

**Aspects of kerogen oxidative dissolution in subcritical water using oxygen from air**

Kaldas, Kristiina; Niidu, Allan; Preegel, Gert; Uustalu, Jaan Mihkel; Muldma, Kati; Lopp, Margus Oil shale 2021 / p. 199-214 : ill <https://doi.org/10.3176/oil.2021.3.02> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Behavior of Estonian oil shale in acidic oxidative conditions**

Niidu, Allan; Grenman, Henrik; Muldma, Kati; Kaldas, Kristiina; Mikli, Valdek; Lopp, Margus Frontiers in Chemical Engineering 2022 / art. 590115 <https://doi.org/10.3389/fceng.2022.590115>

**Capillary electrophoretic analysis of calcium and magnesium acetate samples produced from oil shale industry waste**

Umerenkova, Violetta; Muldma, Kati; Närep, Angelica; Mets, Birgit; Kaldas, Kristiina Euroanalysis 2025 : XXII European Conference on Analytical Chemistry : Abstract Book 2025 / art. P2-074 ; p. 583 [https://www.euroanalysis2025.com/images/site/abstracts/ABSTRACT\\_EUROANALYSIS\\_2025.V13.pdf](https://www.euroanalysis2025.com/images/site/abstracts/ABSTRACT_EUROANALYSIS_2025.V13.pdf)

**Dikarboksüülhapete stabiilsus oksüdatsioonil õhuhapnikuga vesikeskkonnas**

Kaldas, Kristiina; Preegel, Gert; Muldma, Kati; Lopp, Margus XXXIV Eesti keemiapäevad : 100. aastapäeva teaduskonverentsi teesid 2019 / lk. 16 : ill

**Exploring different methods for valorising oil shale ash into calcium and magnesium acetate de-icers**

Muldma, Kati; Mets, Birgit; Siirde, Andres; Umerenkova, Violetta; Lopp, Margus; Kaldas, Kristiina Future Frontiers : PhD Conference on Emerging Technologies : Book of Abstracts 2025 / p. 27 ; poster 18 [https://tuit.ut.ee/sites/default/files/2025-05/PhD%20Conference%202025%20Book%20of%20Abstracts\\_pub3.pdf](https://tuit.ut.ee/sites/default/files/2025-05/PhD%20Conference%202025%20Book%20of%20Abstracts_pub3.pdf)

**Fast reaction yield monitoring by ce analysis of dicarboxylic acids in kerogen valorisation process**

Muldma, Kati; Umerenkova, Violetta; Närep, Angelica; Kontson, Tiina; Kaldas, Kristiina Euroanalysis 2025 : XXII European Conference on Analytical Chemistry : Abstract Book 2025 / art. P1-094 ; p. 459 [https://www.euroanalysis2025.com/images/site/abstracts/ABSTRACT\\_EUROANALYSIS\\_2025.V13.pdf](https://www.euroanalysis2025.com/images/site/abstracts/ABSTRACT_EUROANALYSIS_2025.V13.pdf)

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Umerenkova, Violetta; Muldma, Kati; Närep, Angelica; Mets, Birgit; Kaldas, Kristiina EcoBalt2025 : Book of abstracts 2025 / p. 50 [https://ecobalt.ftmc.lt/wp-content/uploads/2025/10/EcoBalt2025\\_Book\\_of\\_Abstracts\\_V1-cor1\\_2025-10-24.pdf](https://ecobalt.ftmc.lt/wp-content/uploads/2025/10/EcoBalt2025_Book_of_Abstracts_V1-cor1_2025-10-24.pdf)

**Kerox technology: potential of piloting the production of medium chain dicarboxylic acids from kerogen in a continuous flow oxidation reactor**

Reinaas, Maria; Kaldas, Kristiina; Muldma, Kati; Uustalu, Jaan Mihkel; Koern, Villem Ödner; Siirde, Kaarel; Silm, Estelle; Mets, Birgit; Kimm, Mariliis; Rõuk, Kristi Future Frontiers : PhD Conference on Emerging Technologies : Book of Abstracts 2025 / p. 29 ; poster 20 [https://tuit.ut.ee/sites/default/files/2025-05/PhD%20Conference%202025%20Book%20of%20Abstracts\\_pub3.pdf](https://tuit.ut.ee/sites/default/files/2025-05/PhD%20Conference%202025%20Book%20of%20Abstracts_pub3.pdf)

**Kerox technology: potential of piloting the production of medium chain dicarboxylic acids from kerogen in a continuous-flow oxidation reactor**

Reinaas, Maria; Kaldas, Kristiina; Muldma, Kati; Uustalu, Jaan Mihkel; Koern, Villem Ödner; Siirde, Kaarel; Silm, Estelle; Mets, Birgit; Kimm, Mariliis; Rõuk, Kristi Future Frontiers : PhD Conference on Emerging Technologies : Book of Abstracts 2025 / p. 29 [Future Frontiers \(PDF\)](#)

**Potential of producing medium chain dicarboxylic acids from kerogen in kukersite in a continuous-flow oxidation reactor**

Reinaas, Maria; Kaldas, Kristiina; Muldma, Kati; Uustalu, Jaan Mihkel; Koern, Villem Ödner; Siirde, Kaarel; Silm, Estelle; Mets, Birgit; Kimm, Mariliis; Rõuk, Kristi ISCRE 28 Abstracts 2024 / 2 p [https://www.iscre28.org/abstracts/abstract\\_587\\_517\\_1.pdf](https://www.iscre28.org/abstracts/abstract_587_517_1.pdf)

**Production of snow and ice melting agents - calcium and magnesium acetates from oil shale industry combustion waste**

Muldma, Kati; Mets, Birgit; Siirde, Kaarel; Siirde, Andres; Reinaas, Maria; Närep, Angelica; Uustalu, Jaan Mihkel; Koern, Villem Ödner; Lopp, Margus; Kaldas, Kristiina ISCRE 28 : Abstracts 2024 / 2 p [https://www.iscre28.org/abstracts/abstract\\_588\\_518\\_1.pdf](https://www.iscre28.org/abstracts/abstract_588_518_1.pdf) <https://www.iscre28.org/abstracts.html>

**Reactivity of aliphatic dicarboxylic acids in wet air oxidation conditions**

Kaldas, Kristiina; Preegel, Gert; Muldma, Kati; Lopp, Margus Industrial & engineering chemistry research 2019 / p. 10855–10863 : ill <https://doi.org/10.1021/acs.iecr.9b01643> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Structural consideration of kukersite from air oxidation**

Kaldas, Kristiina; Uustalu, Jaan Mihkel; Niidu, Allan; Muldma, Kati; Preegel, Gert; Lopp, Margus GSFMT Scientific Conference 2021 : Tartu, June 14-15, 2021 : abstracts 2021 / O 20

**The stability of dicarboxylic acids in subcritical wet air oxidation (wao) condotions [Online resource]**

Kaldas, Kristiina; Preegel, Gert; Muldma, Kati; Lopp, Margus Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [4.-5. veebr. 2019, Tartu : teesid] 2019 / 1 p.: ill <http://fntdk.ut.ee/teesid-2019/>

**A two-step model for assessing the potential of shale-derived chemicals by oxidation of kukersite**

Mets, Birgit; Lopp, Margus; Uustalu, Jaan Mihkel; Muldma, Kati; Niidu, Allan; Kaldas, Kristiina Oil shale 2023 / p. 344-362

**Valorization of industrial waste into biodegradable deicing agents**

**Muldma, Kati; Mets, Birgit; Siirde, Andres; Umerenkova, Violetta; Lopp, Margus; Pantšenko, Nata-Ly; Kaldas, Kristiina**  
EcoBalt2025 : Book of abstracts 2025 / p. 122 [https://ecobalt.ftmc.lt/wp-content/uploads/2025/10/EcoBalt2025\\_Book\\_of\\_Abstracts\\_V1-cor1\\_2025-10-24.pdf](https://ecobalt.ftmc.lt/wp-content/uploads/2025/10/EcoBalt2025_Book_of_Abstracts_V1-cor1_2025-10-24.pdf)

**Wet air oxidation of oil shales: kerogen dissolution and dicarboxylic acid formation**

**Kaldas, Kristiina; Preegel, Gert; Muldma, Kati; Lopp, Margus** ACS omega 2020 / p. 22021–22030

<https://doi.org/10.1021/acsomega.0c01466> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Wet air oxidation of oil shales-factors affecting dicarboxylic acids formation**

**Kaldas, Kristiina; Preegel, Gert; Muldma, Kati; Lopp, Margus** GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 37 <http://fntdk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>