

Exposure to indoor air pollution across socio-economic groups in high-income countries: A scoping review of the literature and a modelling methodology

Are there environmental or agricultural benefits in using forest residue biochar in boreal agricultural clay soil?

Ministry of the Environment announces a Guide on Renovation and Repair of Buildings with Moisture and Microbial Damage - From theory to practice

Merkittävimmät päästövähennystoimet ilmastonmuutoksen hillitsemiseksi

Utilizing Gelatinized Starchy Waste from Rice Noodle Factory as Substrate for L(+)-Lactic Acid Production by Amyolytic Lactic Acid Bacterium *Enterococcus faecium* K-1

Assessment of the Analytical Potential of HPLC-SEC for the Characterization of DOM and Nutrients in Various Types of Water

Adjoint-based optimization in the development of low-emission industrial boilers

Low concentration of zeolite to enhance microalgal growth and ammonium removal efficiency in a membrane photobioreactor

Measures for Energy Efficient and Low Emission Private Mobility

Particle growth with photochemical age from new particle formation to haze in the winter of Beijing, China

Spatial variations in bacterial and archaeal abundance and community composition in boreal forest pine mycorrhizospheres

Towards bioproduction of poly- $\alpha$ -olefins from lignocellulose

Autolaskurin käyttöopas ja laskennan perusteet

Feasibility of Flexible Biomass Utilization in Energy Systems

Sähköautoilla suuri vähennys päästöihin - pian myös kilpailukykyiseen hintaan

The most difficult at-fault fatal crashes to avoid with current active safety technology

Biovalorisation of liquid and gaseous effluents of oil refinery and petrochemical industry

Digestate valorization for bioremediation of petroleum hydrocarbons contaminated soils

High rate anaerobic treatment of LCFA-containing wastewater at low temperature

ADM1 Based Mathematical Models For Assessing The Effect Of Trace Elements Dynamics On Solid Waste Anaerobic Digestion

Koulutus ja tutkimus kehityksen moottorina

Translated title of the contribution: : Education and research driving development

Joukkoliikenteellä on tärkeä rooli liikenteen päästöjen vähentämisessä

Utilising alternative fuels and technologies in city buses

Vaihtoehtoisten käyttövoimien hyödyntäminen kaupunkiliikenteen linja-autoissa

Highly ductile amorphous oxide at room temperature and high strain rate

Increasing oxygen deficiency changes rare and moderately abundant bacterial communities in coastal soft sediments

Municipal challenges in managing a building with noted health symptoms

Vetoa vesihuoltopalveluihin täydennyskoulutuksen kautta

Translated title of the contribution: : Continuing education empowering water services development

Improved water services cooperation through clarification of rules and roles

Effect of HRT on nitrogen recovery from real reject water in a 3-chamber bioelectroconcentration cell

Transient-state operation of an anoxic biotrickling filter for H<sub>2</sub>S removal

The potential of biomethane in replacing fossil fuels in heavy transport-a case study on Finland

Foreword Towards More Resilient Water Services

Rating the impact sound insulation of concrete floors with single-number quantities based on a psychoacoustic experiment

Cracking of the End Diaphragm of a Post-tensioned Beam Bridge

Vesihuollon koulutus ja tutkimus lähemmäksi rakennettua ympäristöä

Translated title of the contribution: : Water services education and research closer to the built environment

Denitrifying microbial communities along a boreal stream with varying land-use

Co-production of 1,3 propanediol and long-chain alkyl esters from crude glycerol

Towards enhanced nutrient recovery, biogas production and upgrading through AD and BES integration

Engineering and kinetic aspects of bacterial uranium reduction for the remediation of uranium contaminated environments

Vesihuollon instituutiot vaativat taitavaa jalkapallopeleä

Translated title of the contribution: : Water services institutions require skilful soccer playing

Biochars from solid digestates as sorbing materials for metal(loid)s removal from water

Fate of trace elements during and after anaerobic digestion: a sequential extraction method and DGT technique to assess bio-accessible trace elements in digestate

Nutrient and organic matter removal from wastewaters with microalgae

Hydrogen sulfide removal from synthetic biogas using anoxic biofilm reactors

Revisiting the feasibility of biomass-fueled CHP in future energy systems – Case study of the Åland Islands

Vesihuolto yhdyskuntien ympäristön turvaajana: uskomuksia ja todellisuuksia

Translated title of the contribution: : Water services safequaring our environment: beliefs and realities

Long-term performance evaluation of an anoxic sulfur oxidizing moving bed biofilm reactor under nitrate limited conditions

Genesis of Water supply and sanitation services in Finland

Translated title of the contribution: : Vesihuoltopalveluiden synty Suomessa: Editorial

Impacts of short-term temperature fluctuations on biohydrogen production and resilience of thermophilic microbial communities

Scaling up the treatment of the fine fraction from landfill mining

Mass balance and cost structure

Fluidized bed bioreactor for multiple environmental engineering solutions

Enhancement in Lifespan of Halide Perovskite Solar Cells

Particulate Mass and Nonvolatile Particle Number Emissions from Marine Engines Using Low-Sulfur Fuels, Natural Gas, or Scrubbers

The potential of electric trucks – An international commodity-level analysis

Highly compact TiO<sub>2</sub> films by spray pyrolysis and application in perovskite solar cells

Acetotrophic Activity Facilitates Methanogenesis from LCFA at Low Temperatures

Screening from Mesophilic Inocula

Adaptation of Black Carbon Footprint concept would accelerate mitigation of global warming

A decade of Finnish engineering education for sustainable development

Book Review: Time for Customer Orientation in Water Utilities Customer experience management for water utilities. Marketing urban water supply

High-solids anaerobic digestion requires a trade-off between total solids, inoculum-to-substrate ratio and ammonia inhibition

Historical development paths and means for winning the challenge of aging water services infrastructure

Microalgae grow on source separated human urine in Nordic climate  
Outdoor pilot-scale cultivation

Microstructure-property relationships of novel ultra-high strength press hardening steels

Nature and extent of potable water consumption in Tampere (Finland) and Carletonville (South Africa)

Relevance of the resilience concept and long-term thinking for WSS providers

Resiliency is the key for sustainable water services.

Resilient Water Services and Systems: The Foundation of Well-Being

Students' Perceived Priorities on Water as a Human Right, Natural Resource, and Multiple Goods

Towards the EU emissions targets of 2050  
optimal energy renovation measures of Finnish apartment buildings

Use of factorial experimental design to study the effects of iron and sulfur on growth of *Scenedesmus acuminatus* with different nitrogen sources

Water security and resilience

Water Supply and Sanitation in a Green Economy Society  
The Case of Finland

CO<sub>2</sub> reduction costs and benefits in transport: socio-technical scenarios

Editorial

Halogen-Bond-Assisted Photoluminescence Modulation in Carbazole-Based Emitter

Nitrogen recovery from reject water in a 3-chamber bioelectroconcentration cell

Sähköautoilun edistäminen vaatii latausmahdollisuuksien kehittämistä

Anxiety vs reality – Sufficiency of battery electric vehicle range in Switzerland and Finland

Possible Impact of Long and Heavy Vehicles in the United Kingdom—A Commodity Level Approach

Design aspects of all atomic layer deposited TiO<sub>2</sub>–Fe<sub>2</sub>O<sub>3</sub> scaffold-absorber photoanodes for water splitting

Radon, fungal spores and MVOCs reduction in crawl space house  
A case study and crawl space development by hygrothermal modelling

Technical suitability of the fine fraction of municipal solid waste incineration bottom ash to the landfill capping liner

Kirja-arviointi:Yliopistomme vaarassa hukkaa byrokratiaan.

Pekka Kauppi. Kahlittu yliopistomme. Miten vapaudumme byrokratiasta ja opetuksen ylenkatsomisesta. Into Kustannus Oy. 2017.

Translated title of the contribution: : Book review: Universities to be buried under bureaucracy.

Water Services Development and Governance in Finland. Feature Article. JAWWA. 110, 5: 50-55.

Economic analysis of hydrogen production by methane thermal decomposition  
Comparison to competing technologies

Finland's Water Services: Looking to its Past to Figure Out its Future.

Characterization and biological stabilization of fine fraction from landfill mining

UV-Blocking Synthetic Biopolymer from Biomass-Based Bifuran Diester and Ethylene Glycol

Puurakenteiden uudelleenkäyttömahdollisuudet

Translated title of the contribution: : Reuse possibilities of timber structures

Asset Life Cycle Management in Finnish Water Utilities

Evaluation of methods for enhancing methane oxidation via increased soil air capacity and nutrient content in simulated landfill soil cover

Kapkaupungin pysyvä vesikriisi – ratkeaako vesipula, jos lisää vettä pumpataan vuotavaan verkostoon

Mechanical properties of recovered municipal solid waste incineration bottom ash: the influence of aging and changes in moisture content

Recycling mine tailings in chemically bonded ceramics - A review

Recycling potential of post-consumer plastic packaging waste in Finland

Reducing CO2 emissions from freight

Recent developments in freight transport in the Nordic countries and instruments for CO2 reductions

Suomen vesihuollon kehitys kansainvälisessä kontekstissa

Translated title of the contribution: : Development of Finnish water services in international perspective

Valorization of Finnish mining tailings for use in the ceramics industry

Vesihuoltopalvelujen tutkimus-, kehittämis- ja innovaatioklusterin (VEPATUKI) ensimmäinen vuosi keskittyy saneeraustarpeeseen

Water Cooperatives in Tampere, Finland: the case of Pispala

WC-tilat ja -opasteet vain likana silmissämme?

Translated title of the contribution: : WC and signs only as dirt in our eyes?

Landowners' willingness to promote bioenergy production on wasteland – future impact on land use of cutaway peatlands

Sata vuotta vesihuoltoa Suomessa

Translated title of the contribution: : One hundred years of water services in Finland

Understanding sustainable development in Finnish water supply and sanitation services

Vesihuollon ammattilaiset ovat verkostoituneet kautta aikojen

Translated title of the contribution: : Water services professionals have networked throughout history

Carbazole-based small molecule electron donors

Syntheses, characterization, and material properties

Yhdyskuntien vesihuolto – kehityksen ja elämän ehto

Translated title of the contribution: : Community water services - a must for development and life

Tempoilevasta tiede- ja koulutuspolitiikasta kohti laajempaa näkemystä

Translated title of the contribution: : From stop-go science and education policy towards wider points of view

Yli 60 tonnin yhdistelmät parantaneet kuljetusten tehokkuutta

The effect of lake bottom sediment layers on radionuclide transport from bedrock to biosphere and doses to humans

Kokeellinen tutkimus savupiipun läpivientieristeen orgaanisen aineen palamisen vaikutuksesta paloturvallisuuteen

Translated title of the contribution: : Experimental study on the effects of smouldering combustion of organic content in chimney penetration insulation on fire safety

Effect of N/S ratio on anoxic sulfide oxidizing bioreactors

Finnish water services

Experiences in global perspective

The role of inorganics in modelling of biomass gasification

Liikenteen päästötavoitteiden saavuttaminen 2030 - politiikkatoimenpiteiden tarkastelu

Global challenges and role of institutions in water services

Vesihuollon globaalit haasteet ja instituutioiden roolit

Translated title of the contribution: : Global challenges and role of institutions in water services

Continuous removal and recovery of tellurium in an upflow anaerobic granular sludge bed reactor

Toimiva vesihuolto ei ole itsestäänselvyys.

Translated title of the contribution: : Operational water services are not self evident

Vesihuollon koulutus on erinomaista kehitysyhteistyötä  
Keskustelua.

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Conversion of Solid Waste into Functional Carbon Materials: A Review

Operationalising the right to water and sanitation and gender equality via appropriate technology in rural Nepal

The effect of anode potential on bioelectrochemical and electrochemical tetrathionate degradation

Chasing measurements for real-world emissions of city buses

Comparison of air pressure difference, air change rates, and CO<sub>2</sub> concentrations in apartment buildings before and after energy retrofits

Energistä utopiaa?

Historian hajuista tuoksujen tulevaisuuteen

pääkaupunkiseudun jätevedenpuhdistuksen keskeiset päätökset Espoon näkökulmasta

Translated title of the contribution: : From Stinky History to Fragrant Future: Waste water treatment of the metropolitan area - central decisions on the point of view of Espoo

Historian hajuista tuoksujen tulevaisuuteen

Pääkaupunkiseudun jätevedenpuhdistuksen keskeiset päätökset Espoon näkökulmasta

Influence of TiO<sub>2</sub> compact layer precursor on the performance of perovskite solar cells

Kirja-arviointi: Kuinka vesiensuojelu saatiin pääosin kuntoon?

Translated title of the contribution: : Book review: How modern water pollution control was achieved?: For the sake of waters. Phases of Finnish water pollution control

Long term stability of air processed inkjet infiltrated carbon-based printed perovskite solar cells under intense ultra-violet light soaking

Modelling of seep through of humidity to electric connector with stochastic processes

Replacing centralised waste and sanitation infrastructure with local treatment and nutrient recycling  
Expert opinions in the context of urban planning

Sata vuotta Suomen suurimmasta lavantautiepidemiasta

Screening biological methods for laboratory scale stabilization of fine fraction from landfill mining

Service Failures of Rural Water Supply Systems in Ethiopia and Their Policy Implications

Taking Water Services to the Next Level  
A Paradigm Shift?

Valkea kaupunki, mustat vedet

Vesihuolto kaupungistuvissa yhteiskunnissa

Translated title of the contribution: : Water Services in Urbanising Societies

Ympäristö- ja vesihistorian tutkimuksesta 2000-luvulla Suomessa

Indigenous practices of water management for sustainable services  
Case of Borana and Konso, Ethiopia

Unipoli Green - Four Universities Working Together for Sustainability

Rural Water and Sanitation

Community Managed Project Approach for Sustainability in Ethiopia

Älypölkky, radan monitorointi, kreosoottipölkyn korvaavat vaihtoehdot

Ballast bed

Näkökulma-kolumni: Putkiremontit kestävät aivan liian kauan

Sleepers

Tutkimusohjelma Elinkaaritehokas RAta (TERA)

Kokonaisvaltainen ote ratarakennetutkimukseen

Methylophilaceae and Hyphomicrobium as target taxonomic groups in monitoring the function of methanol-fed denitrification biofilters in municipal wastewater treatment plants

Finnish water services

Experiences in global perspective

Editorial to "The best papers from the 32nd International Symposium on Automation and Robotics in Construction and Mining (ISARC 2015)"

Application oriented wear testing of wear resistant steels in mining industry

Elimination of arsenic-containing emissions from gasification of chromated copper arsenate wood

Methylophaga and Hyphomicrobium can be used as target genera in monitoring saline water methanol-utilizing denitrification

Comparison of community managed projects and conventional approaches in rural water supply of Ethiopia

Sustainable nutrients recovery and recycling by optimizing the chemical addition sequence for struvite precipitation from raw swine slurries



Rakennusten energiankulutuksen perusskenaario Suomessa 2015-2050

Translated title of the contribution: : Basic scenario of the energy consumption of building stock in Finland 2015-2050

Recent advances in nutrient removal and recovery in biological and bioelectrochemical systems

Combining mineral fractions of recovered MSWI bottom ash: improvement for utilization in civil engineering structures

Glazed spaces

A simplified calculation method for the evaluation of energy savings and interior temperatures

A laboratory listening experiment on subjective and objective rating of impact sound insulation of concrete floors

A method for design of sound insulation of glazed balconies against traffic noise

Effect of particle size and dispersion status on cytotoxicity and genotoxicity of zinc oxide in human bronchial epithelial cells

Hydrothermal carbonization of pulp mill streams

Innovative use of recovered municipal solid waste incineration bottom ash as a component in growing media

Negotiating Groundwater Governance

Lessons from Contentious Aquifer Recharge Projects

Ravinnevisio

Selvitys Pirkanmaan puhdistamolietteiden ja biojätteiden ravinteista ja niiden potentiaalisesta käytöstä

The effect of climate change on freeze-thaw durability of concrete structures in Finland

Deterioration mechanisms and life cycle of concrete monoblock railway sleepers in Finnish conditions

Parameters Affecting the Upcycling of Waste Cotton and PES/CO Textiles

Betonirakenteiden korjausohjeet 2016, by 41

Paradigman jäljillä

Tutkimus vesihuollon ajattelumalleista

Effect of heavy metal co-contaminants on selenite bioreduction by anaerobic granular sludge

Access to Water? Dynamic Capacity Change for Sustainable Rural Water and Sanitation Services for All

Sisäympäristön laadun ja terveellisuuden arviointi energiaparannuskohteissa

HPLC-SEC

a new approach to characterise complex wastewater effluents

Planning land use for biogas energy crop production

The potential of cutaway peat production lands

Plasma-Assisted Fabrication of Fe<sub>2</sub>O<sub>3</sub> - Co<sub>3</sub>O<sub>4</sub> Nanomaterials as Anodes for Photoelectrochemical Water Splitting

Microbial electrochemical technologies with the perspective of harnessing bioenergy  
Maneuvering towards upscaling

Accelerated deactivation studies of the natural-gas oxidation catalyst-Verifying the role of sulfur and elevated temperature in catalyst aging

Acceptability of contaminated soils and waste materials in landfill structures

A study on raw, torrefied, and steam-exploded wood: Fine grinding, drop-tube reactor combustion tests in N<sub>2</sub>/O<sub>2</sub> and CO<sub>2</sub>/O<sub>2</sub> atmospheres, particle geometry analysis, and numerical kinetics modeling

Characterization of fine fraction mined from two Finnish landfills

Commercialising reclaimed materials in earthworks – guidelines for productization and the process of appending these materials in the Finnish national code of practice

High rate autotrophic denitrification in fluidized-bed biofilm reactors

Institutional development is the key for sustainable water services in the built environment

Learning for sustainable water and sanitation services

Modeling of Finnish building sector energy consumption and greenhouse gas emission  
specification of POLIREM policy scenario model

Modelling of anisotropic fatigue

Modelling of plastic culvert and road embankment interaction in 3D

Need of Services and Understanding of Service Providers in Water and Sanitation: A Case of Ethiopia

Negotiating water governance: towards cooperation in contentious groundwater recharge projects

Pohjoismaiden energiapolitiikka 2030  
Hiilineutraalimpaan energiajärjestelmään osin yhdessä, osin eri polkuja pitkin

Preferential adsorption of Cu in a multi-metal mixture onto biogenic elemental selenium nanoparticles

Revisiting cellulase production and redefining current strategies based on major challenges Article reference: RSER5103

Sorption of zinc onto elemental selenium nanoparticles immobilized in Phanerochaete chrysosporium pellets

Tammikuun tehopiikki – mitä tapahtui 7.1.2016? Miten tehoa hallitaan paremmin jatkossa?

Teräsrumpujen uudet korjausmenetelmät  
Halkaistu sisäputki, puolipohjaus ja pohjan betonointi

The effects of improved energy efficiency on indoor environmental quality in multi-family buildings

Use of diluted urine for cultivation of *Chlorella vulgaris*

Vesihuollon strateginen kehittäminen haltuun  
Ydin- ja tukitoiminnon tarpeen hahmottaa selkeästi

Translated title of the contribution: : Water services to be developed strategically: Recognizing the core and non-core activities of water services

Production of Oleaginous Microbial Biomass by Reusing Wastewaters

Heap Bioleaching of Low-grade Multimetal Sulphidic Ore in Boreal Conditions

Simultaneous nutrient removal and lipid production with *Chlorella vulgaris* on sterilized and non-sterilized anaerobically pretreated piggery wastewater

Airtightness of residential buildings in Finland

Arsenic in bedrock, soil and groundwater - The first arsenic guidelines for aggregate production established in Finland

Power generation in fed-batch and continuous up-flow microbial fuel cell from synthetic wastewater

Evolution of Community-Managed Water Supply Projects From 1994 to the 2010s in Ethiopia

The Effect of Phosphorus Exposure on Diesel Oxidation Catalysts-Part I  
Activity Measurements, Elementary and Surface Analyses

The Effect of Phosphorus Exposure on Diesel Oxidation Catalysts-Part II  
Characterization of Structural Changes by Transmission Electron Microscopy

Viewpoint - Paradigm Shift of Water Services in Finland  
From Production Mentality to Service Mindset

Selecting an indigenous microalgal strain for lipid production in anaerobically treated piggery wastewater

Dry Toilet Sanitation as an Alternative Solution to the Rural Ethiopia

Electricity production by a microbial fuel cell fueled by brewery wastewater and the factors in its membrane deterioration

Subpicosecond to Second Time-Scale Charge Carrier Kinetics in Hematite-Titania Nanocomposite Photoanodes

Catalytic effect of Ca and K on CO<sub>2</sub> gasification of spruce wood char

Are Finns walking the talk?  
Examining the national collaboration process on engineering education for sustainable development five years later

Characteristics and agronomic usability of digestates from laboratory digesters treating food waste and autoclaved food waste

Development of an assessment protocol: the impact of energy retrofits on indoor environmental quality and public health in the existing building stock

Short Global History of Fountains

Test in scala reale su argille sensibili: l'esperienza finlandese

Translated title of the contribution: : Full-scale failure test on sensitive clays: the Finnish experience

Fermentative metabolism of an anaerobic, thermophilic consortium on plant polymers and commercial paper samples

Ecological Sanitation - A Logical Choice? The Development of the Sanitation Institution in a World Society

Fluidized-bed denitrification of mining water tolerates high nickel concentrations

Improved bioconversion of crude glycerol to hydrogen by statistical optimization of media components

Näkökulma: Malti on valttia Suomellekin nollaenergiatavoitteita asetettaessa

Appropriate pricing policy needed worldwide for improving water services infrastructure

Acid Leaching of Cu and Zn from a Smelter Slag with a Bacterial Consortium

A study of a condensing heat exchanger and electrostatic precipitator combination for small-scale wood combustion

Betonielementtien uudelleenkäyttömahdollisuudet

Translated title of the contribution: : Betonielementtien uudelleenkäyttömahdollisuudet

Biological Nitrogen Removal from Acidic, Heavy-metal Containing Waters

Electricity generation from tetrathionate in microbial fuel cells by acidophiles

Erosion testing of filled and/or reinforced vinyl ester composites in water medium at elevated temperature

Factors affecting the elimination capacity of a passive methane biofilter

$\text{Fe}_2\text{O}_3\text{-TiO}_2$  Nano-heterostructure Photoanodes for Highly Efficient Solar Water Oxidation

Fungal treatment of landfill mining fine fraction to increase its stability and end-use potential

Groundwater as a source of conflict and cooperation

Towards creating mutual gains in a Finnish water supply project

Importance and challenges of sharing experiences among an international and interdisciplinary group of doctoral students

Influence of Diffusion Barriers on Thermal Ageing Behaviour of Solar Absorber Coatings on Copper

Kohti tasapuolisempaa tutkimuksen arviointia

Pääkirjoitus

Translated title of the contribution: : Towards better balanced research assessment: Editorial

Konvergenssi ja divergenssi ongelmatyyppien luonnehtijoina

Esimerkkinä vesihuoltoinfrastruktuurin ikääntyminen

Leveraging concepts for environmentally sustainable business management in construction - a focused review

Metals removal and recovery in bioelectrochemical systems

A review

Methane oxidation potential of boreal landfill cover materials: The governing factors and enhancement by nutrient manipulation

Pt-functionalized Fe<sub>2</sub>O<sub>3</sub> photoanodes for solar water splitting

the role of hematite nano-organization and the platinum redox state

Resilient Asset Management and Governance Fordeteriorating Water Services Infrastructure

Simulointi nopeuttaa käyttöiän määrittämistä

Social Norms in Water Services

Exploring the Fair Price of Water

Stabilization of fine fraction from landfill mining in anaerobic and aerobic laboratory leach bed reactors

Struvite precipitation in raw and co-digested swine slurries for nutrients recovery in batch reactors

Tampereelta valmistuneiden vesihuoltoalan diplomi-insinöörien sijoittuminen ja odotukset yliopisto-opetukselle

Tighter contracts or more trust? Outsourcing in Finnish water utilities

To fractionate municipal solid waste incineration bottom ash: Key for utilisation?

Utility–Customer Communication

The Case of Water Utilities

Vapor phase processing of  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> photoelectrodes for water splitting

An insight into the structure/property interplay

Vesiosuuskunnat - minä ne tulisi nähdä?

Water services heritage and institutional diversity

Enabling and Integrative Infrastructure Policy: The Role of Inverse Infrastructures in Local Infrastructure Provision with Special Reference to Finnish Water Cooperatives

The Challenge of Aging Infrastructure, Aging Staff and Reflections for Education and Research

Numerical modeling of fine particle and deposit formation in a recovery boiler

Bioprocessing of enhanced cellulase production from a mutant of *Trichoderma asperellum* RCK2011 and its application in hydrolysis of cellulose

Inhibitory effects of substrate and soluble end products on biohydrogen production of the alkalithermophile *Caloramator celer*  
Kinetic, metabolic and transcription analyses

Assessment of metabolic flux distribution in the thermophilic hydrogen producer *Caloramator celer* as affected by external pH and hydrogen partial pressure

Rewiring the wax ester production pathway of *Acinetobacter baylyi* ADP1

A method for finding suitable particle sizes for thermal conversion processes by using a simulation tool focusing on wood particle heat transfer and chemical kinetics

Anaerobic digestion of autoclaved and untreated food waste

An experimental study and numerical modeling of combusting two coal chars in a drop-tube reactor: A comparison between N<sub>2</sub>/O<sub>2</sub>, CO<sub>2</sub>/O<sub>2</sub>, and N<sub>2</sub>/CO<sub>2</sub>/O<sub>2</sub> atmospheres

ASROCKS-Hankkeen heikkouuttomenetelmien vertailu  
Translated title of the contribution: : ASROCKS-Hankkeen heikkouuttomenetelmien vertailu

Bacterial diversity and active biomass in full-scale granular activated carbon filters operated at low water temperatures

Book review : Oestigaard, T. 2013. Water, Christianity and the rise of capitalism. London, New York: I.B. Tauris. ISBN 978-1-78076-066-7, 209 pages

Characterization of fine fraction from landfill mining for evaluating methane potential

Dynamics of microbial communities in untreated and autoclaved food waste anaerobic digesters

Effect of Temperature on Fume Formation and Deposition in Kraft Recovery Boilers - a Modeling Approach

E-sail test payload of the ESTCube-1 nanosatellite

History of water and sanitation services in Finland in the urban-rural mixture : The Case of the City of Tampere, Finland

Influence of temperature and pretreatments on the anaerobic digestion of wastewater grown microalgae in a laboratory-scale accumulating-volume reactor

Inverse infrastructures: self-organization in the water services

Kohti hajautettua infrastruktuuripolitiikkaa?

Paikalliset vesiosuuskunnat perusrakenteiden tuottajina

Translated title of the contribution: : Towards integrative infrastructure policy? Local water cooperatives as infrastructure producers.

Kuka päättää vesihuollon tulevaisuudesta? (Who decides on the future of the water supply?)

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Lähteet Suomen vesihuollossa

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Liite 6: Yleistä kaivannaisjätealueista ja patoturvallisuudesta

Long-term thermophilic mono-digestion of rendering wastes and co-digestion with potato pulp

Metabolic engineering of *Acinetobacter baylyi* ADP1 for improved growth on gluconate and glucose

Modelling fume deposit growth in recovery boilers: effect of flue gas and deposit temperature

Osuuskunnat mukaan infrastruktuuripolitiikkaan

Translated title of the contribution: : Osuuskunnat mukaan infrastruktuuripolitiikkaan

Simultaneous detection of three antiviral and four antibiotic compounds in source-separated urine with liquid chromatography

Stabilization of fine fraction from landfill mining in leach bed reactor

The effect of torrefaction on the chlorine content and heating value of eight woody biomass samples

Vieraskynä : Vesialan osaamista kehitettävä yhteiskunnan tarpeista

Translated title of the contribution: : Vieraskynä : Vesialan osaamista kehitettävä yhteiskunnan tarpeista

Water services and cooperation

Opening of the seminar

Geo + Ympäristö = Ympäristögeotekniikka?

Translated title of the contribution: : Geo + Environment = Environmental Geotechnics?

A national collaboration process: Finnish engineering education for the benefit of people and environment

Bioenergy consumption and biogas potential in Cambodian households

Biofiltration of odours in dry toilet air

Biological methane oxidation in landfill cover soil - constrained by concurrent decomposition processes and sulphide oxidation?

CFD-modeling of fume formation in kraft recovery boilers

Dags att syna utmaningarna inom vattenförsörjningen

Translated title of the contribution: : Dags att syna utmaningarna inom vattenförsörjningen

Developing community water services and cooperation in Finland and the South

Diversity of the water supply and sanitation sector: roles of municipalities in Europe

Epilogue

Fast pyrolysis of coal, peat, and torrefied wood: Mass loss study with a drop-tube reactor, particle geometry analysis, and kinetics modeling

FSES 2013, Finnish Conference of Environmental Sciences, 2-3 May 2013, Tampere, Finland. Proceedings

Gestao e organizacao dos servicos de saneamento : Abordagens europeias.

Translated title of the contribution: : Gestao e organizacao dos servicos de saneamento : Abordagens europeias.

Halpaa eli hyvää - minkälaisia merkityksiä vesihuoltoala rakentaa itsestään

Translated title of the contribution: : Halpaa eli hyvää - minkälaisia merkityksiä vesihuoltoala rakentaa itsestään

Hanaa!

Suomen vesihuolto - kehitys ja yhteiskunnallinen merkitys

Translated title of the contribution: : Hanaa! : Suomen vesihuolto - kehitys ja yhteiskunnallinen merkitys

Heikot signaalit vesihuollossa

Translated title of the contribution: : Heikot signaalit vesihuollossa

Impact of heavy metals on denitrification of simulated mining wastewaters

Integration of water and wastewater utilities

Jätehuollon jakautuminen osamarkkinoihin ja yritystoiminta

Translated title of the contribution: : Jätehuollon jakautuminen osamarkkinoihin ja yritystoiminta

Jätehuollon, -politiikan ja -lainsäädännön institutionaalinen kuvaus

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Jätehuollon tekniset vaihtoehdot

Translated title of the contribution: : Jätehuollon tekniset vaihtoehdot

Johtoja ja joukkuehenkeä

Translated title of the contribution: : Johtoja ja joukkuehenkeä



Käänteiset infrastruktuurit ja integroiva infrastruktuuripolitiikka

Translated title of the contribution: : Käänteiset infrastruktuurit ja integroiva infrastruktuuripolitiikka

Käänteiset perusrakenteet : Suuntana hajautettu infrastruktuuripolitiikka?

Translated title of the contribution: : Käänteiset perusrakenteet : Suuntana hajautettu infrastruktuuripolitiikka?

Kyläyhteisöt palvelukulutuksen alustana

Translated title of the contribution: : Kyläyhteisöt palvelukulutuksen alustana

Kylien palvelutuotantoedellytyksistä erityisesti julkisten palvelujen näkökulmasta tarkasteltuna

Translated title of the contribution: : Kylien palvelutuotantoedellytyksistä erityisesti julkisten palvelujen näkökulmasta tarkasteltuna

Managed aquifer recharge in community water supply: the Finnish experience and some international comparisons

Nanoscale Surface Processing of Extrusion Coated Substrates with Atmospheric Plasma Technology

Pääkirjoitus : Vesihuoltolaitosten historiat imagon nostajana / Editorial : Relevance of history for current water services management and governance

Translated title of the contribution: : Pääkirjoitus : Vesihuoltolaitosten historiat imagon nostajana / Editorial : Relevance of history for current water services management and governance

Päätelmät yhdyskuntajätehuollon markkinainnovaatioista - taustat, kiistat ja sovellukset

Translated title of the contribution: : Päätelmät yhdyskuntajätehuollon markkinainnovaatioista - taustat, kiistat ja sovellukset

Paradigma alternativo : O papel das cooperativas e das autoridades locais

Translated title of the contribution: : Paradigma alternativo : O papel das cooperativas e das autoridades locais

Pollutants source control and health effects

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Safety of lead water pipes: history and present

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Translated title of the contribution: : Sidosryhmien näkemykset jätehuollon markkinoistumisesta

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Testing activity-based costing to large-scale combined heat and power plant using bioenergy

Tuotanto- ja operointi-innovaatiot - case vesihuolto

Translated title of the contribution: : Tuotanto- ja operointi-innovaatiot - case vesihuolto

Tutkimuksen teoreettinen viitekehys

Translated title of the contribution: : Tutkimuksen teoreettinen viitekehys

Vanhuus uhkaa vesihuoltoa

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Vesihuollon kehitys ja yhteiskunnallinen merkitys : Hapertuvatko hanat?

Translated title of the contribution: : Vesihuollon kehitys ja yhteiskunnallinen merkitys : Hapertuvatko hanat?

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Translated title of the contribution: : Vesihuollossa muhii aikapommi

Vesihuolto osana näkymätöntä kaupunkia

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Vesihuoltotoimintojen ulkoistaminen Suomessa

Translated title of the contribution: : Vesihuoltotoimintojen ulkoistaminen Suomessa

Waste water treatment by multi-stage biofilm processes : Results of the VESITURVA project

Yhdyskuntajätehuollon markkinainnovaatiot tutkimuskaupungeissa

Translated title of the contribution: : Yhdyskuntajätehuollon markkinainnovaatiot tutkimuskaupungeissa

Education, Research and Capacity Building for Water Services

Focus and Change of Water Management in Finland – Analysis of Vesitalous Journal, 1960-2009

Bacterial community transcription patterns during a marine phytoplankton bloom

Accidents and close call situations connected to the use of mobile phones

A comparison of occupational electric field exposures during working tasks at 400 kV and 110 kV substations

Cardiac Pacemakers in Electric and Magnetic Fields of 400-kV Power Lines

Translated title of the contribution: : Cardiac Pacemakers in Electric and Magnetic Fields of 400-kV Power Lines

Career paths of experts on water supply and sanitation services

CFD-Modeling of Fume Formation in Kraft Recovery Boilers

Coal char combustion in O<sub>2</sub>/N<sub>2</sub> and O<sub>2</sub>/CO<sub>2</sub> conditions in a drop tube reactor: an optical study

Comparing the energy required for fine grinding torrefied and fast heat treated pine

Comparison the portable service platforms influence to electric field exposure at 110 kV substations

Effect of Tissue Conductivity on Internal Body Resistances of Numerical Human Model at Power Frequency

Effects of tissue conductivity and electrode area on internal electric fields in a numerical human model for ELF contact current exposures

Environmental impact of micropollutants present in urine

Examples of using the moodle virtual learning environment for teaching technical university students

Examples to Reduce the EMF Generated by HV Power Transmission Lines of Different Design

Experiences of integrating MSc student research projects in the "electromagnetic fields and health" area

Exposure to Extremely Low Frequency Magnetic Fields: a Personal Monitoring Study in a Large Group of Workers

Gender comparison - The university students' exam results in the environmental and energy area

Impacts of changing operational parameters of in situ chemical oxidation (ISCO) on removal of aged PAHs from soil

Insenttiivit julkisen sektorin innovaatiotoiminnan edistämisen välineinä. Esimerkkinä Georgian osavaltion palvelu-uudistus  
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Measurers' Exposure to Extremely Low Frequency Magnetic Fields at 400 kV Substations

Metering the quality of water supply and sewage network maintenance services

Modeling fine particles and alkali metal compound behavior in a kraft recovery boiler

Occupational Exposure to Electric Fields and Currents Associated With 110 kv Substation Tasks

Occupational Exposure to Extremely Low Frequency Electric Fields in Office Work

Part V: Comparative Analysis of the Omnipresent Water Fountains

Production of Electricity and Butanol from Microalgal Biomass in Microbial Fuel Cells

Removal of odours in dry toilets by biofiltration

"Rocky Fountains" of Keciören, Turkey

Translated title of the contribution: : "Rocky Fountains" of Keciören, Turkey

Testattua tahdistusta

Translated title of the contribution: : Testattua tahdistusta

The experiences of technical university students on an "environmental health" course

The Mermaid of Helsinki, Finland

The Possible Exposure of Children to Extremely Low Frequency Magnetic Fields in the Home

Treatment of Composted Soils contaminated with Petroleum Hydrocarbons using Chemical Oxidation followed by Enhanced Aerobic Bioremediation

Tulevaisuuden vesiosajat

Translated title of the contribution: : Tulevaisuuden vesiosajat

Two Years after Donor Funding Ended: Success Factors for Schools to Keep their Urine-Diverting Dry Toilets (UDDTs) Clean and Well Maintained

Ulkoistaminen apuväline vesihuoltoverkoston kunnossapitoon?

Translated title of the contribution: : Ulkoistaminen apuväline vesihuoltoverkoston kunnossapitoon?

Urban water conflicts in recent European history: Changing interactions between technology, environment and society

Vesihuollon historian lyhyt oppimäärä

Translated title of the contribution: : Vesihuollon historian lyhyt oppimäärä

Vesihuollossa kuntayhteistyö toimii

Translated title of the contribution: : Vesihuollossa kuntayhteistyö toimii

Water Fountains in the Worldscape

Water - The Most Important Subject of the World

White-Collar Workers' Self-Reported Physical Symptoms Associated With Using Computers

Adjustable wettability of paperboard by liquid flame spray nanoparticle deposition

Biogenic hydrogen and methane production from *Chlorella vulgaris* and *Dunaliella tertiolecta* biomass

Biogenic hydrogen and methane production from reed canary grass

Calculation of Induced Electric Fields in Human Models Exposed to ELF Magnetic and Electric Fields

CFD Based Modelling for Predicting Fouling and Corrosion in Kraft Recovery Boilers

Challenges to Finnish water and wastewater services in the next 20-30 years

Comparison between the Occupational ELF magnetic field exposure in Finland and in Italy

Developing and testing characterization methods for droplet combustion - part II

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Examples of occupational ELF electric and magnetic field exposure in Finland

Helsinki sai ensimmäisen puhdistamonsa 1910; Helsinki gained its first wastewater treatment plant 1910

Translated title of the contribution: : Helsinki sai ensimmäisen puhdistamonsa 1910; Helsinki gained its first wastewater treatment plant 1910

Hyvän veden ja hyvien yhteyksien kaupunki - Riihimäen Veden historia

Translated title of the contribution: : Hyvän veden ja hyvien yhteyksien kaupunki - Riihimäen Veden historia

Identification of Wastewater Leaching into the Wells by HPLC-SEC Using UV and Fluorescence Detection

Ja alussa oli vesi

Kasvun ja veden kausi – I vesilaitoksesta II maailmansotaan

KUPERA-kaupunkien teknisen sektorin johto kaipaa toimintakulttuuriin muutosta : Haasteista innovatiivisiin mahdollisuuksiin

Translated title of the contribution: : KUPERA-kaupunkien teknisen sektorin johto kaipaa toimintakulttuuriin muutosta : Haasteista innovatiivisiin mahdollisuuksiin

Laajentumisen aika

Lack of water engineers hampering development. North-South cooperation in higher education is a must

L'oxydation chimique pour la remediation des sols contamines par des composes recalcitrants. Cas de la chlordecone

Translated title of the contribution: : L'oxydation chimique pour la remediation des sols contamines par des composes recalcitrants. Cas de la chlordecone

Luminescent bacteria-based sensing method for methylmercury specific determination

Lyhyestä tiede kaunis?

Translated title of the contribution: : Lyhyestä tiede kaunis?

Managing water supply through joint regional municipal authorities in Finland: Two comparative cases

Modeling of Fine Particles and Alkali Metal Compounds in Kraft Recovery Boiler Furnace

Occupational Exposure to Electric and Magnetic Fields While Working at Switching and Transforming Stations of 110 kV

Occupational exposure to electric fields and induced currents associated with 400 kV substation tasks from different service platforms

Pääkirjoitus. Veden keskeinen merkitys yhteiskunnassa ja yhdyskunnissa

Translated title of the contribution: : Pääkirjoitus. Veden keskeinen merkitys yhteiskunnassa ja yhdyskunnissa

Physical symptoms in young adults and their use of different computers and mobile phones

Reduction of combustion-generated emissions by means of multiobjective optimization and computational fluid dynamics

Sähkö- ja elektroniikkateollisuuden ympäristökysymykset

Translated title of the contribution: : Sähkö- ja elektroniikkateollisuuden ympäristökysymykset

Significance of Wild Cards and Weak Signals for Sustainability : Case of Water Services

Study of Aerosols of Black Liquor Combustion

Sustainability competencies of engineers in the field of water supply and sanitation

Syytä olla ylpeä

Translated title of the contribution: : Syytä olla ylpeä

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The evolving role of water co-operatives in Finland

The factors controlling combustion and gasification kinetics of solid fuels

The Fountain A Harbinger of a New Era in Case Tampere

The technical students' feedback from the course issues on environmental health

Työntekijöiden altistuminen sähkö- ja magneettikentille 110 kV sähköasemien työtehtävissä

Translated title of the contribution: : Työntekijöiden altistuminen sähkö- ja magneettikentille 110 kV sähköasemien työtehtävissä

Uuden vuosituhatosen tiennäyttäjät – HS-Veden alkutaival

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Vesihuollon alkutaival – kehitys 1910 asti

Vesihuoltoa kuntiin

Vesi on parasta kylmänä – loppusanat

Water education makes a global difference

Water Fountains in the Cityscape

Working-aged population's mental symptoms and the use of the Internet

A comparison of the usability of a laptop, communicator, and handheld computer

Adjustable hydrophilicity and hydrophobicity on paperboard by liquid flame spray process

An example of exposure to magnetic fields in the home

Asiakkaat, verkostot ja henkilöstö

Asteittain kohti keskitettyä jätevedenpuhdistusta

Translated title of the contribution: : Asteittain kohti keskitettyä jätevedenpuhdistusta

Atmospheric plasma enhanced hybrid barrier films through reel-to-reel process

Bilateral collaboration in municipal water and wastewater services in Finland

Book Review: Graham, S. (Ed.), Disrupted Cities: When Infrastructure Fails

Co-operation between technical education of university and electro-technical standardization association

Developing and testing characterization methods for droplet combustion - Part I

Development of superhydrophobic coating on paperboard surface using the Liquid Flame Spray

Editorial Note: "Pasts and Futures of Water"

Experimental study of oxy-fuel combustion in a drop tube reactor

Exposure to electric and magnetic fields at 110 kV substation while performing the task 'Changing a bulb from a man hoist' in the Tampere region

Fate of dissolved organic matter in softwood element-chlorine-free bleached kraft mill fiberline

Finnish engineering education for the benefit of people and environment

Forgotten infrastructure - In the quest for development, sustainability and security

Geometry of plate fins for maximizing heat transfer

Hydrodynamic drag and velocity of micro-bubbles in dilute paper machine suspensions

Hyvän veden ja hyvien yhteyksien kaupunki : Riihimäen Veden historia

Translated title of the contribution: : Hyvän veden ja hyvien yhteyksien kaupunki : Riihimäen Veden historia

Hyvien yhteyksien ja hyvän veden kaupunki

Ikääntyvä infra - vesihuollon keskeisin haaste

Translated title of the contribution: : Ikääntyvä infra - vesihuollon keskeisin haaste

Influence of atmospheric plasma treatment on surface properties and inkjet printability of plastic packaging film

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Jätevedenpuhdistuksen ja viemäroinnin vaiheita Helsingissä

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Kaivoista ja käymälöistä kohti kunnallista vesihuoltoa

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Translated title of the contribution: : Kirjastolta uutta tiedonhankinnan opetusta tukemaan opetusta antavien yksiköiden toimintaa

Kohti puhtaampaa Itämerä

Long-term measurement of free time exposure to low frequency magnetic fields in Finland

Metropoli ja meri. 100 vuotta jätevedenpuhdistusta Helsingissä

Translated title of the contribution: : Metropoli ja meri. 100 vuotta jätevedenpuhdistusta Helsingissä

Mihin jätevedenpuhdistusta tarvitaan?

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Näkymätönt Porii. Porin veden historia

Translated title of the contribution: : Näkymätönt Porii. Porin veden historia

Occupational exposure to electric and magnetic fields during work tasks at 110 kV substations in the Tampere region

Pääkaupunkiseudun moderni jätevedenpuhdistus ja Viikinmäen puhdistamo

Paperinjalostus- ja pakkaustekniikan tutkimusyksikkö uudistaa kurssitarjontaa

Translated title of the contribution: : Paperinjalostus- ja pakkaustekniikan tutkimusyksikkö uudistaa kurssitarjontaa

Perfusion characterization using flow simulations and  $\mu$ PIV measurements

Pintavedestä pohjaveteen ja tekopohjaveteen

Translated title of the contribution: : Pintavedestä pohjaveteen ja tekopohjaveteen

Pohjavesi, meidän vesi

"Poika, nyt lähdeittiin hommiin" - vesilaitos syntyy

Requirements for rainfall retention and storage in cold climate

Rural energy survey and scenario analysis of village energy consumption: A case study in Lao People's Democratic Republic



Rural household electricity load profiles with a load simulation tool

Sanitation, water and health

Self-reported use of ICT (Information and communication technology) uptake in 2002 and discomfort amongst Finns aged 45-66

Tavoitteena puhdas asuinympäristö

The application of HPLC-SEC for the simultaneous characterization of NOM and nitrate in well waters

The designing and the implementation of WWW-course "Electricity, Electronics and Environment"

The students' feedback on WWW-course "Electricity, Electronics and Environment"

Towards balanced public-private co-operation in urban water management

TTY:ssä panostetaan pakkausalaan

Translated title of the contribution: : TTY:ssä panostetaan pakkausalaan

Turning up the heat on printability

Turning up the heat on printability

Unsteady computational methods to study jet behaviour in large fluidized bed boiler

Use of analytical expressions of convection in conjugated heat transfer problems

UV irradiation for Micropollutant removal from aqueous solution in the presence of H<sub>2</sub>O<sub>2</sub>

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Vesihuollon haasteet ennen ja nyt

Vesihuollon historia pähkinänkuoressa

Vesihuollon ylikunnalliset sopimukset lisääntymässä

Translated title of the contribution: : Vesihuollon ylikunnalliset sopimukset lisääntymässä

Vesi kuntayhteistyön voiteluaineena

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Water and sanitation services in history: Motivations, expectations and experiences

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Water, policy and governance

Yhdysvaltain vesihuollossa julkissektori avainasemassa. Haasteina niukentuvien vesivarojen hallinta ja ikääntyvä infrastruktuuri

Translated title of the contribution: : Yhdysvaltain vesihuollossa julkissektori avainasemassa. Haasteina niukentuvien vesivarojen hallinta ja ikääntyvä infrastruktuuri

Effect of geometrical parameters on vortex-induced vibration of a splitter plate

Ensimmäiset fuusiosuunnitelmat