

**Anchimeric assistance in the case of vicinal dimesylate : formation of enantiomeric or meso-biomorpholine**  
Kanger, Tõnis; Laars, Marju; Kriis, Kadri; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Pehk, Tõnis; Lopp, Margus Synthesis 2006 / 11, p. 1853-1857  
[https://www.researchgate.net/publication/239729268\\_Anchimeric\\_Assistance\\_in\\_the\\_Case\\_of\\_Vicinal\\_Dimesylate\\_Formation\\_of\\_Enantiomeric\\_or\\_meso\\_-Bimorpholine](https://www.researchgate.net/publication/239729268_Anchimeric_Assistance_in_the_Case_of_Vicinal_Dimesylate_Formation_of_Enantiomeric_or_meso_-Bimorpholine)

**Asendatud (2S,2'S)-bimorfoliinide süntees**

Lippur, Kristin; Kriis, Kadri; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Pehk, Tõnis; Kanger, Tõnis XXX Eesti keemiapäevad : teaduskonverentsi teesid = 30th Estonian Chemistry Days : abstracts of scientific conference 2007 / lk. 82-83

**Asymmetric synthesis of 2-aryl-5-oxotetrahydrofuran-2-carboxylic acids**

Jõgi, Artur; Paju, Anne; Pehk, Tõnis; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Kanger, Tõnis; Lopp, Margus Synthesis 2006 / 18, p. 3031-3036 : ill <https://www.thieme-connect.com/products/ejournals/abstract/10.1055/s-2006-950193>

**Asymmetric synthesis of 4'-C-benzyl-2',3'-dideoxynucleoside analogues from 3-benzyl-2-hydroxy-2-cyclopenten-1-one**

Jõgi, Artur; Ilves, Marit; Paju, Anne; Pehk, Tõnis; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Lopp, Margus Tetrahedron : asymmetry 2008 / 5, p. 628-634 [https://www.researchgate.net/publication/232406405\\_Asymmetric\\_synthesis\\_of\\_4'-C-benzyl-2'3'-dideoxynucleoside\\_analogues\\_from\\_3-benzyl-2-hydroxy-2-cyclopenten-1-one](https://www.researchgate.net/publication/232406405_Asymmetric_synthesis_of_4'-C-benzyl-2'3'-dideoxynucleoside_analogues_from_3-benzyl-2-hydroxy-2-cyclopenten-1-one)

**Bimorpholine as an organocatalyst for asymmetric aldol condensation**

Kriis, Kadri; Kanger, Tõnis; Laars, Marju; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Pehk, Tõnis; Lopp, Margus International Conference on Organic Synthesis : Tallinn, Estonia, June 25-29, 2006 : program and abstracts 2006 / p. 104

**Bimorpholine-mediated enantioselective intramolecular and intermolecular aldol condensation**

Kanger, Tõnis; Kriis, Kadri; Laars, Marju; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Pehk, Tõnis; Lopp, Margus Journal of organic chemistry 2007 / p. 5168-5173 <https://pubs.acs.org/doi/10.1021/jo070524i>

**Capillary gas chromatographic analysis of the monoterpene fraction of Estonian conifer needle oil**

Orav, Anne; Kailas, Tiiu; Liiv, Milana; Aav, Riina Proceedings of the Estonian Academy of Sciences. Chemistry 1995 / 2/3, p. 149-155

**Chemical investigation of the essential oil from berries and needles of common juniper (*Juniperus communis* L.) growing wild in Estonia**

Orav, Anne; Kailas, Tiiu; Müürisepp, Aleksander-Mati Natural product research 2010 / 19, p. 1789-1799

**Comparative analysis of the composition of essential oils and supercritical carbon dioxide extracts from the berries and needles of Estonian juniper (*Juniperus communis* L.)**

Orav, Anne; Koel, Mihkel; Kailas, Tiiu; Müürisepp, Aleksander-Mati Procedia chemistry 2010 / p. 161-167

**Comparative analysis of the essential oil and supercritical carbon dioxide extracts of *Juniperus communis* L. berries and needles from Estonia**

Orav, Anne; Koel, Mihkel; Kailas, Tiiu; Müürisepp, Aleksander-Mati NoSSS2009 : 5th Conference on Separation and Related Techniques by Nordic Separation Science Society : 26-29 August, 2009, Tallinn University of Technology, Estonia : abstract book and program 2009 / p. 123

**Composition of blackcurrant aroma isolated from leaves, buds, and berries of *Ribes nigrum* L.**

Orav, Anne; Kailas, Tiiu; Müürisepp, Aleksander-Mati Proceedings of the Estonian Academy of Sciences. Chemistry 2002 / 4, p. 225-234 : ill

**Composition of essential oil of aerial parts of *Chamomilla suaveolens* from Estonia**

Orav, Anne; Sepp, Janne; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Arak, Elmar; Raal, Ain Natural product communications 2010 / 1, p. 133-136

**Composition of the essential oil from *Achillea millefolium* L. from Estonia**

Orav, Anne; Kailas, Tiiu; Ivask, Kaire Journal of essential oil research 2001 / p. 290-294

**Composition of the essential oil from wild majoram (*Origanum vulgare* L. ssp. *vulgare*) of different origins**

Ivask, Kaire; Orav, Anne; Kailas, Tiiu; Raal, Ain; Arak, Elmar; Paaver, Urve Journal of essential oil research 2005 / 4, p. 384-387

**Composition of the essential oil of *Artemisia absinthium* L. of different geographical origin**

Orav, Anne; Raal, Ain; Arak, Elmar; Müürisepp, Aleksander-Mati; Kailas, Tiiu Proceedings of the Estonian Academy of Sciences. Chemistry 2006 / 3, p. 155-165 : ill

**Composition of the essential oil of dill, celery, and parsley from Estonia**

Orav, Anne; Kailas, Tiiu; Jegorova, Anna Proceedings of the Estonian Academy of Sciences. Chemistry 2003 / 4, p. 147-154 : ill

### **Composition of the essential oil of *Levisticum officinale* W.D.J. Koch from some European countries**

Raal, Ain; Arak, Elmar; **Orav, Anne; Kailas, Tiiu; Müürisepp, Aleksander-Mati** Journal of essential oil research 2008 / p. 318-322  
[https://www.researchgate.net/publication/254247369\\_Composition\\_of\\_the\\_Essential\\_Oil\\_of\\_Levisticum\\_officinale\\_WDJ\\_Koch\\_from\\_Some\\_European\\_Countries](https://www.researchgate.net/publication/254247369_Composition_of_the_Essential_Oil_of_Levisticum_officinale_WDJ_Koch_from_Some_European_Countries)

### **Composition of the oil and supercritical fluid CO<sub>2</sub> extract of sweet gale (*Myrica gale* L.) fruits**

**Sokolova, Maia; Orav, Anne; Koel, Mihkel; Kailas, Tiiu; Müürisepp, Aleksander-Mati** Journal of essential oil research 2005 / March/April, p. 188-191 : ill <https://www.tandfonline.com/doi/abs/10.1080/10412905.2005.9698871>

### **Composition of the oil from waste tires. 1, Fraction boiling at up to 160C**

Orav, Anne; Kailas, Tiiu; Müürisepp, Aleksander-Mati; **Kann, Jüri** Proceedings of the Estonian Academy of Sciences. Chemistry 1999 / 1, p. 30-39

### **Composition of the oil from waste tires. 2, Fraction boiling at 160-180C**

Orav, Anne; Kailas, Tiiu; Müürisepp, Aleksander-Mati; **Kann, Jüri** Proceedings of the Estonian Academy of Sciences. Chemistry 1999 / 3, p. 136-140

### **Content and composition of essential oils in some Asteraceae species**

Raal, Ain; Kaur, Helen; **Orav, Anne; Arak, Elmar; Kailas, Tiiu; Müürisepp, Aleksander-Mati** Proceedings of the Estonian Academy of Sciences 2011 / 1, p. 55-63

### **Eesti koriandri, salvei ja teekummeli eeterliku õli koostise võrdlus nende välismaiste analoogidega**

**Orav, Anne; Kailas, Tiiu;** Jeršova, M.; Raal, Ain; Arak, Elmar XXVIII Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 28th Estonian Chemistry Days : abstracts of scientific conference 2002 / lk. 97

### **Eesti männi ja kuuse okkaõli monoterpeense osa kapillaargaasikromatograafiline analüüs**

Orav, Anne; Kailas, Tiiu; **Liiv, Milana;** Aav, Riina XVI Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 16th Estonian chemistry days : abstracts of scientific conference 1995 / lk. 96-98

### **Eesti ravimtaimede eeterlike õlide koostisest**

Orav, Anne; Kailas, Tiiu XXIII Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid 1997 / lk. 92

### **Eestis kasvava hariliku kadaka okaste ja marjade eeterliku õli koostise määramine**

**Orav, Anne; Kailas, Tiiu; Müürisepp, Aleksander-Mati** XXX Eesti keemiapäevad : teaduskonverentsi teesid = 30th Estonian Chemistry Days : abstracts of scientific conference 2007 / lk. 107-108

### **Effect of storage on the essential oil composition of *Piper nigrum* L. fruits of different ripening states**

**Orav, Anne; Stulova, Irina; Kailas, Tiiu; Müürisepp, Aleksander-Mati** Journal of agricultural and food chemistry 2004 / p. 2582-2586 <https://pubmed.ncbi.nlm.nih.gov/15113161/>

### **Elemental composition of humic and fulvic acids in the epipedon of some Estonian solids**

Reintam, Loit; **Kann, Jüri;** Kailas, Tiiu; Kährik, Raja Proceedings of the Estonian Academy of Sciences. Chemistry 2000 / 3, p. 131-144 [https://artiklid.elnet.ee/record=b2397615\\*est](https://artiklid.elnet.ee/record=b2397615*est)

### **Enantioselective synthesis of Wieland-Miescher ketone through biomorpholine-catalyzed organocatalytic aldol condensation**

**Kriis, Kadri; Kanger, Tõnis; Laars, Marju; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Pehk, Tõnis; Lopp, Margus** Synlett 2006 / 11, p. 1699-1702 [https://www.researchgate.net/publication/237887633\\_Enantioselective\\_Synthesis\\_of\\_Wieland-Miescher\\_Ketone\\_through\\_Bimorpholine-Catalyzed\\_Organocatalytic\\_Aldol\\_Condensation](https://www.researchgate.net/publication/237887633_Enantioselective_Synthesis_of_Wieland-Miescher_Ketone_through_Bimorpholine-Catalyzed_Organocatalytic_Aldol_Condensation)

### **Extraction and quantification of hybrid carrageenans from the biomass of the red algae *Furcellaria lumbricalis* and *Coccolytus truncatus***

Tuvikene, Rando; Truus, Kalle; **Vaher, Merike; Kailas, Tiiu;** Martin, Georg; Kersen, Priit Proceedings of the Estonian Academy of Sciences. Chemistry 2006 / 1, p. 40-53 : ill

### **Investigation of the aroma compounds of berries**

Kuningas, Kai; **Kailas, Tiiu;** Rang, Silvia; **Siimer, Enn; Kann, Jüri** Kemia-kemi = [Finnish chemistry] 1991 / p. 951  
[https://www.ester.ee/record=b1201067\\*est](https://www.ester.ee/record=b1201067*est)

### **Koirohu (*Artemisia absinthium* L.) eeterliku õli koostis**

**Orav, Anne;** Raal, Ain; Arak, Elmar; **Kailas, Tiiu** XXIX Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 29th Estonian Chemistry Days : abstracts of scientific conference 2005 / lk. 75-76

### **3'hüdrosü-4'-asendatud-2'-deoksünukleosidi analoogide süntees**

**Jõgi, Artur; Paju, Anne;** Kailas, Tiiu; Müürisepp, Aleksander-Mati; **Lopp, Margus** XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 28 : ill

### **Käeliste tetrahüdrofuraani analoogide süntees**

**Niidu, Allan; Paju, Anne;** Kislitsõn, Konstantin; **Kailas, Tiiu; Müürisepp, Aleksander-Mati; Pehk, Tõnis; Lopp, Margus** XXX Eesti keemiapäevad : teaduskonverentsi teesid = 30th Estonian Chemistry Days : abstracts of scientific conference 2007 / lk. 104-105

### **Organocatalytic asymmetric addition of malonates to unsaturated 1,4-diketones**

**Žari, Sergei; Kailas, Tiiu; Kudrjašova, Marina; Öeren, Mario; Järving, Ivar; Tamm, Toomas; Lopp, Margus; Kanger, Tõnis** Beilstein journal of organic chemistry 2012 / p. 1452-1457 : ill <https://pubmed.ncbi.nlm.nih.gov/23019480/>

### **Stereoselective synthesis of 1-methyl-1,2-and 1,3-cyclopentane diols via $\gamma$ -lactones**

**Niidu, Allan; Paju, Anne; Müürisepp, Aleksander-Mati; Järving, Ivar; Kailas, Tiiu; Pehk, Tõnis; Lopp, Margus** Chemistry of heterocyclic compounds 2013 / p. 1751-1760 : ill <https://doi.org/10.1007/s10593-013-1206-4> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Structural and compositional characteristics of gelling galactan from the red alga *Ahnfeltia tobuchiensis* (Ahnfeltiales, the sea of Japan)**

**Truus, Kalle; Tuvikene, Rando; Vaher, Merike; Kailas, Tiiu; Toomik, Peeter; Pehk, Tõnis** Carbohydrate polymers 2005 / [6] p. : ill. [Ilmumas?] [https://www.researchgate.net/publication/229420426\\_Structural\\_and\\_compositional\\_characteristics\\_of\\_gelling\\_galactan\\_from\\_the\\_red\\_alga\\_Ahnfeltia\\_tobuchiensis\\_Ahnfeltiales\\_the\\_Sea\\_of\\_Japan](https://www.researchgate.net/publication/229420426_Structural_and_compositional_characteristics_of_gelling_galactan_from_the_red_alga_Ahnfeltia_tobuchiensis_Ahnfeltiales_the_Sea_of_Japan)

### **Structural and compositional characteristics of gelling galactan from the red alga *Ahnfeltia tobuchiensis* (Ahnfeltiales, the Sea of Japan)**

**Truus, Kalle; Tuvikene, Rando; Vaher, Merike; Kailas, Tiiu; Toomik, Peeter; Pehk, Tõnis** Carbohydrate polymers 2006 / p. 130-135 : ill [https://www.sciencedirect.com/translate/goog/science/article/abs/pii/S0144861705003759?\\_x\\_tr\\_sl=en&\\_x\\_tr\\_tl=et&\\_x\\_tr\\_hl=et&\\_x\\_tr\\_pto=sc](https://www.sciencedirect.com/translate/goog/science/article/abs/pii/S0144861705003759?_x_tr_sl=en&_x_tr_tl=et&_x_tr_hl=et&_x_tr_pto=sc)

### **Structural constraints for C<sub>2</sub>-symmetric heterocyclic organocatalysts in asymmetric aldol reactions**

**Laars, Marju; Kriis, Kadri; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Pehk, Tõnis; Kanger, Tõnis; Lopp, Margus** Tetrahedron : asymmetry 2008 / p. 641-645 [https://www.researchgate.net/publication/244242681\\_Structural\\_constraints\\_for\\_C\\_2-symmetric\\_heterocyclic\\_organocatalysts\\_in\\_asymmetric\\_aldol\\_reactions](https://www.researchgate.net/publication/244242681_Structural_constraints_for_C_2-symmetric_heterocyclic_organocatalysts_in_asymmetric_aldol_reactions)

### **Structure and thermal stability of pyruvated carrageenans from the red alga *Coccolytus truncatus***

**Tuvikene, Rando; Truus, Kalle; Robal, Marju; Pehk, Tõnis; Kailas, Tiiu; Vaher, Merike; Paalme, Tiina** Carbohydrate research 2009 / p. 788-794 : ill <https://www.sciencedirect.com/science/article/pii/S0008621509000366>

### **Studies of the essential oil composition of some Estonian herbs**

**Orav, Anne; Kailas, Tiiu** 23rd Estonian Chemistry Days : abstracts of scientific conference 1997 / p. 101

### **Study of essential oil from medicinal plants using gas chromatography and mass spectrometry**

**Raal, Ain; Arak, Elmar; Pudersell, K.; Orav, Anne; Kailas, Tiiu** European journal of pharmaceutical sciences 2003 / Supplement 1, XVII Helsinki University Congress of Drug Research, p. P2.1

### **Synthesis of (2S,2'S)-bimorpholine N,N'-quaternary salts as chiral phase transfer catalysts**

**Lippur, Kristin; Kanger, Tõnis; Kriis, Kadri; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Pehk, Tõnis; Lopp, Margus** Tetrahedron : asymmetry 2007 / p. 137-141

### **Synthesis of 3-phenyl-2-hydroxy-2-cyclopenten-1-ones and their asymmetric oxidation**

**Jõgi, Artur; Paju, Anne; Pehk, Tõnis; Müürisepp, Aleksander-Mati; Kailas, Tiiu; Lopp, Margus** International Conference on Organic Synthesis : Tallinn, Estonia, June 25-29, 2006 : program and abstracts 2006 / p. 100

### **Synthesis of 4'-aryl-2',3'-dideoxynucleoside analogues**

**Jõgi, Artur; Paju, Anne; Pehk, Tõnis; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Lopp, Margus** Tetrahedron 2009 / p. 2959-2965 <https://www.sciencedirect.com/science/article/abs/pii/S0040402009001914>

### **Synthesis of 5,5'-disubstituted bimorpholines**

**Lippur, Kristin; Elmers, Cindy; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Pehk, Tõnis; Kanger, Tõnis; Lopp, Margus** Synthetic communications 2010 / p. 266-281

### **Synthesis of 5,5'-disubstituted biomorpholines**

**Lippur, Kristin; Elmers, Cindy; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Pehk, Tõnis; Kanger, Tõnis; Lopp, Margus** Synthetic communications 2009 / p. 1-16

### **Synthesis of chiral enantioenriched tetrahydrofuran derivatives**

**Niidu, Allan; Paju, Anne; Müürisepp, Aleksander-Mati; Kailas, Tiiu; Pehk, Tõnis; Lopp, Margus** Arkivoc 2009 / XIV, p. 39-52 <https://www.arkat-usa.org/get-file/32420/>

### **Synthesis of chiral FHF-analogues**

Niidu, Allan; Kislitsõn, Konstantin; Paju, Anne; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Pehk, Tõnis; Lopp, Margus *Balticum Organicum Syntheticum : International Conference on Organic Synthesis* : June 29 - July 2, 2008, Vilnius : program and abstract book 2008 / ? p

### **Synthesis of cyclopetane hydroxy derivatives**

Niidu, Allan; Paju, Anne; Kailas, Tiiu; Müürisepp, Aleksander-Mati; Pehk, Tõnis; Lopp, Margus *BOS 2012 : International Conference on Organic Synthesis* : July 1-4, 2012, Tallinn, Estonia : program and abstracts 2012 / p. 142

### **Synthesis of novel acyclic nucleoside analogues with anti-retroviral activity**

Paju, Anne; Päri, M.; Selyutina, Anastasia; Žusinaite, Eva; Merits, Andres; Pehk, Tõnis; Siirde, Kaarel; Müürisepp, Aleksander-Mati; Kailas, Tiiu; Lopp, Margus *Nucleosides, nucleotides and nucleic acids 2010* / 9, p. 707-720  
<https://www.tandfonline.com/doi/pdf/10.1080/15257770.2010.501776>

### **The extraction, structure, and gelling properties of hybrid galactan from the red alga *Furcellaria lumbricalis* (Balti Sea, Estonia)**

Tuvikene, Rando; Truus, Kalle; Robal, Marju; Volobujeva, Olga; Mellikov, Enn; Pehk, Tõnis; Kollist, Andres; Kailas, Tiiu; Vaher, Merike *Journal of applied phycology* 2009 / [13] p.: ill <https://link.springer.com/article/10.1007/s10811-009-9425-x>

### **The extraction, structure, and gelling properties of hybrid galactan from the red alga *Furcellaria lumbricalis* (Baltic Sea, Estonia)**

Tuvikene, Rando; Truus, Kalle; Robal, Marju; Volobujeva, Olga; Mellikov, Enn; Pehk, Tõnis; Kollist, Andres; Kailas, Tiiu; Vaher, Merike *Journal of applied phycology* 2010 / p. 51-63 : ill <https://link.springer.com/article/10.1007/s10811-009-9425-x>

### **Trans-tsükloheksaanuurea VCD analüüs tahkes ja vedelas faasis : [posteritekanne]**

Peterson, Anna; Öeren, Mario; Shmatova, Elena; Kailas, Tiiu; Aav, Riina *XXXIII Eesti Keemiapäevad : teaduskonverentsi teesid* 2013

### **Variation in the composition of the essential oil of commercial *Valeriana officinalis* L. roots from different countries**

Raal, Ain; Arak, Elmar; Orav, Anne; Kailas, Tiiu; Müürisepp, Aleksander-Mati *Journal of essential oil research* 2008 / 6, p. 524-529  
[https://www.researchgate.net/publication/241714499\\_Variation\\_in\\_the\\_Composition\\_of\\_the\\_Essential\\_Oil\\_of\\_Commercial\\_Valeriana\\_Officinalis\\_L\\_Roots\\_from\\_Different\\_Countries](https://www.researchgate.net/publication/241714499_Variation_in_the_Composition_of_the_Essential_Oil_of_Commercial_Valeriana_Officinalis_L_Roots_from_Different_Countries)

### **Variation in the composition of the essential oil of *Valeriana officinalis* L. roots from Estonia**

Raal, Ain; Orav, Anne; Arak, Elmar; Kailas, Tiiu; Müürisepp, Aleksander-Mati *Proceedings of the Estonian Academy of Sciences. Chemistry* 2007 / 2, p. 67-74

### **Volatile constituents of *Matricaria matricaroides***

Orav, Anne; Kailas, Tiiu; Kann, Jüri *Journal of essential oil research* 1999 / p. 243-245