

Acetylcholinesterase reactivators based on oxime-functionalized biodegradable ionic liquids

Karpichev, Yevgen; Kapitanov, Illia; Gathergood, Nicholas Military medical science letters 2018 / p. 87

https://www.mmsl.cz/artkey/mms-201888-0087_acetylcholinesterase-activators-based-on-oxime-functionalized-biodegradable-ionic-liquids.php

Advanced oxidation combined with biodegradation in situ remediation of creosote oil contaminated soil

Palmroth, Marja R.T.; Aunola, Tuomo; Goi, Anna Proceedings of the Second European Bioremediation Conference : Chania, Crete, 2003 2003 / p. 63-66

Aggregation properties of a series of novel L-phenylalanine derived surfactants

Naude, M.; Kapitanov, Illia; Gathergood, Nicholas; Karpichev, Yevgen Kyiv-Toulouse : IXth International Chemistry Conference

"Kyiv-Toulouse" dedicated to the 100th anniversary of Fedir Babichev = IXth Conference Internationale de Chimie "Kyiv-Toulouse"

dedie au 100eme anniversaire de Fedir Babichev : (Kyiv, 4-9 June 2017) : materials of reports and performances 2017 / p. 133 : ill

Anaerobic technology for treatment of concentrated wastewater from Estonian food industry

Mölder, Heino; Blonskaja, Viktoria Kalmar ECO-TECH'99 : Seminar on Ecological Technology and Management : September 22

to 24, 1999, Kalmar, Sweden. Volume 2 1999 / [10] p.: ill <https://open.lnu.se/index.php/eco-tech/article/view/1679>

Application of chemical oxidation for improvement of subsequent biodegradation in soil treatment

Trapido, Marina; Goi, Anna; Kulik, Niina Proceedings of 17th International Ozone Association World Congress and Exhibition

"Ozone and Related Oxidants. Innovative and Current Technologies" : Strasbourg, France, August 22-25, 2005 2005 / p. VII.3.1-1 -

VII.3.1-9

Assessing the biodegradation characteristics of poly(butylene succinate) and poly(lactic acid) formulations under controlled composting conditions

Lyshtva, Pavlo; Voronova, Viktoria; Kuusik, Argo; Kobets, Yaroslav AppliedChem 2025 / art. 17

<https://doi.org/10.3390/appliedchem5030017> <https://www.mdpi.com/2673-9623/5/3/17>

Atom economy, biodegradation, catalysis and green toxicology : tools for the delivery of green chemistry based on ionic liquids [Online resource]

Gathergood, Nicholas Abstracts : ICCE 2017 Oslo : 16th International Conference on Chemistry and the Environment : Oslo,

Norway, 18-22 June 2017 2017 / art. 171, p. [155] http://icce2017.org/downloads/Abstraktsamling_16_06_17.pdf

Atom economy, catalysis and green toxicology : tools for the delivery of sustainable chemistry based on ionic liquids

Gathergood, Nicholas 2nd Green and Sustainable Chemistry Conference : 14-17 May 2017, Berlin, Germany : abstracts 2017 / p.

[O4.6]

Benign by design - designing chemicals and pharmaceuticals for environmental biodegradation

Kümmerer, Klaus; Gathergood, Nicholas GSC8 : 8th International Conference on Green and Sustainable Chemistry, 23-26 July

2017, Melbourne, Australia : abstract book 2017 / p. 43 <http://www.racicongress.com/downloads/abstracts/GSC8-abstract-book.pdf>

Biobased natural deep eutectic system as versatile solvents : structure, interaction and advanced applications

Usmani, Zeba; Sharma, Minaxi; Tripathi, Manikant; Lukk, Tiit; Karpichev, Yevgen; Gathergood, Nicholas; Singh, Brahma N.;

Thakur, Vijay Kumar; Tabatabaei, Meisam; Gupta, Vijai Kumar Science of the total environment 2023 / art. 163002

<https://doi.org/10.1016/j.scitotenv.2023.163002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biodegradability of deep eutectic solvents in treatment of pomace fruits

Usmani, Zeba; Husanu, Elena; Gathergood, Nicholas; Guazzelli, Lorenzo; Pomelli, Christian; Karpichev, Yevgen 14th Baltic

Conference on Food Science and Technology "Sustainable Food for Conscious Consumer" : FoodBalt 2021 : book of abstracts

2021 / p. 156

Biodegradable polyurethane/graphene oxide scaffolds for soft tissue engineering : in vivo behavior assessment

Ivanoska-Dacikj, Aleksandra; Bogoeva-Gaceva, Gordana; Krumme, Andres; Tarasova, Elvira; Scalera, Chiara; Stojkovski,

Velimir; Gjorgoski, Icko; Ristoski, Tpe International Journal of Polymeric Materials and Polymeric Biomaterials 2020 / p. 1101 - 1111

<https://doi.org/10.1080/00914037.2019.1655754> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biodegradation of dissolved jet fuel in chemostat by a mixed bacterial culture isolated from a heavily polluted site

Rožkov, Aleksei; Käär, Arvo; Vilu, Raivo Biodegradation 1998 / p. 363-369: ill

Biodegradation of ionic liquids - a critical review

Jordan, Andrew; Gathergood, Nicholas Chemical Society reviews 2015 / p. 8200-8237 : ill <https://doi.org/10.1039/c5cs00444f> [Journal](#)

[metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biodegradation of m-toluate by pine rhizosphere associated microorganisms

Sarand, Inga; Timonen, S.; Koivula, T.; Sen, R.; Romantschuk, M. UIB-GBF-CSIC-TUB Symposium "Biodegradation of Organic

Pollutants", Mallorca, Spain, June 29 - July 3, 1996 1996

Biodegradation of m-toluate by pine, mycorrhizal fungus and associated bacteria

Sarand, Inga; Koivula, Teija; Timonen, Sari; Sen, Robin; Romantschuk, Martin EMS 96 teaduskonverents, 6.-7. juuni 1996, Tallinn = EMS 96 Scientific Conference, 6-7 June 1996, Tallinn 1996 / [1] p

Biodegradation of organic substrate in sulphate containing yeast wastewaters

Krapivina, Marina; Blonskaja, Viktoria; Kurissoo, Tõnu; Vilu, Raivo "Environmental Impact and Water Management in a Catchment Area Perspective" : 24-26 September, 2001, Tallinn, Estonia : proceedings of the Symposium dedicated to the 40th Anniversary of Institute of Environmental Engineering at Tallinn Technical University 2001 / p. 232-241 : ill

Biodegradation studies of a series of dipeptide based ionic liquids and their transformation products [Online resource]

Raba, Grete; Kapitanov, Illia; Karpichev, Yevgen; Kümmerer, Klaus; **Vilu, Raivo; Gathergood, Nicholas** Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fntdk.ut.ee/teesid-2018/>

Biodegradation studies of a series of dipeptide based ionic liquids and their transformation products

Raba, Grete; Kapitanov, Illia; Karpichev, Yevgen; Kümmerer, Klaus; Vilu, Raivo; Gathergood, Nicholas IUPAC Postgraduate Summer School on Green Chemistry : 7-13 July 2018, Venice - Italy : book of abstracts 2018 / p. 25 https://www.unive.it/pag/fileadmin/user_upload/extra/SSGC/documenti/Book_of_abstracts_per_website_23_July.pdf

Biorefinery : value added chemicals [Online resource]

Gathergood, Nicholas The Bioeconomy in Transition Workshop Gela : 25-27 May 2017, Gela, Sicily, Italy 2017 <http://www.bioeconomy-in-transition.eu/about-workshop/>

Catalytic degradation of picric acid by heterogeneous Fenton-based processes

Kulik, Niina; Trapido, Marina Executive summaries : 5th International Conference. 10th IOA-EA3G Berlin Conference on Oxidation Technologies for Water and Wastewater Treatment : Berlin, Germany, March 30 - April 2, 2009 2009 / p. 44-45/PC29(1-8)

Combination of coagulation and catalytic wet oxidation for the treatment of pulp and paper mill effluents

Verenich, Svetlana; Laari, A.; **Kallas, Juha** Water science and technology 2001 / 5, p. 145-152 <https://iwaponline.com/wst/article-abstract/44/5/145/15174/Combination-of-coagulation-and-catalytic-wet?redirectedFrom=fulltext>

Combination of ozonation and Fenton processes for landfill leachate treatment : evaluation of treatment efficiency

Goi, Anna; Veressinina, Jelena; Trapido, Marina Ozone & Related Oxidants in : Advanced Treatment of Water for Human Health and Environment Protection : IOA International Conference Brussels, Belgium, May 15-16, 2008 2008 / p. 6.1.2-1 - 6.1.2.-12 : ill <https://www.tandfonline.com/doi/full/10.1080/01919510802582011>

Degradation and disintegration behavior of PHBV- and PLA-based films under composting conditions

Lyshtva, Pavlo; Kuusik, Argo; Voronova, Viktoria Sustainability 2025 / art. 8657 <https://doi.org/10.3390/su17198657>

Degradation of a poly(3-hydroxybutyrate-co-3-hydroxyvalerate) (PHBV) compound in different environments

Lyshtva, Pavlo; Voronova, Viktoria; Barbir, Jelena; Filho, Walter Leal; Kröger, Silja Denise; Witt, Gesine; Miksch, Lukas; Sabowski, Reinhard; Gutow, Lars; Frank, Carina Heliyon 2024 / art. e24770 <https://doi.org/10.1016/j.heliyon.2024.e24770> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Design of sustainable ionic liquids based on l-phenylalanine and l-alanine dipeptides : synthesis, toxicity and biodegradation studies

Kapitanov, Illia; Raba, Grete; Špulak, Marcel; **Vilu, Raivo; Karpichev, Yevgen; Gathergood, Nicholas** Journal of Molecular Liquids 2023 / art. 121285 <https://doi.org/10.1016/j.molliq.2023.121285> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Design rules for environmental biodegradability of phenylalanine alkyl ester linked ionic liquids

Suk, Morten; Haiß, Annette; Westphal, Janin; Jordan, Andrew; Kellett, Andrew; **Kapitanov, Illia; Karpichev, Yevgen; Gathergood, Nicholas;** Kümmerer, Klaus Green chemistry 2020 / p. 4498-4508 <https://doi.org/10.1039/D0GC00918K> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Designing mineralisable building blocks for greener solvents

Raba, Grete; Kapitanov, Illia; Karpichev, Yevgen; Vilu, Raivo; Gathergood, Nicholas 8th IUPAC International Conference of Green Chemistry : Shangri-La Hotel, Bangkok, Thailand, 9-14 Sept 2018 : poster presentation abstracts 2018 / p. 87 http://www.greeniupac2018.com/download/8th%20IUPAC%20ICGC%202018_Program%20&%20Abstract%20Book_Poster%20Abstract.pdf

Determining biogas yield from industrial biodegradable waste = Biolagunevatest tootmisjäädikdest biogaasi saagise määramine

Kuusik, Argo 2017 <https://digi.lib.ttu.ee/ii/77712> https://www.ester.ee/record=b4680398*est

Eelosoneerimise mõju looduslike orgaaniliste ainete biolagunemisele = The impact of pre-treatment with ozone on biodegradation of natural organic matter-case study

Rožkov, Aleksei; Strömberg, A.; Karlsson, K.; **Preis, Sergei** XVII Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 17th Estonian Chemistry Days : abstracts of scientific conference 1996 / lk. 175-176 https://www.ester.ee/record=b1070511*est

Effect of advanced oxidation process on biodegradation of PAHs in creosote oil contaminated soil

Palmroth, Marja R.T.; Aunola, Tuomo; **Goi, Anna** Abstracts of Sixth Finnish Conference of Environmental Sciences : Current Perspectives in Environmental Science and Technology : Joensuu, Finland, 2003 2003 / p. 51-54
<https://researchportal.tuni.fi/en/publications/effect-of-advanced-oxidation-process-on-biodegradation-of-pahs-in>

Effect of modified Fenton's reaction on microbial activity and removal of PAHs in creosote oil contaminated soil

Palmroth, Marja R.T.; Langwaldt, Jörg H.; Aunola, Tuomo; **Goi, Anna**; Münster, U.; Puhakka, Jaakko A.; Tuhkanen, Tuula
Biodegradation 2006 / 2, p. 29-39

Environmental effects of soil contamination by shale fuel oils

Kanarbik, Liina; Blinova, Irina; Sihtmäe, Mariliis; Künnis-Beres, Kai; Kahru, Anne Environmental science and pollution research 2014 / p. 11320-11330 : ill <https://doi.org/10.1007/s11356-014-3043-0> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Kirde-Eesti fenoole sisaldavate heitmete mikrobioloogilise lagundamise võimalustest

Randla, Tiina; Rožkov, Aleksei; Käär, Arvo; Vilu, Raivo XVI Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 16th Estonian chemistry days : abstracts of scientific conference 1995 / lk. 123-125

Osoonimine kolmefaasilises süsteemis

Veressinina, Jelena; Munter, Rein XXVIII Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 28th Estonian Chemistry Days : abstracts of scientific conference 2002 / lk. 159-160

Osoonitud nitrofenoolide toksilisuse, kõrvalproduktide ja biolagundatavuse uurimine

Goi, Anna; Trapido, Marina XXVII Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 27th Estonian Chemistry Days : abstracts of scientific conference 2001 / lk. 28-29

Oxime-functionalized nanodiamonds as a platform for treatment of organophosphate poisoning

Karpichev, Yevgen; Bondar, Denys; Starkov, Pavel; Heinmaa, Ivo Artificial Intelligence for Material Design, Processing and Characterizations November 21 - November 30, 2020 : SYMPOSIUM S.CT01 : abstract book 2020 / S.NM01.10.06, p. 658 [Meeting abstracts](#)

Phytomanagement of chromium contaminated brown fields

Kumar, Adarsh; **Usmani, Zeba;** Ahirwal, Jitendra; Tripti; Rani, Poonam Phytomanagement of polluted sites : Market opportunities in sustainable phytoremediation 2019 / p. 447-469 <https://doi.org/10.1016/B978-0-12-813912-7.00018-1>

Protein- and lipid-rich solid slaughterhouse waste anaerobic co-digestion : resource analysis and process optimization = Proteiini- ja lipiidirikaste tahkete tapamajajäätmete anaeroobne kooskääratamine : ressursi analüüs ja protsessi optimeerimine

Pitk, Peep 2014 https://www.ester.ee/record=b3724112*est

Puidu biodegradatsiooni uurimine

Kallavus, Urve; Irbe, I.; **Traksmäa, Rainer** XXVII Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 27th Estonian Chemistry Days : abstracts of scientific conference 2001 / lk. 36-37 : ill

Puidu ja puitmaterjalide vastupidavus. Bioloogiliste ohuklasside määratlus

Mänd, Urmas; Soonurm, Enno 2002 https://www.ester.ee/record=b1736765*est

Puidu ja puitmaterjalide vastupidavus. Bioloogiliste ohuklasside määratlus

Mänd, Urmas; Soonurm, Enno 2002 https://www.ester.ee/record=b1736772*est

Puidu ja puitmaterjalide vastupidavus. Bioloogiliste ohuklasside määratlus

Mänd, Urmas; Soonurm, Enno 2002 https://www.ester.ee/record=b1736775*est

Removal of PAHs from creosote oil contaminated soil by addition of concentrated H2O2 and biodegradation

Aunola, Tuomo; **Goi, Anna;** Palmroth, Marja R.T.; Langwaldt, Jörg H.; Tuhkanen, Tuula Journal of advanced oxidation technologies 2006 / [9] p <https://www.degruyter.com/document/doi/10.1515/jaots-2006-0102/html>

Response to the comment on "Wet oxidation lumped kinetic model for wastewater organic burden biodegradability prediction"

Verenich, Svetlana; **Kallas, Juha** Environmental science and technology 2003 / 6, p. 1227

Role of DmpR-mediated regulatory circuit in bacteria biodegradation rates and survival in methylphenol amended soils

Sarand, Inga; Skärfstad, E.; Forsman, M.; Romantschuk, M.; Shingler, V. Applied and environmental microbiology 2001 / 1, p. 162-171 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC92538/>

Role of regulatory circuits of *Pseudomonas* CF600 in (methyl)phenol biodegradation rates and survival in soil

Sarand, Inga; Romantschuk, M.; Shingler, V. *Pseudomonas'99 : Biotechnology and Pathogenesis* : September 1-5, 1999, Maui, Hawaii 1999

Safer chemicals : reducing toxicity and improving biodegradability [Online resource]

Gathergood, Nicholas 3rd EuCheMS Congress on Green and Sustainable Chemistry : 3-6 September 2017, University of York : [oral abstracts] 2017 / p. PL4 <https://www.york.ac.uk/chemistry/research/green/events/3eugsc/>

Safer chemicals: reducing toxicity and improving biodegradability

Gathergood, Nicholas Royal Society of Chemistry Molten Salts Discussion group Summer Research Meeting : 24-26th July, Downing College, University of Cambridge : Schedule and presentations 2018 / p. 12 https://cdn.website-editor.net/09bf8897834e4f9bbfbef1fe6289cd3f/files/uploaded/MSDG%2520Summer%25202018%2520programme_hDwkQAcT1mzpiHIUaRJ.pdf

Solubilization of polycyclic aromatic hydrocarbons (PAHs) with phenol in coking wastewater treatment system: Interaction and engineering significance

Kong, Qiaoping; Wu, Haizhen; Liu, Lei; **Preis, Sergei** *Science of the total environment* 2018 / p. 467-473 : ill <https://doi.org/10.1016/j.scitotenv.2018.02.077> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Studies on wood biodegradation by SEM and ¹³C NMR methods

Irbe, I.; **Kallavus, Urve**; Teeäär, R.; Andersons, B. The Sixth International Mycological Congress, Israel, 23-28 August, 1998 : proceedings 1998 / p. 120

A study of toxicity, biodegradability, and some by-products of ozonised nitrophenols

Goi, Anna; Trapido, Marina; Tuhkanen, Tuula *Advances in environmental research* 2004 / p. 303-311 : ill

Sustainable phenylalanine-derived sails for solubilization of polycyclic aromatic hydrocarbons

Kapitanov, Illia; Sudheer, Surya; Yadav, Toshikee; Ghosh, Kallol K.; Gathergood, Nicholas; **Gupta, Vijai Kumar; Karpichev, Yevgen** *Molecules* 2023 / art. 4185 : ill <https://doi.org/10.3390/molecules28104185> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Synthesis and biodegradation studies of a series of novel L-phenylalanine derived ionic liquids

Kapitanov, Illia; Jordan, Andrew; Haiss, Annette; Špulak, Marcel; **Karpichev, Yevgen; Raba, Grete; Gupta, Vijai Kumar; Vilu, Raivo;** Kümmerer, Klaus; **Gathergood, Nicholas** 20th European Symposium on Organic Chemistry ESOC 2017 : July 2-6, 2017, Cologne, Germany : abstracts 2017 / p. OMSC009 : ill

Synthesis, self-assembly, bacterial and fungal toxicity, and preliminary biodegradation studies of a series of L-phenylalanine-derived surface-active ionic liquids

Kapitanov, Illia; Jordan, Andrew; **Karpichev, Yevgen; Gathergood, Nicholas** *Green chemistry* 2019 / p. 1777-1794 : ill <https://doi.org/10.1039/c9gc00030e> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The design of safer chemicals : Are mineralisable compounds an achievable goal?

Gathergood, Nicholas IUPAC Postgraduate Summer School on Green Chemistry : 7-13 July 2018, Venice - Italy : book of abstracts 2018 / p. 20-21 https://www.unive.it/pag/fileadmin/user_upload/extra/SSGC/documenti/Book_of_abstracts_per_website_23_July.pdf

The impact of pre-treatment with ozone on biodegradation of natural organic matter-case study

Preis, Sergei; Rožkov, Aleksei; Strömberg, A.; Karlsson, K. *International Conference Oxidation Technologies for Water and Wastewater Treatment / Clausthaler Umwelttechnik-Institut GmbH* 1996 / [6] p

Tolerance and biodegradation of m-toluate by Scots pine, a mycorrhizal fungus and fluorescent pseudomonads individually and under associative conditions

Sarand, Inga; Timonen, T.; Koivula, R.; Peltola, R.; Haahtela, K.; Sen, R.; Romantschuk, M. *Journal of applied microbiology* 1999 / p. 817-826

Treatment of PAH-contaminated soil by combination of Fenton's reaction and biodegradation

Palmroth, Marja R.T.; Langwaldt, Jörg H.; Aunola, Tuomo; **Goi, Anna;** Puhakka, Jaakko A.; Tuhkanen, Tuula *Journal of chemical technology and biotechnology* 2006 / p. 598-607 : ill https://www.researchgate.net/publication/229469481_Treatment_of_PAH-contaminated_soil_by_combination_of_Fenton%27s_reaction_and_biodegradation

Wet oxidation of debarking water : changes in lignin content and biodegradability

Kindsigo, Merit; **Kallas, Juha** *Environmental chemistry letters* 2009 / 2, p. 121-126

Wet oxidation of recalcitrant lignin water solution : experimental and reaction kinetics [Electronic resource]

Kindsigo, Merit; Hautaniemi, Marjaana; **Kallas, Juha** *Environmental Applications of Advanced Oxidation Processes* : Chania, September 7-9, 2006 : book of abstracts 2006 / [CD-ROM] <https://link.springer.com/article/10.1007/s10311-008-0151-4>

When can ionic liquids be considered readily biodegradable? Biodegradation pathways of pyridinium, pyrrolidinium and ammonium-based ionic liquids

Deng, Y.; Beadham, I.; Ghavre, Mukund; Costa Gomes, M. F.; **Gathergood, Nicholas** Green chemistry 2015 / p. 1479-1491 : ill
<http://dx.doi.org/10.1039/C4GC01904K>