

Publication list Dr. TJALLING JAGER

Contact information

Email: tjalling@debtox.nl

URLs: <http://www.debtox.nl/> and <http://www.debtox.info/>

PUBLICATIONS

Analysis in Web of Science April 2018: 96 papers (plus two errata), 3302 times cited, h-index 34, average citations per item 33.7. My researcher ID at <http://www.researcherid.com/rid/D-8168-2011> and ORCID account at <https://orcid.org/0000-0002-4424-1442> provide a complete list of publications in peer-reviewed journals. Or consult my Google Scholar profile at <http://scholar.google.nl/citations?user=aVq9CdEAAAJ>.

As first author in international peer-reviewed journals.

- Jager D.T., T.G. Vermeire, W. Slooff, H. Roelfzema (1994). Uniform System for the Evaluation of Substances II: Effects Assessment. *Chemosphere* 29: 319-335.
- Jager D.T., C.J.M. Visser, D. van de Meent. (1994). Uniform System for the Evaluation of Substances IV: Distribution and Intake. *Chemosphere* 29: 353-369.
- Jager T. (1998). Mechanistic approach for estimating bioconcentration of organic chemicals in earthworms (*Oligochaeta*). *Environ. Toxicol. Chem.* 17: 2080-2090.
- Jager T., F.A. Antón Sánchez, B. Muijs, E.G. van der Velde, L. Posthuma (2000). Toxicokinetics of polycyclic aromatic hydrocarbons in *Eisenia andrei* (*Oligochaeta*) using spiked soil. *Environ. Toxicol. Chem.* 19: 953-961.
- Jager T., T.G. Vermeire, M.G.J. Rikken, P. van der Poel (2001). Opportunities for a probabilistic risk assessment of chemicals in the European Union. *Chemosphere* 43: 257-264.
- Jager T., H.A. den Hollander, P. van der Poel, M.G.J. Rikken, T. Vermeire (2001). A probabilistic environmental risk assessment for dibutylphthalate (DBP). *Human Ecol. Risk Assess.* 7(6): 1681-1697.
- Jager T., R. Baerselman, E. Dijkman, A.C. de Groot, E.A. Hogendoorn, A. de Jong, J.A.W. Kruitbosch, W.J.G.M. Peijnenburg (2003). Availability of polycyclic aromatic hydrocarbons to earthworms (*Eisenia andrei*, *Oligochaeta*) in field-polluted soils and soil-sediment mixtures. *Environ. Toxicol. Chem.* 22(4):767-775.
- Jager T. R.H.L.J. Fleuren, W. Roelofs, A.C. de Groot (2003). Feeding activity of the earthworm *Eisenia andrei* in artificial soil. *Soil Biol. Biochem.* 35(2):313-322.
- Jager T., R.H.L.J. Fleuren, E.A. Hogendoorn, G. de Korte (2003). Elucidating the routes of exposure for organic chemicals in the earthworm, *Eisenia andrei* (*Oligochaeta*). *Environ. Sci. Technol.* 37:3399-3404.
- Jager T. (2004). Modeling ingestion as an exposure route for organic chemicals in earthworms (*Oligochaeta*). *Ecotoxicol. Environ. Saf.* 57:30-38.
- Jager T. T. Crommentuijn, C.A.M. van Gestel, S.A.L.M. Kooijman (2004). Simultaneous modeling of multiple endpoints in life-cycle toxicity tests. *Environ. Sci. Technol.* 38:2894-2900.
- Jager T., L. van der Wal, R.H.L.J. Fleuren, A. Barendregt, J.L.M. Hermens (2005). Bioaccumulation of organic chemicals in contaminated soils: Evaluation of bioassays with earthworms. *Environ. Sci. Technol.* 39:293-298.
- Jager T., O. Alda Álvarez, J. Kammenga, S.A.L.M. Kooijman (2005) Modelling nematode life cycles using dynamic energy budgets. *Func. Ecol.* 19:136-144.
- Jager T., S.A.L.M. Kooijman (2005). Modeling receptor kinetics in the analysis of survival data for organophosphorus pesticides. *Environ. Sci. Technol.* 39:8307-8314.
- Jager T., S.A. Reinecke, A.J. Reinecke (2006). Using process-based modelling to analyse earthworm life cycles. *Soil. Biol. Biochem.* 38:1-6.
- Jager T., E.H.W. Heugens, S.A.L.M. Kooijman (2006). Making sense of ecotoxicological test results: towards application of process-based models. *Ecotoxicology* 15:305-314.

- Jager T. T. Crommentuijn, C.A.M. van Gestel, S.A.L.M. Kooijman (2007). Chronic exposure to chlorpyrifos reveals two modes of action in the springtail *Folsomia candida*. *Environ. Pollut.* 145:452-458.
- Jager T., L. Posthuma, D. de Zwart, D. van de Meent (2007). Novel view on predicting acute toxicity: Decomposing toxicity data in species vulnerability and chemical potency. *Ecotox. Environ. Saf.* 67:311-322.
- Jager T., S.A.L.M. Kooijman (2009). A biology-based approach for quantitative structure-activity relationships (QSARs) in ecotoxicity. *Ecotoxicology* 18(2):187-196.
- Jager T., T. Vandenbrouck, J. Baas, W.M. De Coen, S.A.L.M. Kooijman (2010). A biology-based approach for mixture toxicity of multiple endpoints over the life cycle. *Ecotoxicology* 19:351-361.
- Jager T., C. Klok (2010). Extrapolating toxic effects on individuals to the population level: the role of dynamic energy budgets. *Phil. Trans. Royal Soc. London B.* 365:3531-3540.
- Jager T., C. Albert, T. Preuss, R. Ashauer (2011). General Unified Threshold model of Survival - a toxicokinetic-toxicodynamic framework for ecotoxicology. *Environ. Sci. Technol.* 45:2529-2540.
- Jager T. (2011). Some good reasons to ban EC_x and related concepts in ecotoxicology. *Environ. Sci. Technol.* 45(19):8180-8181.
- Jager T., H. Selck (2011). Interpreting toxicity data in a DEB framework: a case study for nonylphenol in the marine polychaete *Capitella teleta*. *J. Sea Res.* 66:456-462.
- Jager T. (2012). Bad habits die hard: the NOEC's persistence reflects poorly on ecotoxicology. *Environ. Toxicol. Chem.* 31(2):228-229.
- Jager T., E.I. Zimmer (2012). Simplified Dynamic Energy Budget model for analysing ecotoxicity data. *Ecol. Mod.* 225:74-81.
- Jager T., A. Barsi, V. Ducrot (2013). Hormesis on life-history traits: is there such a thing as a free lunch? *Ecotoxicology* 22:263-270.
- Jager T. (2013). All individuals are not created equal; accounting for inter-individual variation in fitting life-history responses to toxicants. *Environ. Sci. Technol.* 47:1664-1669.
- Jager T., B.T. Martin, E.I. Zimmer (2013). DEBkiss or the quest for the simplest generic model of animal life history. *J. Theoret. Biol.* 328:9-18.
- Jager T., B.H. Hansen (2013). Linking survival and biomarker responses over time. *Environ. Toxicol. Chem.* 32(8):1842-1845.
- Jager T., A. Barsi, N.T. Hamda, B.T. Martin, E.I. Zimmer, V. Ducrot (2014). Dynamic energy budgets in population ecotoxicology: applications and outlook. *Ecol. Mod.* 280:140-147.
- Jager T. (2014). Reconsidering sufficient and optimal test design in acute toxicity testing. *Ecotoxicology* 23(1):38-44.
- Jager T., E.M. Gudmundsdóttir, N. Cedergreen (2014). Dynamic modeling of sub-lethal mixture toxicity in the nematode *Caenorhabditis elegans*. *Environ. Sci. Technol.* 48(12):7026-7033.
- Jager T., E. Ravagnan (2015). Parameterising a generic model for the dynamic energy budget of Antarctic krill, *Euphausia superba*. *Mar. Ecol. Progr. Ser.* 519:115-128.
- Jager T., I. Salaberria, B.H. Hansen (2015). Capturing the life history of the marine copepod *Calanus sinicus* into a generic bioenergetics framework. *Ecol. Mod.* 299:114-120.
- Jager T., E. Ravagnan, S. Dupont (2016). Near-future ocean acidification impacts maintenance costs in sea-urchin larvae: identification of stress factors and tipping points using a DEB modelling approach. *J. Exp. Mar. Biol. Ecol.* 474:11-17.
- Jager T., E. Ravagnan (2016). Modelling growth of Northern krill (*Meganyctiphanes norvegica*) using an energy-budget approach. *Ecol. Mod.* 325:28-34.
- Jager T., D. Altin, C. Miljeteig, B.H. Hansen (2016). Stage-dependent and sex-dependent sensitivity to water soluble fractions of fresh and weathered oil in the marine copepod *Calanus finmarchicus*. *Environ. Toxicol. Chem.* 35(3):728-735.
- Jager T. (2016). Predicting environmental risk: a road map for the future. *J. Toxicol. Environ. Health.* 79(13-15):572-584.
- Jager T., I. Salaberria, D. Altin, T. Nordtug, B.H. Hansen (2017). Modelling the dynamics of growth, development and lipid storage in the marine copepod *Calanus finmarchicus*. *Marine Biology* 164:1. DOI 10.1007/s00227-016-3030-8
- Jager T., I.B. Øverjordet, R. Nepstad, B.H. Hansen (2017). Dynamic links between lipid storage, toxicokinetics and mortality in a marine copepod exposed to dimethylnaphthalene. *Environ. Sci. Technol.* 51(13):7707-7713. DOI 10.1021/acs.est.7b02212

- Jager T. (2017). Comment on “Robust fit of toxicokinetic-toxicodynamic models using prior knowledge contained in the design of survival toxicity tests”. *Environ. Sci. Technol.* 51(14):8200-8201. DOI 10.1021/acs.est.7b02001.
- Jager, T., R. Ashauer (2018). How to evaluate the quality of toxicokinetic-toxicodynamic models in the context of environmental risk assessment. *Integr. Environ. Assess. Manag.* DOI 10.1002/ieam.2026.

As co-author in international peer-reviewed journals.

- Polder M.D., E.M. Hulzebos, D.T. Jager (1995). Validation of models on uptake of organic chemicals by plant roots. *Environ. Toxicol. Chem.* 14: 1615-1623.
- Vermeire T.G., D.T. Jager, B. Bussian, J. Devillers, K. den Haan, B. Hansen, I. Lundberg, H. Niessen, S. Robertson, H. Tyle, P.T.J. van der Zandt (1997). European Union System for the Evaluation of Substances (EUSES). Principles and structure. *Chemosphere* 34: 1823-1836.
- Polder, M.D., E.M. Hulzebos and D.T. Jager (1998). Bioconcentration of gaseous organic chemicals in plant leaves: comparison of experimental data with model predictions. *Environ. Toxicol. Chem.* 17: 962-968.
- Severinsen M., T. Jager (1998). Modelling the influence of terrestrial vegetation on the environmental fate of xenobiotics. *Chemosphere* 37: 41-62.
- Peijnenburg W.J.G.M., L. Posthuma, P.G.P.C. Zweers, R. Baerselman, A.C. de Groot, R.P.M. van Veen, T. Jager (1999). Prediction of metal bioavailability in Dutch field soils for the oligochaete *Enchytraeus crypticus*. *Ecotox. Environ. Saf.* 43: 170-186.
- Peijnenburg W.J.G.M., R. Baerselman, A.C. de Groot, T. Jager, L. Posthuma, R.P.M. van Veen (1999). Relating environmental availability to bioavailability: Soil-type-dependent metal accumulation in the oligochaete *Eisenia andrei*. *Ecotox. Environ. Saf.* 44: 294-310.
- Huijbregts M.A.J., U. Thissen, J.B. Guinée, T. Jager, D. Kalf, D. van de Meent, A.M.J. Ragas, A. Wegener Sleswijk, L. Reijnders (2000). Priority assessment of toxic substances in life cycle assessment. Part I: calculation of toxicity potentials for 181 substances with the nested multi-media fate, exposure and effects model USES-LCA. *Chemosphere* 41(4): 541-573.
- Huijbregts M.A.J., U. Thissen, T. Jager, D. van de Meent, A.M.J. Ragas (2000). Priority assessment of toxic substances in life cycle assessment. Part II: assessing parameter uncertainty and human variability in the calculation of toxicity potentials. *Chemosphere* 41(4): 575-588.
- Peijnenburg W., R. Baerselman, A. de Groot, T. Jager, D. Leenders, L. Posthuma, R. van Veen (2001). Quantification of metal bioavailability for lettuce (*Lactuca sativa* L.) in field soils. *Arch. Environ. Toxic. Contam.* 39: 420-430.
- Vijver M., T. Jager, L. Posthuma, W. Peijnenburg (2001). Impact of metal pools and soil properties on metal accumulation in *Folsomia candida* (Collembola). *Environ. Toxicol. Chem.* 20(4): 712-720.
- Vermeire T., T. Jager, G. Janssen, P. Bos, M. Pieters (2001). A probabilistic human health risk assessment for environmental exposure to dibutylphthalate. *Human Ecol. Risk Assess.* 7(6): 1663-1679.
- Tarazona J., K. Hund, T. Jager, M. S-Salonen, A.M.V.M. Soares, J.U. Skaare, M. Vighi (2002). Standardizing chemical risk assessment, at last. *Nature* 415: 14.
- Van Wezel A.P., T. Jager (2002). Comparison of two screening level risk assessment approaches for six disinfectants and pharmaceuticals. *Chemosphere* 47:1113-1128.
- Vijver M., T. Jager, L. Posthuma, W. Peijnenburg (2003). Metal uptake from soils and soil-sediment mixtures by larvae of *Tenebrio molitor* (L.) (Coleoptera). *Ecotox. Environ. Saf.* 54:277-289.
- Artola-Garicano E., I. Borkent, K. Damen, T. Jager, W.H.J. Vaes (2003). Sorption kinetics and microbial biodegradation activity of hydrophobic chemicals in sewage sludge: model and measurements based on free concentrations. *Environ. Sci. Technol.* 37:116-122.
- Roelofs J.J.W., M.A.J. Huijbregts, T. Jager, A.M.J. Ragas (2003). Prediction of ecological no-effect concentrations for initial risk assessment: combining substance-specific data and database information. *Environ. Toxicol. Chem.* 22(6):1387-1393.
- Peijnenburg W.J.G.M., T. Jager (2003). Monitoring approaches to assess bioaccessibility and bioavailability of metals: matrix issues. *Ecotoxicol. Environ. Saf.* 56:63-77.
- Peijnenburg W., A. de Groot, T. Jager, L. Posthuma (2005). Short-term ecological risks of depositing contaminated sediment on arable soil. *Ecotoxicol. Environ. Saf.* 60:1-14.
- Heugens E.H.W., T. Jager, R. Creighton, M.H.S. Kraak, A.J. Hendriks, N.M. van Straalen, W. Admiraal (2003). Temperature-dependent effects of cadmium on *Daphnia magna*: accumulation versus sensitivity. *Environ. Sci. Technol.* 37:2145-2151.

- Fleuren R.H.L.J., T. Jager, W. Roelofs, A.C. de Groot, R. Baerselman, W.J.G.M. Peijnenburg. (2003). Feeding behaviour of *Eisenia andrei* in two different field contaminated soils. *Pedobiologia* 47(5-6):670-675.
- Van der Wal L., T. Jager, R.H.L.J. Fleuren, A. Barendregt, T.L. Sinnige, C.A.M. van Gestel, J.L.M. Hermens (2004). Solid-phase microextraction to predict bioavailability and accumulation of organic micropollutants in terrestrial organisms after exposure to a field-contaminated soil. *Environ. Sci. Technol.* 38:4842-4848.
- Kooijman S.A.L.M., T. Jager, B.W. Kooi (2004). The relationship between elimination rates and partition coefficients. *Chemosphere* 57:745-753.
- Vijver M.G., J.P.M. Vink, T. Jager, H.T. Wolterbeek, N.M. van Straalen, C.A.M. van Gestel (2005). Biphasic elimination and uptake kinetics of Zn and Cd in the earthworm *Lumbricus rubellus* exposed to contaminated floodplain soil. *Soil Biol. Biochem.* 37:1843-1851.
- Alda Álvarez O., T. Jager, S.A.L.M. Kooijman, J.E. Kammenga (2005). Responses to stress of *Caenorhabditis elegans* populations with different reproductive strategies. *Func. Ecol.* 19:656-664.
- Vijver M.G., J.P.M. Vink, T. Jager, N.M. van Straalen, H.T. Wolterbeek, C.A.M. van Gestel (2006). Kinetics of Zn and Cd accumulation in the isopod *Porcellio scaber* exposed to contaminated soil and/or food. *Soil Biol. Biochem.* 38:1554-1563.
- Alda Álvarez O., T. Jager, B. Nuñez Colao, J.E. Kammenga (2006). Temporal dynamics of effect concentrations. *Environ. Sci. Technol.* 40:2478-2484.
- Alda Álvarez O., T. Jager, E. Marco Redondo, J.E. Kammenga (2006). Physiological modes of action of toxic chemicals in the nematode *Acrobeloides nanus*. *Environ. Toxicol. Chem.* 25(12) :3230-3237.
- Pieters B.J., T. Jager, M.H.S. Kraak, W. Admiraal (2006). Modeling responses of *Daphnia magna* to pesticide pulse exposure under varying food conditions: intrinsic versus apparent sensitivity. *Ecotoxicology* 15:601-608.
- Kooijman S.A.L.M., J. Baas, D. Bontje, M. Broerse, T. Jager, C. A. M. van Gestel, B. van Hattum (2007). Scaling relationships based on partition coefficients and body sizes have similarities and interactions. *SAR QSAR Environ. Res.* 18:315-330.
- Van Zelm R., M.A.J. Huijbregts, M.H. Russell, T. Jager, D. van de Meent (2008). Modeling the environmental fate of perfluorooctanoate and its precursors from global fluorotelomer acrylate polymer use. *Environ. Toxicol. Chem.* 27(11): 2216-2223.
- Kooijman S.A.L.M., T. Sousa, L. Pecqueri, J. van der Meer, T. Jager (2008). From food-dependent statistics to metabolic parameters, a practical guide to the use of dynamic energy budget theory. *Biol. Rev.* 83:533-552.
- Baas J., T. Jager, S.A.L.M. Kooijman (2009). Estimation of no effect concentrations from exposure experiments when values scatter among individuals. *Ecol. Modelling* 220(3):411-418.
- Baas J., T. Jager, S.A.L.M. Kooijman (2009). A model to analyze effects of complex mixtures on survival. *Ecotox. Environ. Saf.* 72:669-676.
- Baas J., J. Willems, T. Jager, M.H.S. Kraak, T. Vandenbrouck, S.A.L.M. Kooijman (2009). Prediction of Daphnid survival after in situ exposure to complex mixtures. *Environ. Sci. Technol.* 43(15): 6064-6069.
- Swain S., J.F. Wren, S.R. Stürzenbaum, P. Kille, A.J. Morgan, T. Jager, M.J. Jonker, P.K. Hankard, C. Svendsen, J. Owen, B.A. Hedley, M. Blaxter, D.J. Spurgeon (2010). Linking toxicant physiological mode of action with induced gene expression changes in *Caenorhabditis elegans*. *BMC Systems Biology* 4:32.
- Forbes V.E., P. Calow, V. Grimm, T. Hayashi, T. Jager, A. Palmqvist, R. Pastorok, D. Salvito, R. Sibly, J. Spromberg, J. Stark, R.A. Stillman (2010). Integrating population modeling into ecological risk assessment. *Integrated Environmental Assessment and Management* 6:191-192.
- Baas J., T. Jager, B. Kooijman (2010). Understanding toxicity as processes in time. *Sci. Total Environm.* 408:3735-3739.
- Baas J., T. Jager, B. Kooijman (2010). A review of DEB theory in assessing toxic effects of mixtures. *Sci. Total Environm.* 408: 3740-3745.
- Heckmann L.H., J. Baas, T. Jager (2010). Time is of the essence. *Environ. Toxicol. Chem.*, 29(6):1396-1398.
- Forbes V.E., P. Calow, V. Grimm, T. I. Hayashi, T. Jager, A. Katholm, A. Palmqvist, R. Pastorok, D. Salvito, R. Sibly, J. Spromberg, J. Stark, R. A. Stillman (2011). Adding value to ecological risk assessment with population modeling. *Human Ecol. Risk Assess.* 17:287-299.

- Wren J.F., P. Kille, D.J. Spurgeon, S. Swain, S.R. Sturzenbaum, T. Jager (2011). Application of physiologically based modelling and transcriptomics to probe the systems toxicology of aldicarb for *Caenorhabditis elegans* (Maupas 1900). *Ecotoxicology* 20:397-408.
- Ashauer R., A. Agatz, C. Albert, V. Ducrot, N. Galic, J. Hendriks, T. Jager, A. Kretschmann, I. O'Connor, M.N. Rubach, A.M. Nyman, W. Schmitt, J. Stadnicka, P.J. van den Brink, T.G. Preuss (2011). Toxicokinetic-toxicodynamic modelling of quantal and graded sublethal endpoints: a brief discussion of concepts. *Environ. Toxicol. Chem.* 30(11):2519-2524.
- Martin B., E.I. Zimmer, V. Grimm, T. Jager (2012). Dynamic Energy Budget theory meets individual-based modelling: a generic and accessible implementation. *Methods in Ecology and Evolution* 3:445-449.
- Zimmer E.I., T. Jager, V. Ducrot, L. Lagadic, S.A.L.M. Kooijman (2012). Juvenile food limitation in standardized tests - a warning to ecotoxicologists. *Ecotoxicology* 21:2195-2204.
- Van Ommen Kloeke A.E.E., T. Jager, C.A.M. Van Gestel, J. Ellers, M. Van Pomeran, T. Krommenhoek, B. Styrishave, M. Hansen, D. Roelofs (2012). Time-related survival effects of two gluconasturtiin hydrolysis products on the terrestrial isopod *Porcellio scaber*. *Chemosphere* 89:1084-1090.
- Martin B., T. Jager, R.M. Nisbet, T.G. Preuss, V. Grimm (2013). Predicting population dynamics from the properties of individuals: a cross-level test of the Dynamic Energy Budget theory. *Am. Nat.* 181(4):506-519.
- Hansen B.H., D. Altin, I.B. Overjordet, T. Jager, T. Nordtug (2013). Acute exposure of water soluble fractions of marine diesel on Arctic *Calanus glacialis* and boreal *Calanus finmarchicus*: effects on survival and biomarker response. *Sci. Total Environ.* 449:276-284.
- Martin B.T., T. Jager, R.M. Nisbet, T.G. Preuss, M. Hammers-Wirtz, V. Grimm (2013). Extrapolating ecotoxicological effects from individuals to populations: a generic approach based on Dynamic Energy Budget theory and individual-based modeling. *Ecotoxicology* 22:574-583.
- Barsi, A., T. Jager, M. Collinet, L. Lagadic, V. Ducrot (2014). Considerations for test design to accommodate energy-budget models in ecotoxicology: a case study for acetone in the pond snail *Lymnaea stagnalis*. *Environ. Toxicol. Chem.* 33(7):1466-1475.
- Gergs, A., T. Jager (2014). Body size mediated starvation resistance in an insect predator. *J. Anim. Ecol.* 83: 758-768.
- Martin B., T. Jager, R.M. Nisbet, T.G. Preuss, V. Grimm (2014) Limitations of individual to population extrapolation of toxic stress. *Ecol. Appl.* 24(8):1972-1983.
- Zimmer E.I., V. Ducrot, T. Jager, J. Koene, L. Lagadic, S.A.L.M. Kooijman (2014). Metabolic acceleration in the pond snail *Lymnaea stagnalis*? *J. Sea Res.* 94:84-91.
- Hansen B.H., T. Jager, D. Altin, I.B. Overjordet, A.J. Olsen, I. Salaberria, T. Nordtug (2016). Acute toxicity of dispersed crude oil on the cold-water copepod *Calanus finmarchicus*: elusive implications of lipid content. *J. Toxicol. Environ. Health.* 79(13-15):549-557.
- Ashauer, R., C. Albert, S. Augustine, N. Cedergreen, S. Charles, V. Ducrot, A. Focks, F. Gabsi, A. Gergs, B. Goussen, T. Jager, N.I. Kramer, A.M. Nyman, V. Poulsen, S. Reichenberger, R.B. Schäfer, P.J. Van den Brink, K. Veltman, S. Vogel, E.I. Zimmer, T.G. Preuss (2016). Modelling survival: exposure pattern, species sensitivity and uncertainty. *Scientific Reports* 6:29178, DOI 10.1038/srep29178.
- Ashauer R., T. Jager (2018). Physiological modes of action across species and toxicants: the key to predictive ecotoxicology. *Environ. Sci.: Processes Impacts.* 20:48-57, DOI 10.1039/C7EM00328E.

Books

- Jager, T. (2017). Making sense of chemical stress. Applications of Dynamic Energy Budget theory in ecotoxicology and stress ecology. Leanpub: https://leanpub.com/debttox_book. First version: 2012.
- Jager, T. (2016). DEBKiss. A simple framework for animal energy budgets. Leanpub: https://leanpub.com/debkiss_book. First version: 2014.
- Jager, T. and R. Ashauer (2018). Modelling survival under chemical stress. A comprehensive guide to the GUTS framework. Toxicodynamics Ltd., York, UK. Available from Leanpub: https://leanpub.com/guts_book. First version: 2018.

Book chapters

- Jager, D.T. (1995). Human exposure through the environment. Chapter 4.6 in: Van Leeuwen and Hermens (eds.). Risk assessment of chemicals: an introduction. Dordrecht, Kluwer Academic Publishers, ISBN 0-7923-3740-9.

- Jager, T., J. de Bruijn (2001). The EU-TGD for new and existing chemicals: does it predict risk? In: Rainbow, Hopkin and Crane (eds.). Forecasting the environmental fate and effects of chemicals. John Wiley & Sons, Ltd. Sussex, United Kingdom. Pages: 71-82.
- Breure, A.M., D.T. Jager, D. van de Meent, C. Mulder, W.J.G.M. Peijnenburg, L. Posthuma, M. Rutgers, A.J. Schouten, A. Sterkenburg, J. Struijs, P. van Beelen, M. Vonk, D. de Zwart (2002). Ecological risk assessment of environmental stress. In: Encyclopedia of Life Support Systems (9). <http://www.eolss.net/Sample-Chapters/C09/E1-08-13.pdf>.
- Kooijman, S.A.L.M., J. Baas, D. Bontje, M. Broerse, C.A.M. van Gestel, T. Jager (2009). Ecotoxicological applications of Dynamic Energy Budget theory. In: Devillers, J. (Ed.). Ecotoxicological Modeling. Springer.
- Svendsen, C., T. Jager, S. Haddad, R.S.H. Yang, J.L.C.M. Dorne, M. Broerse, P. Kramarz (2011). Chapter 2: Toxicokinetics and toxicodynamics. In: Van Gestel, C.A.M. et al. (Eds.). Mixture Toxicity. Linking approaches from ecological and human toxicology. CRC Press, Boca Raton, FL, US. Pages 47-93.
- Jager, T. (2016). Chapter 3: Dynamic modelling for uptake and effects of chemicals. In: Blasco, J. et al. (Eds). Marine Ecotoxicology: current Knowledge and Future Issues. Academic Press, London, UK. Pages 71-98.

Guidance documents and documentation for risk assessment systems

- Editor and author: VROM, WVC, RIVM, RPC (1992). Uniform System for the Evaluation of Substances (USES), Second Prototype December 1992. RIVM report no. 679120 002.
- Editor and author: RIVM, VROM, WVC (1994). Uniform System for the Evaluation of Substances (USES), version 1.0. The Hague, Ministry of Housing, Spatial Planning and the Environment. Distribution No. 11144/150.
- Editor and co-author: EC (1996). Technical Guidance Documents in support of Directive 93/67/EEC on risk assessment of new notified substances and Regulation (EC) No. 1488/94 on risk assessment of existing substances (Parts I, II, III and IV). EC Catalogue Numbers CR-48-96-001, 002, 003, 004-EN-C. Office for Official Publications of the European Community, 2 Rue Mercier, L-2965 Luxembourg.
- Editor and author: EC (1996). EUSES, the European Union System for the Evaluation of Substances. National Institute of Public Health and the Environment (RIVM), the Netherlands. Available From European Chemicals Bureau (EC/DGXI), Ispra, Italy.
- Editor and co-author: RIVM, VROM, VWS (1998). Uniform System for the Evaluation of Substances 2.0 (USES 2.0). RIVM report no. 679102 044.
- Co-author: EC-CSTEE (2000). CSTEE opinion on the available scientific approaches to assess the potential effects and risk of chemicals on terrestrial ecosystems. Scientific Committee on Toxicity, Ecotoxicity and the Environment (CSTEE). Brussels, Belgium.
- Co-author: OECD (2006). Current approaches in the statistical analysis of ecotoxicity data: a guidance to application. Series on testing and assessment 54. OECD, Paris, France.
- Co-author: ISO (2006). Water quality - Guidance on statistical interpretation of ecotoxicity data. ISO/TS 20281:2006. International Organization for Standardization (ISO), Geneva, Switzerland.

Reports for the National Institute for Public Health and the Environment (RIVM)

- Polder, M.D., E.M. Hulzebos and D.T. Jager (1994). Validation of models on uptake of organic chemicals by plant roots. RIVM report no. 679102 024.
- Jager, D.T. (1995). Feasibility of validating the Uniform System for the Evaluation of Substances (USES). RIVM report no. 679102 026.
- Jager, D.T. and W. Slob (1995). Uncertainty analysis of the Uniform System for the Evaluation of Substances (USES). RIVM report no. 679102 027.
- Jager, D.T. (1995). Uncertainty analysis of the Uniform System for the Evaluation of Substances (USES): Example Calculations. RIVM report no. 679102 032.
- Polder, M.D., E.M. Hulzebos and D.T. Jager (1997). Bioconcentration of gaseous organic chemicals in plant leaves: comparison of experimental data with model predictions. RIVM report no. 679102034.
- Jager, D.T. and T. Hamers (1997). Estimation methods for bioaccumulation in risk assesment of organic chemicals. RIVM report no. 679102 013.

- Jager, T., M.G.J. Rikken and P. van der Poel (1997). Uncertainty analysis of EUSES: Improving risk management by probabilistic risk assessment. RIVM report no. 679102 039.
- Van Eijkeren, J.C.H., D.T. Jager and A.J.A.M. Sips (1998). Generic PBPK-modelling of lipophilic contaminants in the cow. RIVM report no. 679102 042.
- Linders, J.B.H.J. and D.T. Jager eds. (1997). USES 2.0, The Uniform System for the Evaluation of Substances, version 2.0. The Netherlands' supplement to EUSES. RIVM report no. 679102 037.
- Jager, T. (1998). Uncertainty analysis of EUSES: Interviews with representatives from Member States and industry. RIVM report no. 679102 047.
- Jager, T. ed. (1998). Evaluation of EUSES: inventory of experiences and validation activities. RIVM report no. 679102 048.
- Klepper, O., T. Jager, T. van der Linden and R. Smit (1998). An assessment of the effect on natural vegetations of atmospheric emissions and transport of herbicides in the Netherlands. Internal ECO-memo 98/05.
- De Kruijf, H. and D.T. Jager (1999). Report of the training sessions for the UNITAR Pilot Case Study on Risk Assessment and Risk Management Decision-making in Cameroon, 21-30 April 1999. National Institute of Public Health and the Environment, The Netherlands.
- Posthuma, L., A.C. de Groot, D.T. Jager, W.J.G.M. Peijnenburg, R. Baerselman, R. Ritsema, E.G. Velde, A. de Jong, R.O.G. Franken (1999). Beoordeling van de ecotoxicologische risico's van de verspreiding van baggerspecie op land. Pilot-toetsing van de invloed van bodemeigenschappen op biobeschikbaarheid van metalen en PAKs in veldbodems. RIVM report no. 733007 006.
- Jager, T., H.A. den Hollander, G.B. Janssen, P. van der Poel, M.G.J. Rikken and T.G. Vermeire (2000). Probabilistic risk assessment for new and existing chemicals: Example calculations. RIVM report no. 679102 049
- Smit, C.E., A.P. van Wezel, T. Jager, T.P. Traas (2000). Secondary poisoning of cadmium, copper and mercury: implications for the Maximum Permissible Concentrations and Negligible Concentrations in water, sediment and soil. RIVM report no. 601501 009
- Peijnenburg, W.J.G.M., R. Franken, A. de Groot, E. Hogendoorn, D.T. Jager, L. Posthuma, R. Ritsema (2000). Ecotoxicologische risico's van de verspreiding van baggerspecie uit regionale wateren op land: Vervolgonderzoek naar de ecologische betekenis van normoverschrijding. RIVM report no. 733007 007.
- Rutgers, M., T. Aldenberg, R.O.G. Franken, D.T. Jager, J. Lijzen, W.J.G.M. Peijnenburg, A.J. Schouten, T.P. Traas, D. de Zwart, L. Posthuma (2000). Ecologische risicobeoordeling van verontreinigde (water)bodem - voorstellen ter verbetering van de urgentiesystematiek RIVM report no. 711701 018.
- Peijnenburg, W.J.G.M., D.T. Jager, L. Posthuma, D.T.H.M. Sijm (2001). Huidige mogelijkheden en inzichten voor implementatie van metaalbiobeschikbaarheid in de risicobeoordeling van landbodems. RIVM report no. 607220 004.
- Jager, T., T.P. Traas (2001). Quantification of ecological risk for natural vegetation. ECO-memo 01/03.
- Roelofs, W., T. Jager (2001). Modelling bioaccumulation of pesticides in Lumbricidae. ECO-memo 01/05.
- Rikken, M.G.J., H.J. van Wijnen, J.B.H.J. Linders, D.T. Jager (2002). Uncertainty analysis of USES 3.0. Improving risk management through probabilistic risk assessment

of agricultural pesticides. RIVM report no. 601450 011.

- Jager, T., F.M.W. de Jong, T.P. Traas (2007). Population models for time-varying pesticide exposure. RIVM report 601516015.