.V.K.** 2004: Reproduction of the tundra vole (*Microtus oeconomus*) with dietary phytosterol supplement. *Food Chem Toxicol.* 42: 945-951.
- SA-118 Akkanen J., Vogt R.D., and **Kukkonen J.V.K.** 2004: Essential characteristics of natural dissolved organic matter affecting the sorption of hydrophobic organic contaminants. *Aquatic Sciences* 66: 171-177.
- SA-119 Vogt R.D., Akkanen J., Andersen D.O., Brüggemann R., Chatterjee B., Gjessing E., **Kukkonen J.V.K.**, Larsen H.E., Luster J., Paul A., Pflugmagher S., Starr M., Steinberg C.E.W., Schmitt-Kopplin P. and Zsolnay A. 2004: Key site variables governing the functional characteristics of dissolved natural organic matter (DNOM) in Nordic forested catchments. *Aquatic Sciences* 66: 195-210.
- SA-120 **Kukkonen J.V.K.**, Landrum P.F., Mitra S., Gossiaux D.C., Gunnarsson J. and Weston D. 2004: The role of desorption for describing the bioavailability of select polycyclic aromatic hydrocarbon and polychlorinated biphenyl congeners for seven laboratory-spiked sediments. *Environ. Toxicol. Chem.* 23: 1842-1851.
- SA-121 Koponen P.S., Nieminen P., Mustonen A.-M. and **Kukkonen J.V.K.** 2004: Postmetamorphic *Xenopus laevis* shows decreased plasma triiodothyronine concentrations and phosphorylase activity due to subacute phytosterol exposure. *Chemosphere* 57: 1683-1689.
- SA-122 Greenberg M.S., Burton Jr. G.A., Landrum P.F., Leppänen M.T. and **Kukkonen J.V.K.** 2005: Desorption kinetics of fluoranthene and trifluralin from Lake Huron and Erie, USA, sediments. *Environ. Tox. Chem.* 24: 31-39.
- SA-123 Ryökkynen A., Nieminen P., Mustonen A.-M., Pykkönen T., Asikainen J., Hänninen S., Mononen J. and **Kukkonen J.V.K.** 2005: Phytoestrogens alter the reproductive organ development in the mink (*Mustela vison*). *Toxicol. Appl. Pharmacol.* 202: 132-139.
- SA-124 Ryökkynen A., Käyhkö U.-R., Mustonen A.-M., **Kukkonen J.V.K.** and Nieminen P. 2005: Multigenerational exposure to phytosterols in the mouse. *Reproductive Toxicol.* 19: 535-540.
- SA-125 **Kukkonen J.V.K.**, Mitra S., Landrum P.F., Gossiaux D.C., Gunnarsson J. and Weston D. 2005: The contrasting roles of sedimentary plant-derived carbon and black carbon on sediment-spiked hydrophobic organic contaminant bioavailability to *Diporeia* species and *Lumbriculus variegatus*. *Environ. Toxicol. Chem.* 24: 877-885.
- SA-126 Honkanen J.O, Kostamo A. and **Kukkonen J.V.K.** 2005: Toxicity of a phytosterol mixture to grayling (*Thymallus thymallus*) during early developmental stages. *Arch. Environ. Contam. Toxicol.* 48: 391-396.
- SA-127 Akkanen J., Lyttikäinen M., Tuikka A. and **Kukkonen J.V.K.** 2005: Dissolved organic matter in pore water of freshwater sediments: Effects of separation procedure on quantity, quality and functionality. *Chemosphere* 60: 1608-1615.
- SA-128 Akkanen J., Tuikka A. and **Kukkonen J.V.K.** 2005: Comparative sorption and desorption of benzo[a]pyrene and 3,4,3',4'-tetrachlorobiphenyl in natural lake water containing dissolved organic matter. *Environ. Sci. Technol.* 39: 7529-7534.

- SA-129 Penttinen O.-P., Honkanen J.O., Sorsa K. and **Kukkonen J.V.K.** 2005: Can aquatic pollutants cause specific endocrinological and metabolic responses in salmon (*Salmo salar m. sebago*) embryos? A direct calorimetry study. Verh. Int. Ver. Limnol. 29: 945-948.
- SA-130 Leppänen M.T. and **Kukkonen J.V.K.** 2006: Evaluating the role of desorption in bioavailability of sediment-associated contaminants using oligochaetes, semipermeable membrane devices and Tenax extraction. Env. Poll. 140: 150-163.
- SA-131 Penttinen O.-P. and **Kukkonen J.V.K.** 2006: Body-residues as dose for sublethal responses in alevins of landlocked salmon (*Salmo salar m. sebago*): a direct calorimetry study. Environ. Tox. Chem. 25: 1088-1093.
- SA-132 Mäenpää K. and **Kukkonen J.V.K.** 2006: Bioaccumulation and toxicity of 4-nonylphenol (4-NP) and 4-(2-dodecyl)-benzene sulfonate (LAS) in *Lumbriculus variegatus* (Oligochaeta) and *Chironomus riparius* (Insecta). Aquatic Tox. 77: 329-338.
- SA-133 Ryökkynen A., **Kukkonen J.V.K.** and Nieminen P. 2006: Effects of dietary genistein on mouse reproduction, postnatal development and weight regulation. Anim. Reprod. Sci. 337-348.
- SA-134 Honkanen J.O. and **Kukkonen J.V.K.** 2006: Environmental temperature changes uptake rate and bioconcentration factors of bisphenol A in tadpoles of *Rana temporaria*. Environ. Tox. Chem. 25: 2804-2808.
- SA-135 Wiegand C., Pehkonen S., Akkanen J., Penttinen O.-P. and **Kukkonen J.V.K.** 2007: Bioaccumulation of paraquat by *Lumbriculus variegatus* in the presence of dissolved natural organic matter and impact on energy costs, biotransformation and antioxidative enzymes. Chemosphere 66: 558-566.
- SA-136 Koponen P.S., Tuikka A. and **Kukkonen J.V.K.** 2007: Effects of ultraviolet-B radiation and larval growth on toxicokinetics of waterborne bisphenol A in common frog (*Rana temporaria*) larvae. Chemosphere 66: 1323-1328.
- SA-137 Burton G.A., Green A., Baudo R., Forbes V., Nguyen L.T.H., Janssen C.R., **Kukkonen J.**, Leppanen M., Maltby L., Soares A., Kapo K., Smith P. and Dunning J. 2007: Characterizing sediment acid volatile sulfide concentrations in European streams. Environ. Tox. Chem. 26: 1-12.
- SA-138 Koistinen J., **Kukkonen J.V.K.**, Sormunen A., Mannila E., Herve S. and Vartiainen T. 2007: Bioaccumulation, bioavailability and environmental fate of chlorophenol impurities, polychlorinated hydroxydiphenyl ethers and their methoxy analogues. Chemosphere 68: 1382-1391.
- SA-139 Tkatcheva V., Holopainen I.J., Hyvärinen H. and **Kukkonen J.V.K.** 2007: The responses of rainbow trout gills to high lithium and potassium concentrations in water. Ecotox. Environ. Safety 68: 419-425.
- SA-140 Lytykäinen M., Pehkonen S., Akkanen J., Leppänen M., and **Kukkonen J.V.K.** 2007: Bioaccumulation and biotransformation of polycyclic aromatic hydrocarbons during sediment tests with oligochaetes (*Lumbriculus variegatus*). Environ. Tox. Chem. 26: 2660-2666.
- SA-141 Parsons J., Jesus Belzunce Segarra M., Cornelissen G., Gustafsson Ö., Grotenhuis T., Harms H., Janssen C.R., **Kukkonen J.**, van Noort P., Ortega Calvo J.J., Solaun Etxeberria O. 2007: Characterisation of contaminants in sediments – effects of bioavailability on impact. In: Damià Barceló and Mira Petrovic (Eds.): Sustainable Management of Sediment Resources, vol. 1., Sediment Quality and Impact Assessment of Pollutants. Elsevier B.V. (ISBN: 978-0-444-51962-7), pp. 35-60.
- SA-142 Mäenpää K., Sorsa K., Lytykäinen M., Leppänen M.T. and **Kukkonen J.V.K.** 2008: Bioaccumulation, sublethal toxicity and biotransformation of sediment-associated pentachlorophenol in *Lumbriculus variegatus* (Oligochaeta). Ecotox. Environ. Safety 69: 121-129.
- SA-143 Korkea-aho T.L., Partanen J.M., **Kukkonen J.V.K.** and Taskinen J. 2008: Hypoxia increases intensity of epidermal papillomatosis in roach *Rutilus rutilus*. Diseases of Aquatic Organisms 78:235-241.
- SA-144 Honkanen J.O., Wiegand C., and **Kukkonen J.V.K.** 2008: Humic substances modify accumulation but not biotransformation of pyrene in salmon yolk-sac fry. Aquat Toxicol. 86:239-248.

- SA-145 Sormunen A.J., Leppänen M.T. and **Kukkonen J.V.K.** 2008: Influence of sediment ingestion and exposure concentration on the bioavailable fraction of sediment-associated tetrachlorobiphenyl in Oligochaetes. *Environ. Tox. Chem.* 27: 854-863.
- SA-146 Sormunen A.J., Koistinen J., Leppänen M.T. and **Kukkonen J.V.K.** 2008: Desorption of sediment-associated polychlorinated dibenzo-p-dioxins, dibenzofurans, diphenyl ethers and hydroxydiphenyl ethers from contaminated sediment. *Chemosphere* 72: 1-7.
- SA-147 Korkea-aho T.L., Vehniäinen E.-R., **Kukkonen J.V.K.** and Taskinen J. 2008: The effects of treated effluents on the intensity of papillomatosis and HSP70 expression in roach. *Ecotox. Environ. Safety* 70: 462-468.
- SA-148 Airas S., Leppänen M. and **Kukkonen J.V.K.** 2008: Effects of temperature and oxygen concentration in sediment toxicity. *Ecotox. Environ. Safety* 70: 475-482.
- SA-149 Jantunen A.P.K., Tuikka A., Akkanen J. and **Kukkonen J.V.K.** 2008: Bioaccumulation of atrazine and chlorpyrifos to *Lumbriculus variegatus* from lake sediments. *Ecotox. Environ. Safety* 71: 860-868.
- SA-150 Jager D.F., Wilmking M. and **Kukkonen J.V.K.** 2009: The influence of summer seasonal extremes on dissolved organic carbon export from a boreal peatland catchment: Evidence from one dry and one wet growing season. *Sci. Total Environ.* 407: 1373-1382.
- SA-151 Mäenpää K., Leppänen, M.T. and **Kukkonen, J.V.K.** 2009: Sublethal toxicity and biotransformation of pyrene in *Lumbriculus variegatus* (Oligochaeta). *Sci. Total Environ.* 407: 2666-2672.
- SA-152 Sormunen A.J., Leppänen M.T. and **Kukkonen J.V.K.** 2009: Desorption and bioavailability of spiked pentabromo diphenyl ether and tetrachlorodibenzo-p-dioxin in contaminated sediments. *Arch. Environ. Contam. Toxicol.* 56: 670-679.
- SA-153 Sormunen A.J., Leppänen M.T. and **Kukkonen J.V.K.** 2009: Examining the role of temperature and sediment-chemical contact time on the desorption and bioavailability of sediment-associated tetrabromo diphenyl ether and benzo(a)pyrene. *Ecotox. Environ. Safety* 72: 1234-1241.
- SA-154 Petersen E.J., Akkanen J., **Kukkonen J.V.K.** and Weber W.J., Jr. 2009: Biological uptake and depuration of carbon nanotubes by *Daphnia magna*. *Environ. Sci. Technol.* 43: 2969-2975.
- SA-155 Saari P., Saarnio S., **Kukkonen J.V.K.**, Akkanen J., Heinonen J., Saari V. and Alm J. 2009: DOC and N<sub>2</sub>O dynamics in upland and peatland forest soils after clear-cutting and soil preparation. *Biogeochemistry* 94: 217-231.
- SA-156 Tervonen K., Waissi G., Petersen E.J., Akkanen J., and **Kukkonen J.V.K.** 2010: Analysis of fullerene-C<sub>60</sub> and kinetic measurements for its accumulation and depuration in *Daphnia magna*. *Environ. Toxicol. Chem.* 29: 1072-1078.
- SA-157 Sormunen A.J., Tuikka A.I., Akkanen J., Leppänen M.T. and **Kukkonen J.V.K.** 2010 Predicting the bioavailability of sediment-associated spiked compounds by using the polyoxymethylene passive sampling and Tenax® extraction methods in sediments from three river basins in Europe. *Arch. Environ. Contam. Toxicol.* 59: 80-90.
- SA-158 Pehkonen S., You J., Akkanen J., **Kukkonen J.V.K.** and Lydy M.J. 2010: Influence of black carbon and chemical planarity on bioavailability of sediment-associated contaminants. *Environ. Tox. Chem.* 29: 1976-1983.
- SA-159 Rautio A., Kunnasranta M., Valtonen A., Ikonen M., Hyvärinen H., Holopainen I.J., and **Kukkonen J.V.K.** 2010: Sex, age and tissue specific accumulation of eight metals, arsenic and selenium in European hedgehog (*Erinaceus europaeus*). *Arch. Environ. Contam. Toxicol.* 59: 642-651.
- SA-160 Kuivikko M., Sorsa K., **Kukkonen J.V.K.**, Akkanen J., Kotiaho T. and Vähätalo A.V. 2010: Partitioning of tetra- and pentabromo diphenyl ether and benzo(a)pyrene among water, dissolved and particulate organic carbon along a salinity gradient in coastal waters. *Environ. Tox. Chem.* 29: 2443-2449.

- SA-161 Ruotsalainen A.-M., Akkanen J. and **Kukkonen J.V.K.** 2010: Dissolved organic matter modulating the uptake, biotransformation, and elimination rates of pyrene in *Daphnia magna*. Environ. Tox. Chem. 29: 2783-2791.
- SA-162 Slootweg T., Alvinerie M., Egeler P., Gilberg D., **Kukkonen J.V.K.**, Oehlmann J., Prasse C., Sormunen A.J. and Liebig M. 2010: Bioaccumulation of ivermectin from natural and artificial sediments in the benthic organism *Lumbriculus variegatus*. J. Soils Sediments 10: 1611-1622.
- SA-163 Tuikka A.I., Schmitt C., Höss S., Bandow N., von der Ohe P.C., de Zwart D., de Deckere E., Streck G., Mothes S., van Hattum B., Kocan A., Brix R., Brack W., Barceló D., Sormunen A.J. and **Kukkonen J.V.K.** 2011: Toxicity assessment of sediments from three European river basins using a sediment contact test battery. Ecotox. Environ. Safety 74: 123-131.
- SA-164 Carrasco Navarro V., Brozinski J.-M., Leppänen M.T., Honkanen J.O., Kronberg L. and **Kukkonen J.V.K.** 2011: Inhibition of pyrene biotransformation by piperonyl butoxide and identification of two pyrene derivatives in *Lumbriculus variegatus* (Oligochaeta). Env. Tox. Chem. 30: 1069-1078.
- SA-165 Agbo S.O, Küster E., Georgi A., Akkanen J., Leppänen M.T., **Kukkonen J.V.K.** 2011: Photostability and toxicity of pentachlorophenol and phenanthrene. J. Hazard. Mater. 189: 235-240.
- SA-166 Pakarinen K., Petersen E.J., Leppänen M.T., Akkanen J., and **Kukkonen J.V.K.** 2011: Adverse effects and uptake of fullerenes spiked to sediments by *Lumbriculus variegatus* (Oligochaeta). Environ. Poll. 159: 3750-3756.
- SA-167 Hanako Poulsen A., Kawaguchi S., **Kukkonen J.V.K.**, Leppänen M.T. and Bengtson Nash S. 2011: Altered developmental timing in early life stages of Antarctic krill (*Euphausia superba*) exposed to p,p'-DDE. Sci. Total Environ. 409: 5268-5276.
- SA-168 Hanako Poulsen A., Kawaguchi S., **Kukkonen J.V.K.**, Leppänen M.T. and Bengtson Nash S. 2012: Aqueous uptake and sublethal toxicity of p,p'-DDE in non-feeding larval stages of Antarctic krill (*Euphausia superba*). Environ. Poll. 160: 185-191.
- SA-169 Akkanen J., Tuikka A. and **Kukkonen J.V.K.** 2012: On the borderline of dissolved and particulate organic matter: partitioning and bioavailability of polycyclic aromatic hydrocarbons. Ecotox. Environ. Safety 78: 91-98.
- SA-170 López-Doval J.C., **Kukkonen J.V.K.**, Rodrigo P. and Muñoz I. 2012: Effects of indomethacin and propranolol on *Chironomus riparius* and *Physella (Costatella) acuta*. Ecotox. Environ. Safety 78: 110-115.
- SA-171 Akkanen J., Slootweg T., Mäenpää K., Leppänen M.T., Agbo S., Gallampois C. and **Kukkonen J.V.K.** 2012: Bioavailability of organic contaminants in freshwater environments. In: Helena Guasch, Antoni Ginebreda and Anita Geiszinger (eds.): Emerging and Priority Pollutants in Rivers: Bringing science into River Management Plans. The handbook of Environmental Chemistry vol 19., Springer (ISBN: 978-3-642-25721-6). Pp. 25-53.
- SA-172 Carrasco Navarro V., Leppänen M.T., Honkanen J.O. and **Kukkonen J.V.K.** 2012: Trophic transfer of metabolite and nonextractable fractions from pyrene exposed Oligochaete (*Lumbriculus variegatus*) to juvenile brown trout (*Salmo trutta*). Chemosphere 88: 55-61.
- SA-173 Laurén A., Lappalainen M., Saari P., **Kukkonen J.V.K.**, Koivusalo H., Piirainen S., Setälä H., Sarjala T., Bylund D., Heinonen J., Nieminen M., Palviainen M., Launiainen S. and Finér L. 2012: Nitrogen and carbon dynamics and the role of Enchytraeid worms in decomposition of L, F and H layers of boreal mor. Water Air Soil Pollut 223: 3701-3719.
- SA-174 Waissi-Leinonen G.C., Petersen E.J., Pakarinen K., Akkanen J., Leppänen M.T. and **Kukkonen J.V.K.** 2012: Toxicity of fullerene ( $C_{60}$ ) to sediment-dwelling invertebrate *Chironomus riparius* larvae. Environ. Tox. Chem. 31: 2108-2116.
- SA-175 Wolfram G., Höss S., Orendt C., Schmitt C., Adámek Z., Bandow N., Großschartner M., **Kukkonen J.V.K.**, Leloup V., López Doval J.C., Muñoz I., Traunspurger W., Tuikka A., Van Liefferinge C., von der Ohe P.C. and de Deckere E. 2012: Assessing the impact of chemical pollution on benthic invertebrates

- from three different European rivers using a weight-of-evidence approach. *Science of the Total Environment* 438: 498-509.
- SA-176 Cao Y., Lehto T., Piirainen S., **Kukkonen J.V.K.** and Pelkonen P. 2012: Effects of planting orientation and density on soil solution chemistry and growth of willow cuttings. *Biomass and Bioenergy* 46: 165-173.
- SA-177 Nybom I., Werner D., Leppänen M.T., Siavalas G., Christianis K., Karapanagioti H., **Kukkonen J.V.K.** and Akkanen J. 2012: Responses of *Lumbriculus variegatus* to activated carbon amendments in uncontaminated sediments. *Environ. Sci. Technol.* 46: 12895-12903.
- SA-178 Carrasco Navarro V., Leppänen M.T., **Kukkonen J.V.K.** and Godoy Olmos S. 2013: Trophic transfer of pyrene metabolites between aquatic invertebrates. *Env. Poll.* 173: 61-67.
- SA-179 Agbo S.O., Lemmetyinen J., Keinänen M., Keski-Saari S., Akkanen J., Leppänen M.T., Wang Z., Wang H., Price D.A. and **Kukkonen J.V.K.** 2013: Response of *Lumbriculus variegatus* transcriptome and metabolites to chemical contaminants. *Comp. Biochem. Physiol. C* 157: 183-191.
- SA-180 Agbo S.O., Akkanen J., Leppänen M.T. and **Kukkonen J.V.K.** 2013: Bioconcentration of benzo[a]pyrene in *Chironomus riparius* and *Lumbriculus variegatus* in relation to dissolved organic matter and biotransformation. *Aquat. Ecosyst. Health & Mgmt.* 16: 70-77.
- SA-181 Pakarinen K., Petersen E.J., Alvila L., Waissi-Leinonen G., Akkanen J., Leppänen M.T., and **Kukkonen J.V.K.** 2013: A screening study on the fate of fullerenes ( $nC_{60}$ ) and their toxic implications in natural freshwaters. *Env. Tox. Chem.* 32: 1224-1232. DOI: 10.1002/etc.2175
- SA-182 Lappalainen M., **Kukkonen J.V.K.**, Piirainen S., Sarjala T., Setälä H., Koivusalo H., Finér L., and Laurén A. 2013: Nitrogen release in decomposition of boreal mor and peat as affected by Enchytraeid worms. *Boreal Environmental Research* 18:181-194.
- SA-183 Agbo S.O., Keinänen M., Keski-Saari S., Lemmetyinen J., Akkanen J., Leppänen M.T., Mayer P. and **Kukkonen J.V.K.** 2013: Changes in *Lumbriculus variegatus* metabolites under hypoxic exposure to benzo(a)pyrene, chlorpyrifos and pentachlorophenol: Consequences on biotransformation. *Chemosphere* 93: 302-310.
- SA-184 Figueiredo K., Mäenpää K., Leppänen M.T., Kiljunen M., Lyytikäinen M., **Kukkonen J.V.K.**, Koponen H., Biasi C. and Martikainen P.J. 2014: Trophic transfer of polychlorinated biphenyls (PCB) in boreal lake ecosystem. *Science of Total Environment* 466-467: 690-698.
- SA-185 Pakarinen K., Akkanen J., Leppänen M. and **Kukkonen J.V.K.** 2014: "Distribution of fullerenes ( $nC_{60}$ ) between sediment and water in freshwaters. *Chemosphere* 108: 320-325.
- SA-186 Vehniäinen E.-R. and **Kukkonen J.V.K.** 2015: Multixenobiotic resistance efflux activity in *Daphnia magna* and *Lumbriculus variegatus*. *Chemosphere* 124: 143-149.
- SA-187 Waissi-Leinonen G.C., Nybom I., Pakarinen K., Akkanen J., Leppänen M.T. and **Kukkonen J.V.K.** 2015: Fullerenes ( $nC_{60}$ ) affect the growth and development of sediment-dwelling invertebrate *Chironomus riparius* larvae. *Env. Poll.* 206: 17 - 23.
- SA-188 Carrasco Navarro V., Jæger I., Honkanen J.O., **Kukkonen J.V.K.**, Carroll J. and Camus L. 2015: Bioaccumulation, biotransformation and elimination of pyrene in the arctic crustacean *Gammarus setosus* (Amphipoda) at two temperatures. *Mar. Environ. Res.* 110: 101-109.
- SA-189 Nybom I., Waissi-Leinonen G., Mäenpää K., Leppänen M.T., **Kukkonen J.V.K.**, Werner D., Akkanen J. 2015: Effects of activated carbon ageing in three PCB contaminated sediments: Sorption efficiency and secondary effects on *Lumbriculus variegatus*. *Water Research* 85: 413-421.
- SA-190 Tuikka, A.I., Leppänen, M.T., Akkanen, J., Sormunen, A.J., Leonards, P.E.G., van Hattum, B., van Vliet, L.A., Brack, W., Smedes, F., and **Kukkonen, J.V.K.** 2016: Predicting the bioaccumulation of polyaromatic hydrocarbons and polychlorinated biphenyls in benthic animals in sediments. *Science of Total Environment* 563-564: 396-404.

- SA191 Nybom I., Abel S., Waissi G.C., Väänänen K., Mäenpää K., Leppänen M.T., **Kukkonen J.V.K.**, and Akkanen J. 2016: Effects of activated carbon on PCB bioaccumulation and biological responses of *Chironomus riparius* in full life cycle test. Environ. Sci. Technol. 50: 5252-5260.
- SA-192 Rajala J.E., Mäenpää K., Vehniäinen E.-R., Väisänen A., Scott-Fordsmand J.J., Akkanen J., and **Kukkonen J.V.K.** 2016: Toxicity testing of silver nanoparticles in artificial and natural sediments using the benthic organism *Lumbriculus variegatus*. Arch. Environ. Contam. Toxicol. 71: 405-414.
- SA-193 Salmelin J., Karjalainen A.K., Hämläinen H., Leppänen M.T., Kiviranta H., **Kukkonen J.V.K.**, and Vuori K.-M. 2016: Biological responses of midge (*Chironomus riparius*) and lamprey (*Lampetra fluviatilis*) larvae in ecotoxicity assessment of PCDD/F, PCB and Hg-contaminated river sediments. Environ. Sci. Pollut. Res. 23: 18379-18393. DOI: DOI: <http://dx.doi.org/10.1007/s11356-016-7014-5>
- SA-194 Waissi G.C., Bold S., Pakarinen K., Akkanen J., Leppänen M.T., Petersen E.J., and **Kukkonen J.V.K.** 2017: *Chironomus riparius* exposure to fullerene-contaminated sediment results in oxidative stress and may impact life cycle parameters. J. Hazard. Mater. 322: 301-309.  
<http://dx.doi.org/10.1016/j.jhazmat.2016.04.015>
- SA-195 Arola H.E., Karjalainen J., Vehniäinen E.-R., Väisänen A., **Kukkonen J.V.K.** and Karjalainen A.K. 2017: Tolerance of whitefish (*Coregonus lavaretus*) early life stages to manganese sulfate is affected by the parents. Env. Tox. Chem. 36: 1343-1353. DOI: <http://dx.doi.org/10.1002/etc.3667>
- SA-196 Rajala J.E., Vehniäinen E.-R., Väisänen A. and **Kukkonen, J.V.K.** 2017: Partitioning of nanoparticle-originated dissolved silver in natural and artificial sediments. Env. Tox. Chem. 36: 2593-2601. DOI: <http://dx.doi.org/10.1002/etc.3798>.
- SA-197 Waissi G.C., Väänänen K., Nybom I., Pakarinen K., Akkanen J., Leppänen M.T. and **Kukkonen J.V.K.** 2017: The chronic effects of fullereneC(60)-associated sediments in the midge *Chironomus riparius* - Responses in the first and the second generation. Env.Poll. 229: 423-430.  
<http://dx.doi.org/10.1016/j.envpol.2017.06.015>
- SA-198 Suuronen A., Muñoz-Escobar C., Lensu A., Kuitunen M., Guajardo Celis N., Espinoza Astudillo P., Ferrú M., Taucare-Ríos A., Miranda M. and **Kukkonen J.V.K.** 2017: The influence of solar power plants on microclimatic conditions and the biotic community in Chilean desert environments. Environmental Management 60: 630-642. doi: <http://dx.doi.org/10.1007/s00267-017-0906-4>
- SA-199 Suuronen A., Lensu A., Kuitunen M., Guajardo Celis N., Miranda M., Perez M., and **Kukkonen J.V.K.** 2017: Optimization of photovoltaic solar power plant locations in northern Chile. Environmental Earth Sciences 76:824-837. doi: <http://dx.doi.org/10.1007/s12665-017-7170-z>
- SA-200 Rajala J.E., Vehniäinen E.-R., Väisänen A. and **Kukkonen J.V.K.** 2018: Toxicity of silver nanoparticles to *Lumbriculus variegatus* is a function of dissolved silver and promoted by low sediment ph. Env. Tox. Chem. 37: 1889-1897. doi: <http://dx.doi.org/10.1002/etc.4136>
- SA-201 Sivula L., Vehniäinen E.-R., Karjalainen A.K. and **Kukkonen J.V.K.** 2018: Toxicity of biomining effluents to *Daphnia magna*: Acute toxicity and transcriptomic biomarkers. Chemosphere 210: 304-311. doi: <https://doi.org/10.1016/j.chemosphere.2018.07.030>.
- SA-202 Lappalainen M., Palviainen M., **Kukkonen J.V.K.**, Setälä H., Piirainen S., Sarjala T., Koivusalo H., Finér L., Launiainen S. and Laurén A. 2018: Release of carbon in different molecule size fractions from decomposing boreal mor and peat as affected by Enchytraeid worms. Water Air Soil Poll. 229: 240 doi: <https://doi.org/10.1007/s11270-018-3871-5>
- SA-203 Van den Brink P.J., Boxal A.B.A., Maltby L., Brooks B.W., Rudd M.A., Backhaus T., Spurgeon D., Verougstraete V., Ajao C., Ankley G.T., Apitz S.E., Arnold K., Brodin T., Cañedo-Argüelles M., Chapman J., Corrales J., Coutellec M.-A., Fernandes T.F., Fick J., Ford A.T., Giménez Papiol G., Groh K.J., Hutchinson T.H., Kruger H., **Kukkonen J.V.K.**, Loutseti S., Marshall S., Muir D., Ortiz-Santaliestra M.E., Paul K.B., Rico A., Rodea-Palomares I., Römbke J., Rydberg T., Segner H., Smit M., van Gestel C.A.M., Vighi M., Werner I., Zimmer E.I. and van Wensem J. 2018: Towards sustainable environmental quality: Priority research questions for Europe. Env. Tox. Chem. 37: 2281- 2295.  
doi: <http://dx.doi.org/10.1002/etc.4205>.

- SA-204 Vehniäinen E.-R., Ruusunen M., Vuorinen P.J., Keinänen M., Oikari A.O.J. and **Kukkonen J.V.K.** 2019: How to preserve and handle fish liver samples to conserve RNA integrity. Environ. Sci. Pollut. Res. 26: 17204 - 17213. doi: <https://doi.org/10.1007/s11356-019-05033-0>
- SA-205 Taipale S.J., Peltomaa E., **Kukkonen J.V.K.**, Kainz M.J., Kautonen P. and Tirola M. 2019: Tracing the fate of microplastic carbon in the aquatic food web by compound-specific isotope analysis. Scientific Reports 9: 19894. doi: <https://doi.org/10.1038/s41598-019-55990-2>
- SA-206 Honkanen J.O., Rees C.B., **Kukkonen J.V.K.** and Hodson P.V. 2020: Temperature determines the rate at which retene affects trout embryos, not the concentration that is toxic. Aquatic Toxicology 222: 105471, doi: <https://doi.org/10.1016/j.aquatox.2020.105471>
- SA-207 Hiltunen M., Vehniäinen E.-R., and **Kukkonen J.V.K.** 2021: Interacting effects of simulated eutrophication, temperature increase, and microplastic exposure on Daphnia. Environmental Research. 192: 110304. <https://doi.org/10.1016/j.envres.2020.110304>
- SA-208 Asamoah B.O., Salmi P., Räty J., Ryymin K., Talvitie J., Karjalainen A.K., **Kukkonen J.V.K.**, Roussey M. and Peiponen K.-E. 2021: Optical identification of microplastics filtrated from wastewater sludge and suspended in ethanol. Polymers. 13: 871. <https://doi.org/10.3390/polym13060871>
- SA-209 Carrasco-Navarro V., Nuutinen A., Sorvari J. and **Kukkonen J.V.K.** 2022: Toxicity of tire rubber microplastics to freshwater sediment organisms. Arch. Environ. Contam. Toxicol.: 82: 180-190. <https://doi.org/10.1007/s00244-021-00905-4>
- SA-210 Räsänen K., Hannukkala A., Kurppa S., Aaltonen M., Rahkonen A., **Kukkonen J.V.K.** and Vänninen I. 2022. The use of chemical plant protection products in field vegetable farms in a central industrial vegetable growing area in Finland. Agricultural and Food Science. 31: 54-69. <https://doi.org/10.23986/afsci.112827>
- SA-211 Abdolahpur Monikh F., Holm S., Kortet R., Bandekar M., Kekäläinen J. Koistinen A., Leskinen J.T.T., Akkanen J., Huusonen H., Valtonen A., Dupuis L., Peijnenburg W., Lynch I., Valsami-Jones E. and **Kukkonen J.V.K.** 2022: Quantifying the trophic transfer of sub-micron plastics in an assembled food chain. Nano Today 46:101611. <https://doi.org/10.1016/j.nantod.2022.101611>
- SA-212 Bandekar M., Abdolahpur Monikh F., Kekäläinen J., Tahvanainen T., Kortet R., Zhang P., Guo Z., Akkanen J., Leskinen J.T.T., Gomez-Gonzalez M.A., Krishna Darbha K., Grossart H.-P., Valsami-Jones E., **Kukkonen J.V.K.** 2022: Submicron plastic sorption by peat leads to vegetation uptake and bacterial communities' alteration in peatland ecosystems. Environ. Sci. Technol. 56 (22): 15661-15671. <https://doi.org/10.1021/acs.est.2c04892>
- SA-213 Abdolahpur Monikh F., Peijnenburg W., Oomen A., Valsami-Jones E., Stone V., Kortet R., Akkanen J., Zhang P., Kekäläinen J., Ševčík A. and **Kukkonen J.V.K.** 2023: "Advanced materials" and the challenges on the horizon for testing their (eco)toxicity and assessing their hazard. Environ. Sci.: Adv. 2: 162-170. DOI: <https://doi.org/10.1039/D2VA00128D>
- SA-214 Albrecht E., Hannonen O., Palacín-Lizarbe C., Suni J., Härkönen L.H., Soininen N., **Kukkonen J.** and Vainikka A. 2023: Browning of boreal lakes: Do public perceptions and governance meet the biological foundations? Ecological Applications: 33: e2856. DOI: <https://doi.org/10.1002/eap.2856>
- SA-215 Abdolahpur Monikh F., Baun A., Hartmann N.B., Kortet R., Akkanen J., Lee J.-S., Shi H., Lahive E., Uurasjärvi E., Tufenkji N., Altmann K., Wiesner Y., Grossart H.-P., Peijnenburg W. and **Kukkonen J.V.K.** 2023: Exposure protocol for ecotoxicity testing of microplastics and nanoplastics. Nature Protocols: 18: 3534-3564. DOI: <https://doi.org/10.1038/s41596-023-00886-9>
- SA-216 Penttinen O.-P. and **Kukkonen J.V.K.** 2023: Importance of Dose Metrics for Understanding Sublethal Pentachlorophenol Toxicity in Aquatic Systems. Online J Ecol Environ Sci. 1(3): 2023. OJEES.MS.ID.000515.
- SA-217 Taipale S.J., Vesämäki J., Kautonen P., **Kukkonen J.V.K.**, Biasi C., Nissinen R. and Tirola M.T. 2023: Biodegradation of microplastic in freshwaters - a long-lasting process affected by the lake microbiome. Environ. Microbiol. 25:2669-2680. DOI: <https://doi.org/10.1111/1462-2920.16177>

- SA-218 Caballero-Carretero P., Carrasco-Navarro V., **Kukkonen J.V.K.**, Martínez-Guitarte J.L. 2024: Gene expression analysis of *Chironomus riparius* in response to acute exposure to tire rubber microparticles and leachates. *Environmental Pollution* 342: 123111.  
DOI: <https://doi.org/10.1016/j.envpol.2023.123111>
- SA-219 Abdolahpur Monikha F., Lehtonen S., Kekäläinen J., Karkossa I., Auriola S., Schubert K., Zanut A., Peltonen S., Niskanen J., Bandekar M., von Bergen M., Leskinen J., Koistinen A., Bogialli S., Guo Z., **Kukkonen J.V.K.**, Chen C., Lynch I. 2024: Biotransformation of nanoplastics in human plasma and their permeation through a model in vitro blood-brain barrier: An in-depth quantitative analysis. *Nano Today* 59: 102466. DOI: <https://doi.org/10.1016/j.nantod.2024.102466>
- SA-220 Abu-Danso E., Weingart N., Standau T., Altstädt V., **Kukkonen J.V.K.**, Ruckdäschel H. 2024: Processing of water regenerable PLA@HNT nanocomposite via melt extrusion for selective adsorption of aqueous phase tetracycline. *Materials Today Sustainability* 28: 101029.  
DOI: <https://doi.org/10.1016/j.mtsust.2024.101029>
- SA-221 Shirani Z., Carrasco-Navarro V., Majlesi S., Yli-Pirilä P., **Kukkonen J.V.K.**, Akkanen J. 2024: Efficiency and ecotoxicity of activated biochar in the treatment of artificial wastewater contaminated by pharmaceuticals. *Journal of Environmental Management* 371: 123224.  
<https://doi.org/10.1016/j.jenvman.2024.123224>

### Publications in Congress Proceedings

- CP-1 **Kukkonen J.** 1987: Effects of different concentrations of aquatic humus on accumulation of benzo(a)pyrene into *Daphnia magna*. Commission of the European Communities, Water Pollution Research Report 7: Bioavailability and Partitioning, EUR 11357, p. 10-13.
- CP-2 **Kukkonen J.** and Oikari A. 1989: Binding and bioavailability of benzo(a)pyrene in humic waters. Matemaattis-luonnontieteellisen tiedekunnan raporttisarja N:o 29. (University of Joensuu. Faculty of Mathematics and Natural Sciences. Report Series. N:o 29). Joensuu 1989. s. 36-39.
- CP-3 Virtanen V., **Kukkonen J.** and Oikari A. 1989: Acute toxicity of organic chemicals to *Daphnia magna* in humic waters. Matemaattis-luonnontieteellisen tiedekunnan raporttisarja N:o 29. (University of Joensuu. Faculty of Mathematics and Natural Sciences. Report Series. N:o 29). Joensuu 1989. s. 84-86.
- CP-4 **Kukkonen J.**, McCarthy J.F. and Oikari A. 1990: Binding and Bioavailability of organic micropollutants in natural waters: Effects of the quality and quantity of dissolved organic material. American Chemical Society, Division of Environmental Chemistry: Preprints of Papers Presented at the 199th ACS National Meeting Boston, MA April 22-27, 1990. Vol. 30, No 1: 513-516.
- CP-5 **Kukkonen J.** and Oikari A. 1990: Effects of dissolved organic matter on the bioavailability of xenobiotics in natural waters. Proceedings of the 4th National Humus Seminar, Huhmari, Joensuu 23.-24.8. 1990. Humus-uutiset (Finnish Humus News) vol. 2(5): 43-46.
- CP-6 Mäkelä P., Petänen T., **Kukkonen J.** ja Oikari A. 1990: Simpukkatutkimus: Menetelmien kehittelyä ympäristökemikaalien ja jätevesien haittavaikutusten biologiseen arviointiin. (Mussel monitoring: Some aspects in developing a freshwater mussel watch concept, in finnish with english abstract). Joensuun yliopisto, Karjalan Tutkimuslaitoksen julkaisuja (University of Joensuu, Publications of Karelian Institute) 90: 109-114.
- CP-7 Pellinen J., Herb A., **Kukkonen J.** Mäkelä P. and Soimasuo R. 1992: Sellun valkaisun klooriyhdisteiden kulkeutuminen, sedimenttiaatio ja sedimenttien myrkylisyyys. (The fate of chlorinated compounds of pulp bleaching wastewater and sediment toxicity, in finnish with english abstract). In: Viljanen M. ja Ollikainen S. (toim.): Saimaa Seminaari, Joensuun yliopisto, Karjalan tutkimuslaitoksen julkaisuja (University of Joensuu, Publications of Karelian Institute) n:o 103: 53-63.
- CP-8 Holopainen I.J., **Kukkonen J.**, Pellinen J., Penttinen O.-P. and Ristola T. 1993: Pollutants in lake sediments: Transport, bioavailability and effects on benthic animals. In: Tuomisto J. and Ruuskanen J. (eds.): Proceedings, First Finnish Conference of Environmental Scieces. October 8.-9. 1993, Kuopio, Finland. Kuopio University Publications C. Natural and Environmental Sciences 14. pp. 232-235.

- CP-9 Ristola T., Pellinen J., **Kukkonen J.**, Leppänen M., Van Hoof P.L. and Robbins J.A. 1995: Ecotoxicological state of Lake Ladoga sediments. In: Simola H., Viljanen M., Slepukhina T. and Murthy R. (Eds.): Abstracts of the First International Lake Ladoga Symposium 1993. University of Joensuu. Publications of Karelian Institute N:o 112: 130-139.
- CP-10 Ristola T., **Kukkonen J.V.K.**, Pellinen J., Postma J.F. Groenendijk D., Pöyhönen P. and Parker D. 1997: Toxicity testing using midge *Chironomus riparius* (Diptera: Chironomidae). In: Högmander H. and Oikari A. (Eds.): Proceedings of Third Finnish Conference of Environmental Sciences: Ecotoxicology and Environmental Health, Technology and Policy. Jyväskylä, May 9-10, 1997. University of Jyväskylä, Environmental Sciences. Ambiotica 1/1997: 75-76.
- CP-11 Hämäläinen H., Ristola T. and **Kukkonen J.V.K.** 1997: Morphological deformities in Midge (Chironomidae) larvae in southern Lake Saimaa along a sediment contamination gradient. In: Högmander H. and Oikari A. (Eds.): Proceedings of Third Finnish Conference of Environmental Sciences: Ecotoxicology and Environmental Health, Technology and Policy. Jyväskylä, May 9-10, 1997. University of Jyväskylä, Environmental Sciences. Ambiotica 1/1997: 149-150.
- CP-12 Kostamo A., Pellinen J. and **Kukkonen J.** 1997: Comparison of three different methods in analysis of fish and sediment samples. In: Högmander H. and Oikari A. (Eds.): Proceedings of Third Finnish Conference of Environmental Sciences: Ecotoxicology and Environmental Health, Technology and Policy. Jyväskylä, May 9-10, 1997. University of Jyväskylä, Environmental Sciences. Ambiotica 1/1997: 170-171.
- CP-13 Leppänen M. and **Kukkonen J.V.K.** 1997: Use of *Lumbriculus variegatus* (Oligochateta: Lumbriculidae) in sediment toxicity tests. In: Högmander H. and Oikari A. (Eds.): Proceedings of Third Finnish Conference of Environmental Sciences: Ecotoxicology and Environmental Health, Technology and Policy. Jyväskylä, May 9-10, 1997. University of Jyväskylä, Environmental Sciences. Ambiotica 1/1997: 194-197.
- CP-14 Lyytikäinen M., **Kukkonen J.V.K.** and Pellinen J. 1997: The effect of sediment quality on recovery of chlorophenols. In: Högmander H. and Oikari A. (Eds.): Proceedings of Third Finnish Conference of Environmental Sciences: Ecotoxicology and Environmental Health, Technology and Policy. Jyväskylä, May 9-10, 1997. University of Jyväskylä, Environmental Sciences. Ambiotica 1/1997: 213-216.
- CP-15 Nikkilä A., Halme A. and **Kukkonen J.V.K.** 1997: Toxicity and lethal body burdens of sediment-bound chlorophenols in the oligochaete, *Lumbriculus variegatus*. In: Högmander H. and Oikari A. (Eds.): Proceedings of Third Finnish Conference of Environmental Sciences: Ecotoxicology and Environmental Health, Technology and Policy. Jyväskylä, May 9-10, 1997. University of Jyväskylä, Environmental Sciences. Ambiotica 1/1997: 233-236.
- CP-16 Penttinen S., Kostamo A. and **Kukkonen J.V.K.** 1997: The effect of water hardness on the cadmium bioavailability to *Daphnia magna* in humic lake water. In: Högmander H. and Oikari A. (Eds.): Proceedings of Third Finnish Conference of Environmental Sciences: Ecotoxicology and Environmental Health, Technology and Policy. Jyväskylä, May 9-10, 1997. University of Jyväskylä, Environmental Sciences. Ambiotica 1/1997: 247-248.
- CP-17 Saski E.K., Mikkola R., **Kukkonen J.V.K.** and Salkinoja-Salonen M.S. 1997: Environmental safety of organic halogen discharged by bleached kraft pulp mill. In: Högmander H. and Oikari A. (Eds.): Proceedings of Third Finnish Conference of Environmental Sciences: Ecotoxicology and Environmental Health, Technology and Policy. Jyväskylä, May 9-10, 1997. University of Jyväskylä, Environmental Sciences. Ambiotica 1/1997: 274-277..
- CP-18 Kostamo A., Lyytikäinen M., Pellinen J. and **Kukkonen J.V.K.** 1997: Different methods in analysis of chlorohydrocarbons and chlorophenols in fish and sediment samples. In: Vartiainen T. and Komulainen H. (eds.): 7th Nordic Symposium on Organic Pollutants, August 25-28, 1997, Kuopio, Finland. Kuopio University Publications C. Natural and Environmental Sciences 68: 32-35.
- CP-19 Ristola T., **Kukkonen J.V.K.** and Pellinen J. 1997: Chronic toxicity of sediment-bound 2,4,5-trichlorophenol to the midge *Chironomus riparius*. In: Vartiainen T. and Komulainen H. (eds.): 7th Nordic Symposium on Organic Pollutants, August 25-28, 1997, Kuopio, Finland. Kuopio University Publications C. Natural and Environmental Sciences 68: 82-85.

- CP-20 **Kukkonen J.V.K.** 1997: Bioaccumulation of organic compounds in sediments by benthic organisms. In: Vartiainen T. and Komulainen H. (eds.): 7th Nordic Symposium on Organic Pollutants, August 25-28, 1997, Kuopio, Finland. Kuopio University Publications C. Natural and Environmental Sciences 68: 91-94.
- CP-21 Kostamo A., Pellinen J., **Kukkonen J.**, Viljanen M. and Hyvärinen H. 1997: EOX and organic chlorine compounds in fish and seal samples from Lake Ladoga, Russia. In: Simola H., Viljanen M. and Slepukhina T. (eds.): Proceedings of the Second International Lake Ladoga Symposium 1996. University of Joensuu, Publications of Karelian Institute 117: 130-132.
- CP-22 **Kukkonen J.V.K.**, Rantalainen A.-L., Mikkelsen P., Lyytikäinen M., Hääläinen H. and Paasivirta J. 1998: Bioavailability of polychlorinated diphenylethers (PCDEs) in contaminated sediments: Comparison of benthic organisms and semipermeable membrane devices (SPMDs). Organohalogen Compounds 39: 5 - 8.
- CP-23 Hääläinen H., Ristola T., **Kukkonen J.V.K.** and Kostamo A. 1998: Surviaisääskitoukkien epämudostumat metsäteollisuuden kuormittamilla Etelä-Saimalla ja Haukivedellä. (Chironomid larval deformities in southern Lake Saimaa and Lake Haukivesi areas polluted by pulp and paper mill effluents). In: Grönlund E., Simola H., Viljanen M. And Niinioja R. (Eds.): Saimaa Symposium 1998 - Present and Future Lake Saimaa. University of Joensuu, Publications of Karelian Institute 122: 194-197. (in Finnish with English abstract).
- CP-24 Nikkilä A., Penttinen S. and **Kukkonen J.V.K.** 1998: Effects of dissolved organic material in humic fresh waters on the UV-B induced acute toxicity of pyrene to the water flea *Daphnia magna*. HUMUS - Nordic Humus Newsletter 5: 14-19.
- CP-25 Heinonen J., **Kukkonen J.V.K.** and Holopainen I.J. 1999: Seasonal variation in toxicokinetics of 2,4,5-trichlorophenol in the freshwater clam, *Pisidium amnicum*. In: Kuusisto S., Isoaho S. and Puhakka J. (Eds.): Proceedings of Fourth Finnish Conference of Environmental Sciences, May 21-22, 1999, Tampere, Finland. Tampere University of Technology, Water and Environmental Engineering. Report 9: 101-104.
- CP-26 Kostamo A., Medvedev N., Pellinen J., Hyvärinen H. and **Kukkonen J.V.K.** 1999: Organochlorine compounds and EOX in ringed seal from Lake Saimaa, Lake Ladoga and the White Sea. In: Kuusisto S., Isoaho S. and Puhakka J. (Eds.): Proceedings of Fourth Finnish Conference of Environmental Sciences, May 21-22, 1999, Tampere, Finland. Tampere University of Technology, Water and Environmental Engineering. Report 9: 117-120.
- CP-27 Lyytikäinen M., **Kukkonen J.V.K.** and Sormunen A. 1999: Toxicity of sediments from an old saw mill area and the recipient lake to *Lumbriculus variegatus*. In: Kuusisto S., Isoaho S. and Puhakka J. (Eds.): Proceedings of Fourth Finnish Conference of Environmental Sciences, May 21-22, 1999, Tampere, Finland. Tampere University of Technology, Water and Environmental Engineering. Report 9: 121-124.
- CP-28 Akkanen J.T., Penttinen S. and **Kukkonen J.V.K.** 1999: Bioavailability of organic chemicals in European rivers. In: Kuusisto S., Isoaho S. and Puhakka J. (Eds.): Proceedings of Fourth Finnish Conference of Environmental Sciences, May 21-22, 1999, Tampere, Finland. Tampere University of Technology, Water and Environmental Engineering. Report 9: 135-138.
- CP-29 Honkanen J.O., Hääläinen H. and **Kukkonen J.V.K.** 1999: Mouthpart deformities of chironomid larvae in relation to some benthic community parameters in the River Kymijoki, Southern Finland. In: Kuusisto S., Isoaho S. and Puhakka J. (Eds.): Proceedings of Fourth Finnish Conference of Environmental Sciences, May 21-22, 1999, Tampere, Finland. Tampere University of Technology, Water and Environmental Engineering. Report 9: 145-148.
- CP-30 Nikkilä A. and **Kukkonen J.V.K.** 1999: Atrazine kinetics with juvenile *Daphnia magna* in different natural waters. In: Kuusisto S., Isoaho S. and Puhakka J. (Eds.): Proceedings of Fourth Finnish Conference of Environmental Sciences, May 21-22, 1999, Tampere, Finland. Tampere University of Technology, Water and Environmental Engineering. Report 9: 174-177.
- CP-31 Akkanen J.T., Penttinen S. and **Kukkonen J.V.K.** 1999: Bioaccumulation of three organic chemicals in river waters with varying levels of DOM. In: Andersen D.A. and Becher G. (Eds.): 7<sup>th</sup> Nordic Symposium on Humic Substances in Soil and Water. June 6-9, 1999, Kristiansand, Norway. Extended Abstracts p. 7-9.

- CP-32 **Kukkonen J.V.K.**, Punta E., Koponen P., Paranko J., Leppänen H., Holopainen I.J. and Hyvärinen H. 1999: Biomarker responses by crucian carp (*Carassius carassius*) living in a pond of secondary treated pulp mill effluent. In: The 6<sup>th</sup> IAWQ Symposium on Forest Industry Wastewaters. June 6-10, 1999, Tampere, Finland. Final Programme and Symposium Pre-prints p. 429-436.
- CP-33 **Kukkonen J.V.K.**, Ristola T. and Hämläinen H. 1999: Xenobiotics in sediments: Challenge for biomonitoring. In: Peltonen A. and Viljanen M. (eds.): Proceedings of a Workshop on Monitoring of Large Lakes. University of Joensuu, Publications of Karelian Institute 126: 98-106.
- CP-34 Verta M., Korhonen M., Lehtoranta J., Salo S., Vartiainen T., Kiviranta H., **Kukkonen J.**, Hämläinen H., Mikkelsen P. and Palm H. 1999: Ecotoxicological and health effects caused by PCP's, PCDE's, PCDD's and PCDF's in River Kymijoki sediments, South-Eastern Finland. Organohalogen Compounds 43: 239-242.
- CP-35 Sormunen A., Lyttikäinen M. and **Kukkonen J.V.K.** 2000: Application of biological and chemical methods to the monitoring of contaminated sediments - a case study. In: A. Peltonen, E. Grönlund and M. Viljanen (Eds.): Proceedings of the Third International Lake Ladoga Symposium 1999. University of Joensuu, Publications of Karelian Institute 129: 292-298.
- CP-36 Hämläinen H., **Kukkonen J.V.K.**, Leppä M. and Ristola T. 2000: Use of midge larval deformities in monitoring of sediment contamination in pulp mill recipients. In: M. Ruoppa, J. Paasivirta, K.-J. Lehtinen and S. Ruonala (eds.): 4<sup>th</sup> International Conference on Environmental Impacts of the Pulp and Paper Industry, Proceedings of the Conference June 12-15, 2000, Helsinki Finland. The Finnish Environment 417: 190-195.
- CP-37 Mattsson K., Lehtinen K.-J., Tana J., Härdig J., Engström C., **Kukkonen J.V.K.** and Nakari T. 2000: Adaptive and metabolic responses in juvenile rainbow trout exposed to untreated and treated whole pulp mill effluents and restricted diet. In: M. Ruoppa, J. Paasivirta, K.-J. Lehtinen and S. Ruonala (eds.): 4<sup>th</sup> International Conference on Environmental Impacts of the Pulp and Paper Industry, Proceedings of the Conference June 12-15, 2000, Helsinki Finland. The Finnish Environment 417: 240-245.
- CP-38 **Kukkonen J.V.K.** 2001: The role of natural organic material on the environmental fate of xenobiotics in aquatic environments. In: Lehtonen T., Salminen J.-P. and Pihlaja K. (eds.): Proceedings of Fifth Finnish Conference of Environmental Sciences, May 18-19, 2001, Turku, Finland. University of Turku (ISBN 951-29-1957-5). p: 34-37.
- CP-39 Akkanen J. and **Kukkonen J.V.K.** 2001: Combined effects of water hardness and humic substances on bioavailability of organic chemicals. In: Lehtonen T., Salminen J.-P. and Pihlaja K. (eds.): Proceedings of Fifth Finnish Conference of Environmental Sciences, May 18-19, 2001, Turku, Finland. University of Turku (ISBN 951-29-1957-5). p: 50-52.
- CP-40 Penttinen O.-P. and **Kukkonen J.V.K.** 2001: Pollutant induced calorimetric responses in aquatic organisms. In: Lehtonen T., Salminen J.-P. and Pihlaja K. (eds.): Proceedings of Fifth Finnish Conference of Environmental Sciences, May 18-19, 2001, Turku, Finland. University of Turku (ISBN 951-29-1957-5). p: 65-67.
- CP-41 Heinonen J., **Kukkonen J.V.K.** and Holopainen I.J. 2001: Seasonal temperatures and trematode parasites induce changes in the toxicity of pentachlorophenol to freshwater clam (*Pisidium amnicum*). In: Lehtonen T., Salminen J.-P. and Pihlaja K. (eds.): Proceedings of Fifth Finnish Conference of Environmental Sciences, May 18-19, 2001, Turku, Finland. University of Turku (ISBN 951-29-1957-5). p: 124-127.
- CP-42 Honkanen J., Heinonen J. and **Kukkonen J.V.K.** 2001: Temperature induced changes in the toxicokinetics of bisphenol A in salmon eggs. In: Lehtonen T., Salminen J.-P. and Pihlaja K. (eds.): Proceedings of Fifth Finnish Conference of Environmental Sciences, May 18-19, 2001, Turku, Finland. University of Turku (ISBN 951-29-1957-5). p: 128-129.
- CP-43 Kostamo A. and **Kukkonen J.V.K.** 2001: Fate of resin acids and plant sterols in the activated sludge treatment plant of a pulp mill. In: Lehtonen T., Salminen J.-P. and Pihlaja K. (eds.): Proceedings of Fifth Finnish Conference of Environmental Sciences, May 18-19, 2001, Turku, Finland. University of Turku (ISBN 951-29-1957-5). p: 139-142.

- CP-44 Nikkilä A., **Kukkonen J.V.K.** and Oikari A. 2001: Bioavailability of retene to a sediment-dwelling oligochaete *Lumbriculus variegatus*. In: Lehtonen T., Salminen J.-P. and Pihlaja K. (eds.): Proceedings of Fifth Finnish Conference of Environmental Sciences, May 18-19, 2001, Turku, Finland. University of Turku (ISBN 951-29-1957-5). p: 164-167.
- CP-45 Koponen P.S. and **Kukkonen J.V.K.** 2001: Effects of four UVB doses on common frog (*Rana temporaria*) and swamp frog (*R. arvalis*) in the laboratory. In: Lehtonen T., Salminen J.-P. and Pihlaja K. (eds.): Proceedings of Fifth Finnish Conference of Environmental Sciences, May 18-19, 2001, Turku, Finland. University of Turku (ISBN 951-29-1957-5). p: 234-235.
- CP-46 Akkanen J. and **Kukkonen J.V.K.** 2001: Water hardness affects the bioavailability of organic chemicals in the presence of humic substances. In: Borggaard O.K., Jørgensen J.A. and Rasmussen L.H. (Eds.): Proceedings of the 8th Nordic IHSS Symposium on Humic Substances - Characterization, Dynamics, Transport and Effects, May 28-30, 2001, Fredriksberg, Denmark. p: 118-121.
- CP-47 **Kukkonen J.V.K.** 2002: Characterization of carbon-14 labelled humic substances. Proceedings of the International Humic Substances Society 20th Anniversary Conference Humic Substances: Nature's Most Versatile Materials, July 21 - 26, 2002, Northeastern University, Boston, MA, USA. p: 121-122.
- CP-48 Vogt R.D., Akkanen J., Gjessing E., **Kukkonen J.**, Pflugmacher S., Steinberg C. and Zolnay A. 2002: Correlations between dom characterisation parameters and key descriptive parameters of the watershed. Proceedings of the International Humic Substances Society 20th Anniversary Conference Humic Substances: Nature's Most Versatile Materials, July 21 - 26, 2002, Northeastern University, Boston, MA, USA. p: 399-402.
- CP-49 Akkanen J., Vogt R., Wiegand C., Pflugmacher S., Steinberg C.E.W. and **Kukkonen J.V.K.** 2003: Natural organic matter in the nordic countries: an ecotoxicological perspective. In: Honkanen J.O. and Koponen P.S. (eds.): Proceedings of Sixth Finnish Conference of Environmental Sciences, May 8-9, 2003, Joensuu, Finland. University of Joensuu (ISBN 952-458-271-6). p: 63-66.
- CP-50 Leppänen M.T., Sormunen A. and **Kukkonen J.V.K.** 2003: Are sediment-associated polybrominated diphenylethers (flame retardants) bioavailable? In: Honkanen J.O. and Koponen P.S. (eds.): Proceedings of Sixth Finnish Conference of Environmental Sciences, May 8-9, 2003, Joensuu, Finland. University of Joensuu (ISBN 952-458-271-6). p: 80-83.
- CP-51 Kiiski A., Hämäläinen H., Salo S., Verta M., Honkanen J.O. and **Kukkonen J.V.K.** 2003: Identifying hazardous river sediments by the incidence of morphological deformities in midge (*Chironomidae: Chironomus spp.*) larvae. In: Honkanen J.O. and Koponen P.S. (eds.): Proceedings of Sixth Finnish Conference of Environmental Sciences, May 8-9, 2003, Joensuu, Finland. University of Joensuu (ISBN 952-458-271-6). p: 295-298.
- CP-52 Lyytikäinen M., Hämäläinen H., Rantala A.-L., Mikkelsen P., Paasivirta J. and **Kukkonen J.V.K.** 2003: Are semipermeable membrane devices (SPMDs) good surrogates for oligochaetes in bioaccumulation tests? In: Honkanen J.O. and Koponen P.S. (eds.): Proceedings of Sixth Finnish Conference of Environmental Sciences, May 8-9, 2003, Joensuu, Finland. University of Joensuu (ISBN 952-458-271-6). p: 322-325.
- CP-53 Mäenpää K.A. and **Kukkonen J.V.K.** 2003: Bioaccumulation of sediment associated surfactants (4-nonylphenol and 4-(2-dodecyl) benzensulfonysyrene) in *Lumbriculus variegatus* (Oligochaeta). In: Honkanen J.O. and Koponen P.S. (eds.): Proceedings of Sixth Finnish Conference of Environmental Sciences, May 8-9, 2003, Joensuu, Finland. University of Joensuu (ISBN 952-458-271-6). p: 326-329.
- CP-54 Ryökkynen A., Mustonen A.-M., Nieminen P., Pyykönen T., Hänninen S., Asikainen J., Mononen J. and **Kukkonen J.V.K.** 2003: Effects of a five-month phytoestrogen exposure on plasma lipids and testosterone in the mink (*Mustela vison*). In: Honkanen J.O. and Koponen P.S. (eds.): Proceedings of Sixth Finnish Conference of Environmental Sciences, May 8-9, 2003, Joensuu, Finland. University of Joensuu (ISBN 952-458-271-6). p: 334-336.
- CP-55 Sormunen A., Leppänen M.T. and **Kukkonen J.V.K.** 2003: Desorption behaviour of sediment-associated halogenated compounds (TBDE, PBDE AND TCDD). In: Honkanen J.O. and Koponen P.S. (eds.): Proceedings of Sixth Finnish Conference of Environmental Sciences, May 8-9, 2003, Joensuu, Finland. University of Joensuu (ISBN 952-458-271-6). p: 344-347.

- CP-56 Jantunen A.P.K. and **Kukkonen J.V.K.** 2003: Desorption of the herbicide pendimethalin from four lake sediments. In: Del Re A.A.M., Capri E., Padovani L. and Trevisan M. (eds.): Pesticide in Air, Plant, Soil & Water System. Proceedings of the XII Symposium Pesticide Chemistry, June 4-6, 2003, Piacenza, Italy. p: 375-384.
- CP-57 Lyytikäinen M., Vartiainen H., Tuikka A., Akkanen J., Leppänen M. and **Kukkonen J.V.K.** 2004: Factors affecting bioaccumulation of sediment-bound PAHs. In: J. Paasivirta (ed.): CEOEC'2004. Sixth Finnish-Russian Seminar: Chemistry and Ecology of Organo-Element Compounds, June 14-18, 2004, Jyväskylä, Finland. Department of Chemistry, University of Jyväskylä, Research Report No. 108: 61-64.
- CP-58 **Kukkonen J.V.K.**, Schultz E., Pehkonen S. and Penttinen O.-P. 2004: Potential biological effects of isolated humic materials. In: L. Martin-Neto, D. Marcondes Bastos Pereira Milori and W. Tadeu Lopes da Silva (eds.): International Humic Substances Society, Proceedings of XII International Meeting of IHSS, Humic Substances and Soil and Water Environment, July 25-30, 2004, Colina Verde Hotel, São Paulo, São Paulo, Brazil. p: 119-122.
- CP-59 Akkanen J., Haftka J.J.H., Parsons J.R. and **Kukkonen J.V.K.** 2005: The pool of dissolved natural organic matter in the environment: How do we define it? In: Meriläinen P., Sivula L. and Oikari A (eds.): Proceedings of Seventh Finnish Conference of Environmental Sciences, May 12-13, 2005, Jyväskylä, Finland. (ISBN 951-39-2167-0). p: 76-79.
- CP-60 Lyytikäinen M., Pehkonen S., Akkanen J., Tuikka A., Vartiainen H., Hirva P., Rantalainen A.-L., Mikkelsson P., Paasivirta J. and **Kukkonen J.** 2005: Factors affecting bioavailability of sediment-bound PCDD/Fs, PCDEs and PAHs. In: Meriläinen P., Sivula L. and Oikari A (eds.): Proceedings of Seventh Finnish Conference of Environmental Sciences, May 12-13, 2005, Jyväskylä, Finland. (ISBN 951-39-2167-0). p: 97-100.
- CP-61 Airas S., Leppänen M. and **Kukkonen J.V.** 2005: Effects of temperature and oxygen concentration in sediment toxicity testing with *Lumbricus variegatus*. In: Meriläinen P., Sivula L. and Oikari A (eds.): Proceedings of Seventh Finnish Conference of Environmental Sciences, May 12-13, 2005, Jyväskylä, Finland. (ISBN 951-39-2167-0). p: 218-220.
- CP-62 Kiiski A., Hääläinen H., Salo S., Verta M. and **Kukkonen J.** 2005: Incidence of midge (Diptera, Chironomidae) larval deformities in the assessment of biologically hazardous sediments. In: Meriläinen P., Sivula L. and Oikari A (eds.): Proceedings of Seventh Finnish Conference of Environmental Sciences, May 12-13, 2005, Jyväskylä, Finland. (ISBN 951-39-2167-0). p: 225-228.
- CP-63 Mäenpää K., Sorsa K., Lyytikäinen M., Leppänen M.T. and **Kukkonen J.V.K.** 2005: Bioaccumulation, toxicity, biotransformation and effective body residues of pentachlorophenol (PCP) in *Lumbricus variegatus*. In: Meriläinen P., Sivula L. and Oikari A (eds.): Proceedings of Seventh Finnish Conference of Environmental Sciences, May 12-13, 2005, Jyväskylä, Finland. (ISBN 951-39-2167-0). p: 240-242.
- CP-64 Pehkonen S., Lyytikäinen M., Akkanen J., Leppänen M. and **Kukkonen J.V.K.** 2005: Assessing bioaccumulation and toxicity of PAHs in creosote-contaminated sediment. In: Meriläinen P., Sivula L. and Oikari A (eds.): Proceedings of Seventh Finnish Conference of Environmental Sciences, May 12-13, 2005, Jyväskylä, Finland. (ISBN 951-39-2167-0). p: 243-246.
- CP-65 Ryökkynen A., **Kukkonen J.V.K.** and Nieminen P. 2005: Two-generation genistein exposure on the mouse. In: Meriläinen P., Sivula L. and Oikari A (eds.): Proceedings of Seventh Finnish Conference of Environmental Sciences, May 12-13, 2005, Jyväskylä, Finland. (ISBN 951-39-2167-0). p: 251-253.
- CP-66 Akkanen J., Tuikka A. and **Kukkonen J.V.K.** 2006: The use of tenax extraction to study the release of DNOM sorbed hydrophobic organic contaminants. In: Frimmel F.H. and Abbt-Braun G. (eds.). Proceedings of the 13th Meeting of the International Humic Substances Society July 30 to August 4, 2006. Karlsruhe, Germany (ISSN: 1612-118X). Abstract Book: 857-860.
- CP-67 Sorsa K., Akkanen J. and **Kukkonen J.V.K.** 2006: Bioavailability of organic pollutants in boreal waters revisited: what has happened in 17 years? In: Frimmel F.H. and Abbt-Braun G. (eds.). Proceedings of the 13th Meeting of the International Humic Substances Society July 30 to August 4, 2006. Karlsruhe, Germany (ISSN: 1612-118X). Abstract Book: 885-888.
- CP-68 Akkanen J., **Kukkonen J.V.K.** and Pehkonen S. 2007: Remediation of contaminated sediments with black carbon: an ecological perspective. In: Xiang H., Neg Akieh M., Vuorio A.-M., Jokinen T. and

- Sillanpää M. (eds.). Proceedings of Eighth Finnish Conference of Environmental Sciences, May 10-11, 2007, Mikkeli, Finland. (ISBN 978-951-27-0555-9). p.: 25-27.
- CP-69 Jantunen A.P.K., Tuikka a., Akkanen J. and **Kukkonen J.V.K.** 2007: The bioaccumulation of atrazine and chlorpyrifos to *Lumbriculus variegatus* from four lake sediments. In: Xiang H., Neg Akieh M., Vuorio A.-M., Jokinen T. and Sillanpää M. (eds.). Proceedings of Eighth Finnish Conference of Environmental Sciences, May 10-11, 2007, Mikkeli, Finland. (ISBN 978-951-27-0555-9). p.: 101-104.
- CP-70 Saari P., Saarnio S., **Kukkonen J.V.K.**, Akkanen J., Saari V., Luotonen H., Lyytikäinen V., Heikkinen S.M. and Alm J. 2007: Concentrations and characteristics of DOC and dynamic of N<sub>2</sub>O in a peatland buffer. In: Xiang H., Neg Akieh M., Vuorio A.-M., Jokinen T. and Sillanpää M. (eds.). Proceedings of Eighth Finnish Conference of Environmental Sciences, May 10-11, 2007, Mikkeli, Finland. (ISBN 978-951-27-0555-9). p.: 294-297.
- CP-71 **Kukkonen J.V.K.** 2009: Evaluation of toxicity and bioavailability of chemicals in sediments. In: Sediment contact tests. Reference conditions, control sediments, toxicity thresholds. Symposium on 13-14 November 2008 in Koblenz, Germany. Bundesanstalt für Gewässerkunde, Veranstaltungen 2/2009 (ISBN: 978-3-940247-02-5), p.: 14-17.
- CP-72 Figueiredo K., Leppänen M.T., Mäenpää K., Lyytikäinen M. and **Kukkonen J.V.K.** 2009: Modelling bioaccumulation and trophic transfer of polychlorinated biphenyls in contaminated lake. In: Vakkilainen K. and Pukkila V. (Eds.): Proceedings of Ninth Finnish Conference of Environmental Sciences, May 14-15, 2009, Lahti, Finland. (ISBN 978-952-10-5576-8). p.: 119-121.
- CP-73 Pehkonen S., McCullough J., **Kukkonen J.V.K.** and Akkanen J. 2009: assessing the effect of activated carbon and creosote oil on *L. variegatus* in sediment. In: Vakkilainen K. and Pukkila V. (Eds.): Proceedings of Ninth Finnish Conference of Environmental Sciences, May 14-15, 2009, Lahti, Finland. (ISBN 978-952-10-5576-8). p.: 134-137.
- CP-74 Saari P., Saarnio S., **Kukkonen J.V.K.**, Akkanen J. and Alm J. 2009: Are peatland forestry buffers hot spots of N<sub>2</sub>O emissions? In: Vakkilainen K. and Pukkila V. (Eds.): Proceedings of Ninth Finnish Conference of Environmental Sciences, May 14-15, 2009, Lahti, Finland. (ISBN 978-952-10-5576-8). p.: 153-156.
- CP-75 Tuikka A.I., Leppänen M.T., Akkanen J., Sormunan A.J., **Kukkonen J.V.K.**, Leonards P., van Hattum B., van Vliet S., Brack W. and Smedes F. 2011: Predicting the bioavailability of native PAHs and PCBs to *Lumbriculus variegatus* on the basis of their pore-water concentrations in the sediment. In: Brozinski J.-M., Brozinski A. and Kronberg L. (Eds.): Proceedings of Finnish Conference of Environmental Science, May 5-6, 2011, Turku, Finland. (ISBN 978-952-12-2577-2). p.: 43-46.
- CP-76 Agbo S.O., Akkanen J., Leppänen M.T., Küster E., Georgi A., and **Kukkonen J.V.K.** 2011: Photostability of pentachlorophenol and phenanthrene: consequences on *Daphnia magna* neonate mobility. In: Brozinski J.-M., Brozinski A. and Kronberg L. (Eds.): Proceedings of Finnish Conference of Environmental Science, May 5-6, 2011, Turku, Finland. (ISBN 978-952-12-2577-2). p.: 77-79.
- CP-77 Carrasco Navarro V., Leppänen M.T., **Kukkonen J.V.K.** 2011: Trophic transfer of PAH metabolites between aquatic invertebrates. In: Brozinski J.-M., Brozinski A. and Kronberg L. (Eds.): Proceedings of Finnish Conference of Environmental Science, May 5-6, 2011, Turku, Finland. (ISBN 978-952-12-2577-2). p.: 80-84.
- CP-78 Nybom I., **Kukkonen J.V.K.**, Leppänen M.T. and Akkanen J. 2011: Carbon amendments as a potential method for sediment remediation: Ecotoxicological effects in *Lumbriculus variegatus*. In: Brozinski J.-M., Brozinski A. and Kronberg L. (Eds.): Proceedings of Finnish Conference of Environmental Science, May 5-6, 2011, Turku, Finland. (ISBN 978-952-12-2577-2). p.: 85-87.
- CP-79 Pakarinen K., Akkanen J., Leppänen M.T. and **Kukkonen J.V.K.** 2013: Fullerenes' partitioning between sediment and water: Sediment is not their final sink. In: Pynnönen S and Tuhkanen T. (Eds.): Finnish Conference on Environmental Sciences. 2-3 May 2013, Tampere, Finland. Proceedings (ISBN 978-952-15-3049-4). p.: 18-21.
- CP-80 Waissi-Leinonen G.C., Pakarinen K., Bold S., Petersen E.J., Akkanen J., Leppänen M.T. and **Kukkonen J.V.K.** 2013: Body residues and responses of the midge *Chironomus riparius* to sediment associated

fullerene C<sub>60</sub>. In: Pynnönen S and Tuhkanen T. (Eds.): Finnish Conference on Environmental Sciences. 2-3 May 2013, Tampere, Finland. Proceedings (ISBN 978-952-15-3049-4). p.: 23-26.

- CP-81 Agbo S.O., Lemmetyinen J., Keinänen M., Keski-Saari S., Akkanen J., Leppänen M.T., Mayer P., Wang Z., Wang H., Price D.A. and **Kukkonen J.V.K.** 2013: Transcriptomal and metabolic changes in *Lumbriculus variegatus* exposed to model chemicals and hypoxia. In: Pynnönen S and Tuhkanen T. (Eds.): Finnish Conference on Environmental Sciences. 2-3 May 2013, Tampere, Finland. Proceedings (ISBN 978-952-15-3049-4). p.: 31-34.
- CP-82 Carrasco Navarro V., Leppänen M.T. and **Kukkonen J.V.K.** 2013: Trophic transfer of PAH metabolites in short aquatic food chains. In: Pynnönen S and Tuhkanen T. (Eds.): Finnish Conference on Environmental Sciences. 2-3 May 2013, Tampere, Finland. Proceedings (ISBN 978-952-15-3049-4). p.: 37-40.
- CP-83 Nybom I., Abel S., Leppänen M.T., **Kukkonen J.V.K.** and Akkanen J. 2013: Biological effects of carbon amendments on *Lumbriculus variegatus* in PCB contaminated sediments. In: Pynnönen S and Tuhkanen T. (Eds.): Finnish Conference on Environmental Sciences. 2-3 May 2013, Tampere, Finland. Proceedings (ISBN 978-952-15-3049-4). p.: 53-55.

#### Edited Books and Publications

- EB-1 Oikari A., **Kukkonen J.** and Mäkelä P. (editors) 1991: 9. Kansallinen vesieläinten fysiologian ja fysiologisen toksikologian tutkijakokous. Tiivistelmät. (9th National Meeting on physiology and physiological toxicology of aquatic organisms. Abstracts.) Mekrijärvi 17.-18.10. 1991. Joensuu yliopisto, Matemaattis-luonnontieteellisen tiedekunnan raporttisarja (University of Joensuu, Faculty of Mathematics and Natural Sciences Report Series) N:o 30.
- EB-2 Frisk T., Kortelainen P., Münster U., Kronberg L., Knuutinen J. and **Kukkonen J.** (guest editors) 1998: Humus as an Environmental Factor. The Sixth Nordic Symposium on Humic Substances. Special Issue of Environment International 24 (5/6): 507-698.

#### Presentation Abstracts

Over 260 presentation abstracts listed. List will be provided if required

#### Other Publications and Reports (Some in Finnish)

- OP-1 Oikari A., **Kukkonen J.** ja Keinonen-Mettälä K. 1986: Ympäristöanalytiikka ja Toksikologia. Harjoitustyöt. Joensuu yliopisto, Biologian laitos 1986. Moniste. 28 s.
- OP-2 **Kukkonen J.** ja Oikari A. 1989: PAH-yhdisteiden biologisesta saatavuudesta humukseltaan erilaisissa vesissä. Valtion Painatuskeskus, Helsinki 1989. Suomen Akatemian Julkaisuja 5/89: 76-85.
- OP-3 **Kukkonen J.** 1989: Vesihuksen ekotoksikologisesta merkityksestä. Humus-uutiset No. 2-3 (vol. 1): 10-11.
- OP-4 Pellinen J., Ristola T., **Kukkonen J.**, Leppänen M., Soimasuo R., Van Hoof P.L. and Robbins J.A. 1994: Toxic chemicals and toxicity of Lake Ladoga sediments. In: M. Viljanen, V. Drabkova and N. Filatov (eds.): Report on Lake Ladoga Research in 1991-1993. University of Joensuu. Publications of Karelian Institute N:o 111, p:157-163.
- OP-5 Holopainen I.J. and **Kukkonen J.** 1995: Aquatic ecotoxicology - study of freshwater systems stressed by toxic chemicals. Ann. Zool. Fennici 32: 235-236.
- OP-6 **Kukkonen J.** 1995: Measuring sediment toxicity. In: Development of (eco)toxicity tests. Nordic Council of Ministers, Copenhagen. TemaNord 1995:623: 24-25.
- OP-7 Verta M., Ahtiainen J., Hämäläinen H., Jussila H., Järvinen O., Kiviranta H., Korhonen M., **Kukkonen J.**, Lehtoranta J., Lyytikäinen M., Malve O., Mikkelsen P., Moisio V., Niemi A., Paasivirta J., Palm H.,

- Porvari P., Rantalaisten A.-L., Salo S., Vartiainen T. ja Vuori K.-M. 1999: Organoklooriyhdisteet ja raskasmetallit Kymijoen sedimentissä: esiintyminen, kulkeutuminen, vaikutukset ja terveysriskit. Suomen Ympäristökeskus. Suomen ympäristö 334. 72 p.
- OP-8 Vuori K.-M., Dubrovina L., Regerand T., Liljaniemi P., Luotonen H., Illyashuk B., Sirén O. and **Kukkonen J.** 1999: Metsätalouden aiheuttaman metalli- ja humikuormituksen ekotoksikologiset vaikutukset Suomen ja Venäjän Karjalan vesistöissä: alustavia tuloksia maasto- ja laboratoriotutkimuksista. Metsäntutkimuslaitoksen tiedonantoja 745: 39-52.
- OP-9 **Kukkonen J.V.K.** and Holopainen I.J. 1999: Book Review: Environmental Photochemistry, P.Boule (ed.). International Journal of Environment and Pollution 12(1): 122.
- OP-10 Sormunen A., **Kukkonen J.** and Viljanen M. 2000: Recommendations for ecotoxicological monitoring programme to Lake Ladoga. In: A.-L. Holopainen, M. Rahkola-Sorsa and M. Viljanen (eds.): Environmental Monitoring in Lake Ladoga, Proposal for a Monitoring Programme. University of Joensuu. Karelian Institute, working papers N:o 1/2000: 106-112.
- OP-11 **Kukkonen J.V.K.** 2002: Book Review: Chiral Environmental Pollutants: Trace Analysis and Ecotoxicology by Roland Kallenborg and Heinrich Hühnerfuss. International Journal of Environment and Pollution 18(1): 104-105.
- OP-12 Rasmussen D., **Kukkonen J.V.K.**, Källqvist T., Helweg C., Madsen T., Mäenpää K., Sormunen A. and Efraimsson H. 2002: Distribution, degradation and toxicity of pesticides at environmentally realistic temperatures. Nordtest, NT Technical Report 496, 65 p. NT Project No. 1522-01.
- OP-13 **Kukkonen J.V.K.** 2002: Book Review: Humic Substances: Structures, Models and Functions by E.A. Ghabbour and G. Davies (Editors). International Journal of Environment and Pollution 18(6): 610.
- OP-14 Petersen G., Rasmussen D., Mäenpää K., Källqvist T., Madsen T. and **Kukkonen J.V.K.** 2003. Transport and fate of surfactants in the aquatic environment. Nordtest, NT Technical Report 524, 48 p. NT Project No. 1570-02.
- OP-15 **Kukkonen J.** 2004: 4.6 Sedimentin haitallisuuden testaus. In: Ruoppa M. and Heinonen P. (eds.): Suomessa käytetyt biologiset vesitutkimusmenetelmät. Suomen Ympäristö 682: 98-100.
- OP-16 **Kukkonen J.V.K.** 2004: Book Review: UV Effects in Aquatic Organisms and Ecosystems by E.W. Helbling and H. Zagarese (Editors). International Journal of Environment and Pollution 21(6): 613-614.
- OP-17 Westerberg L.-M., Kukkonen J. ja Virtasalo J. 2006: Suomen ympäristökeskuksen vertailulaboratorion arvointi 2005. Ympäristöministeriön raportteja 6/2006. ISBN: 952-11-2244-7
- OP-18 Vuorio E., Huttula T., **Kukkonen J.**, Kurtakko K., Malm K., Mikkola A., Mäki M., Rekilä E., Yanar A., Kekäläinen H., Moitus S. ja Mustonen K. 2008: Helsingin yliopiston laadunvarmistusjärjestelmän auditointi. Korkeakoulujen Arviointineuvoston Julkaisuja 2:2008.
- OP-19 **Kukkonen J.** 2008: Järjestötoimintaa vai järjetöntä toimintaa? Pääkirjoitus. Luonnon Tutkija 5(2008): 143.
- OP-20 Saari P., Saari V., Saarnio S., **Kukkonen J.V.K.**, Akkanen J., Luotonen H., Lyytikäinen V, Heikkinen S.M., Hirvonen T. ja Alm J. 2010: Kasvillisuus kertoo suometsätalouden ravinnekuormituksen vähäisyydestä. Luonnon tutkija 1(2010): 8-12.
- OP-21 Räsänen K., Hannukkala A., Kurppa S., Aaltonen M., Rahkonen A., Kukkonen J.V.K. ja Vänninen I. 2022. Kasvinsuojeluaineiden käyttöä vihanneksilla selvitetty laajasti. Puutarha & Kauppa 2022/8: 10-11.
- Popularized texts in newspapers etc. in Finnish**
- PT-1 Lyytikäinen M., Sormunen A., Ristola T. and **Kukkonen J.** 1999: Penttilän sahan onni onnettomuudessa. Ostiensis Tiedettä ja Tutkimusta Joensuun Yliopistossa 1999, Sanansaattaja Joensuusta, erikoisnumero 7B: 20-22.
- PT-2 **Kukkonen J.** 1999: Ympäristömyrkyt - päättymätön työsarka. Karjalainen 29.9.1999, 2. sivu "alakerta".