

## **Advances in the structural biology, mechanism, and physiology of cyclopropane fatty acid modifications of bacterial membranes**

Cronan, John E.; **Lukk, Tiit** Microbiology and Molecular Biology Reviews 2022 <https://doi.org/10.1128/membr.00013-22> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Antifungal activity of medicinal mushrooms and optimization of submerged culture conditions for Schizophyllum commune (Agaricomycetes)**

Berikashvili, Violeta; Khardziani, Tamar; Kobakhidze, Aza; **Kulp, Maria; Kuhtinskaja, Maria; Lukk, Tiit**; Gargano, Maria; Venturella, Giuseppe; Kachlishvili, Eka; Metreveli, Eva; Elisashvili, Vladimir; Asatiani, Mikheil International journal of medicinal mushrooms 2023 / p. 1-21 <https://doi.org/10.1615/IntJMedMushrooms.2023049836> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Author correction: First crystal structure of an endo-levanase – the BT1760 from a human gut commensal Bacteroides thetaiotaomicron (Scientific Reports, (2019), 9, 1, (8443), 10.1038/s41598-019-44785-0)**

Ermits, Karin; **Eek, Priit; Lukk, Tiit**; Visnapuu, Triinu; Alamäe, Tiina Scientific reports 2019 / art. 17512, 1 p. <https://doi.org/10.1038/s41598-019-54274-z> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **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](#)

## **Bioprocessing of waste biomass for sustainable product development and minimizing environmental impact**

**Usmani, Zeba**; Sharma, Minaxi; Awasthi, Abhishek Kumar; Sivakumar, Nallusamy; **Lukk, Tiit** Bioresource technology 2021 / art. 124548, 12 p. : ill <https://doi.org/10.1016/j.biortech.2020.124548> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Bioremediation of lindane contaminated soil: Exploring the potential of Actinobacterial strains**

**Usmani, Zeba; Kulp, Maria; Lukk, Tiit** Chemosphere 2021 / art. 130468, 12 p. : ill <https://doi.org/10.1016/j.chemosphere.2021.130468> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Biosafe sustainable antimicrobial encapsulation and coatings for targeted treatment and infections prevention: Preparation for another pandemic**

**Usmani, Zeba; Lukk, Tiit**; Mohanachandran, Dileep Kumar Current Research in Green and Sustainable Chemistry 2021 / art. 100074 <https://doi.org/10.1016/j.crgsc.2021.100074> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **CERNi esindajad käisid TalTechis : kas Eesti saab liikmeks?**

Mente et Manu 2023 / lk. 10 [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

## **Characterization of bacterial dye-decolorizing peroxidases = Bakteriaalsete värvi pleegitavate peroksüdaaside iseloomustamine**

**Pupart, Hegne** 2024 [https://www.ester.ee/record=b5713840\\*est](https://www.ester.ee/record=b5713840*est) <https://digikogu.taltech.ee/et/Item/d40055e9-2600-4e49-8aec-3f561267772e> <https://doi.org/10.23658/taltech.72/2024>

## **Characterization of organosolv lignins and their application in the preparation of aerogels**

**Jõul, Piia; Ho, Tran T.; Kallavus, Urve; Konist, Alar; Leiman, Kristiina; Salm, Olivia-Stella; Kulp, Maria; Koel, Mihkel; Lukk, Tiit** Materials 2022 / art. 2861 <https://doi.org/10.3390/ma15082861> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Characterization of the ensemble of lignin-remodeling DyP-type Peroxidases from Streptomyces coelicolor A3(2)**

**Pupart, Hegne; Jõul, Piia; Bramanis, Melissa Ingela; Lukk, Tiit** Energies 2023 / art. 1557, 15 p. : ill <https://doi.org/10.3390/en16031557> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Chloromethylation of lignin as a route to functional material with catalytic properties in cross-coupling and click reactions**

**Mohan, Mahendra Kothottil; Silenko, Oleg; Krasnou, Illia; Volobujeva, Olga; Kulp, Maria; Ošeka, Maksim; Lukk, Tiit; Karpichev, Yevgen** ChemSusChem 2024 / art. e202301588 <https://doi.org/10.1002/cssc.202301588>

## **Chloromethylation of lignin as a route to functional material with catalytic properties in cross-coupling and click reactions : preprint**

**Mohan, Mahendra Kothottil; Silenko, Oleg; Krasnou, Illia; Volobujeva, Olga; Kulp, Maria; Ošeka, Maksim; Lukk, Tiit; Karpichev, Yevgen** ChemRxiv 2023 / 20 p <https://doi.org/10.26434/chemrxiv-2023-w98xc>

## **Developments in enzyme and microalgae based biotechniques to remediate micropollutants from aqueous systems - a review**

**Usmani, Zeba; Sharma, Minaxi; Lukk, Tiit; Karpichev, Yevgen** Critical reviews in environmental science and technology 2022 / p. 1684-1729 <https://doi.org/10.1080/10643389.2020.1862551> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

[at WOS](#)

**Dye-decolorizing peroxidase of *Streptomyces coelicolor* (ScDyPB) exists as a dynamic mixture of kinetically different oligomers**

Pupart, Hegne; Vastšjonok, Darja; Lukk, Tiit; Väljamäe, Priit ACS Omega 2024 / p. 3866-3876 : ill

<https://doi.org/10.1021/acsomega.3c07963> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Dye-decolorizing peroxidase of *Thermobifida* halotolerance displays complex kinetics with both substrate inhibition and apparent positive cooperativity**

Pupart, Hegne; Lukk, Tiit; Väljamäe, Priit Archives of biochemistry and biophysics 2024 / art. 109931, 11 p. : ill

<https://doi.org/10.1016/j.abb.2024.109931>

**Dye-decolorizing peroxidases from *Streptomyces coelicolor* show organosolv lignin remodeling activity**

Pupart, Hegne; Ojangu, Eve-Ly; Zovo, Kairit; Lukk, Tiit FEBS Open Bio 2021 / p. 63

<https://febs.onlinelibrary.wiley.com/doi/epdf/10.1002/2211-5463.13206> <https://doi.org/10.1002/2211-5463.13206>

**Eesti teadlane on kotijooksu maailmameister**

Lukk, Tiit Eesti Päevaleht 2023 / Lk. 3 <https://dea.digar.ee/article/eestipaevaleht/2023/04/05/3.5>

**Eesti uus plaan paneb ettevõtluspisiku üles leidnud ülikoole kahtlema**

Saarmann, Tanel Eesti Päevaleht 2023 [Eesti uus plaan paneb ettevõtluspisiku üles leidnud ülikoole kahtlema](#) [Eesti uus plaan paneb ettevõtluspisiku üles leidnud ülikoole kahtlema](#)

**Enzymatic conversion of hydrolysis lignin - a potential biorefinery approach**

Khan, Sharib; Puss, Kait Kaarel; Lukk, Tiit; Loog, Mart; Kikas, Timo; Salmar, Siim Energies 2023 / art. 370, 13 p. : ill

<https://doi.org/10.3390/en16010370> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**First crystal structure of a bacterial endo-levanase**

Ermits, Karin; Eek, Priit; Lukk, Tiit; Visnapuu, Triinu; Alamäe, Tiina FEBS3+ conference of Latvian, Lithuanian and Estonian Biochemical Societies : abstract book : Riga, Latvia, 17-19 June 2019 2019 / p. 22

**First crystal structure of an endo-levanase - the BT1760 from a human gut commensal *Bacteroides thetaiotaomicron***

Ermits, Karin; Eek, Priit; Lukk, Tiit Scientific reports 2019 / art. 8443, 13 p. : ill <https://doi.org/10.1038/s41598-019-44785-0> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Higher AMPK activation in mouse oxidative compared with glycolytic muscle does not correlate with LKB1 or CaMKKb expression**

Bernasconi, Romain; Soodla, Kārol; Sirp, Alex; Zovo, Kairit; Kuhtinskaja, Maria; Lukk, Tiit; Vendelin, Marko; Birkedal, Rikke

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**Industrial doctorate students to solve challenges facing Eesti Energia**

news.err.ee 2023 [Industrial doctorate students to solve challenges facing Eesti Energia](#)

**Jarek Kurnitski : teadus peab toetama läbimurret kodude ja töökohtade täisrenoveerimisel**

Kurnitski, Jarek; Aav, Riina rohe.geenius.ee 2024 [Jarek Kurnitski: teadus peab toetama läbimurret kodude ja töökohtade täisrenoveerimisel](#)

**Koalitsioonilepe näeb ette rohkem tasulist kõrgharidust. Mida tähendab see tudengitele?**

Palgi, Greete Päevaleht epl.delfi.ee 2023 / Lk. 7 [Koalitsioonilepe näeb ette rohkem tasulist kõrgharidust. Mida tähendab see tudengitele?](#)

**Kolm Eesti ülikooli ja rida ettevõtteid loovad täiesti uusi puidupõhiseid materjale**

Kartau, Mari maaleht.delfi.ee 2023 [Kolm Eesti ülikooli ja rida ettevõtteid loovad täiesti uusi puidupõhiseid materjale](#) [Kolm Eesti ülikooli ja rida ettevõtteid loovad täiesti uusi puidupõhiseid materjale](#)

**Lignocellulosic biorefineries : the current state of challenges and strategies for efficient commercialization**

Usmani, Zeba; Sharma, Minaxi; Awasthi, Abhishek Kumar; Lukk, Tiit; Tuohy, Maria G.; Gong, Liang; Nguyen-Tri, Phuong; Goddard, Alan D.; Bill, Roslyn M.; Nayak, S. Chandra; Gupta, Vijai Kumar Renewable and sustainable energy reviews 2021 / art. 111258, 14 p. : ill <https://doi.org/10.1016/j.rser.2021.111258> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Mis tooks igast maailma sadamast vähemalt ühe eestlase koju tagasi? : kojutulnu kõne Eesti Vabariigi 100. sünnipäevaks peetud aktusel**

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[http://www.ester.ee/record=b1242496\\*est](http://www.ester.ee/record=b1242496*est) [https://artiklid.elnet.ee/record=b2836024\\*est](https://artiklid.elnet.ee/record=b2836024*est)

**Muutus TalTechi rektoraadis : teadusprorektoriks saab Tiit Lukk, Maarja Kruusmaa pühendub uurimistöole**

digi.geenius.ee 2023 [Muutus TalTechi rektoraadis : teadusprorektoriks saab Tiit Lukk, Maarja Kruusmaa pühendub uurimistöole](#)

## Preparation and characterization of lignin-derived carbon aerogels

Jõul, Piia; Järvik, Oliver; Lees, Heidi; Kallavus, Urve; Koel, Mihkel; Lukk, Tiit *Frontiers in chemistry* 2023 / art. 1326454  
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## Puidukeemia - hoogu võttev tuleviku tehnoloogia?

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## Saepuruvõie võib jõuda kodukööki

Imeline Teadus 2023 / lk. 20 : fot [https://www.ester.ee/record=b2747925\\*est](https://www.ester.ee/record=b2747925*est)

## 105-aastane TalTech promoveerib aastapäevaaktusel 58 doktorit

**105-aastane TalTech promoveerib aastapäevaaktusel 58 doktorit = 58 научных сотрудников Таллиннского технического университета получают докторскую степень**

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## Structural and mechanistic investigations of protein S-glycosyltransferases

Fujinami, Daisuke; Garcia de Gonzalo, Chanthai V.; Biswas, Subhanip; Hao, Yue; Wang, Huan; Garg, Neha; Lukk, Tiit; Nair, Satish K.; Donk, Wilfried A. van der *Cell Chemical Biology* 2021 / p. 1740-1749 <https://doi.org/10.1016/j.chembiol.2021.06.009>

## Substitution of the Methionine Axial Ligand of the T1 copper for the fungal-like Phenylalanine Ligand (M298F) causes local structural perturbations that lead to thermal instability and reduced catalytic efficiency of the small Laccase from *Streptomyces coelicolor* A3(2)

Zovo, Kairit; Pupart, Hegne; Van Wieren, Arie; Gillilan, Richard E.; Lukk, Tiit *ACS omega* 2022 / p. 6184-6194  
<https://doi.org/10.1021/acsomega.1c06668> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## Synthesis and antibacterial properties of lignin-based amino and quaternary ammonium surfactants

Kothottil Mohan, Mahendra; Duvanova, Ella; Lukk, Tiit; Karpichev, Yevgen *5th International Caparica Symposium on Nanoparticles, Nanomaterials and Applications 2022 : book of abstracts 2022* / p. 208

## Synthesis and antibacterial properties of lignin-based quaternary ammonium and phosphonium salts

Mohan, Mahendra Kothottil; Kaur, Harleen; Duvanova, Ella; Rosenberg, Merilin; Dahlem, Marcos; Ivask, Angela; Raimundo, Jean-Manuel; Lukk, Tiit; Karpichev, Yevgen *International Conference EcoBalt 2023 "Chemicals&Environment"* 2023 / 2 p.  
<https://doi.org/10.3390/proceedings2023092058>

## Synthesis and antibacterial properties of novel quaternary ammonium lignins

Mohan, Mahendra Kothottil; Kaur, Harleen; Rosenberg, Merilin; Duvanova, Ella; Lukk, Tiit; Ivask, Angela; Karpichev, Yevgen *ACS omega* 2024 / p. 39134-39145 : ill <https://doi.org/10.1021/acsomega.4c06000> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## Tallinna Tehnikaülikool promoveeris 58 doktorit

Elektrala 2023 / lk. 10 <https://dea.digar.ee/article/AKelektrala/2023/10/0/10.2> [https://www.ester.ee/record=b1240496\\*est](https://www.ester.ee/record=b1240496*est)

## TalTechi teadusprorektor Tiit Lukk: vaatan oma otsustes tulevikku

Lukk, Tiit *digi.geenius.ee* 2023 [TalTechi teadusprorektor Tiit Lukk: vaatan oma otsustes tulevikku](#)

## Tehnikaülikool rakendab rohepöörde veduriks sünergia

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## Tehnikaülikooli uus teadusprorektor Tiit Lukk: soovin näha tõhusamat koostööd Eesti ettevõtetega

Lukk, Tiit *postimees.ee* 2023 [Tehnikaülikooli uus teadusprorektor Tiit Lukk: soovin näha tõhusamat koostööd Eesti ettevõtetega](#)

## Tiit Lukk: vaatan oma otsustes tulevikku

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## Tudengite enneaegne noppimine koolipingist murrab meie järelkasvu

Lukk, Tiit *postimees.ee* 2023 [Tudengite enneaegne noppimine koolipingist murrab meie järelkasvu](#)

## Utilization of phenolic lignin dimer models for the quantification of monolignols in biomass and in its derived organosolv lignins via thioacidolysis and GC-MS analysis

Ho, Tran Thi Thuy; Salm, Olivia-Stella; Lukk, Tiit; Kulp, Maria *Analytical methods* 2025 / p. 3283-3289  
<https://doi.org/10.1039/D5AY00073D>

Üks küsimus : milline on teie jaoks ideaalne ülikool?

**Коалиционное соглашение предусматривает платное высшее образование. Что это будет означать для студентов?**

Palgi, Greete rus.delfi.ee 2023 [Коалиционное соглашение предусматривает платное высшее образование. Что это будет означать для студентов?](#)