

MarvinSketch

Ari Myllyviita FM, yhteisöpedagogi (AMK)

ari.myllyviita@helsinki.fi

Kemian ja matematiikan lehtori

Helsingin yliopiston Viikin normaalikoulu

Sisältö

1. Lataaminen
2. Asentaminen
3. Lisenssikuvio
4. ... Ohjeet
5. ... Ohjelman käyttö



MarvinSketch

MarvinSketch

- Ajankohtaista
- MarvinSketchin ominaisuudet
- Koulutukset
- Ohjeet
- Tutkimus: MarvinSketchin omaksuminen
- Diasarjat
- [+ Luo sivu](#)

Sivukartta

Haku

Järjestely

MarvinSketch



Luo sisältöä

bit.ly/marvinsketch



Tämän sivuston tavoitteena on tarjota tukea kemian opettajien MarvinSketch-käyttönotolle. Sivustolta löydät mm.

- koulutuskalenterin
- ohjevideoita
- koulutusten aineistoja.

Mukavaa harjoittelua.

Ylläpitäjät: Ari Myllyviita & Johannes Perna

Twitter-koonti



Twiiatkaa hashtagilla **#marvinsketchsuomi**.

Twiiiteinä esim. kuvakaappauksia kommenttien kera. Kootaan myös aineistoa erilaisista tilanteista, ongelmista, ideoista, löydyistä.

#marvinsketchsuomi



Ari Myllyviita
@myllyviita

#marvinsketchsuomi -koulutusta



Search for anything on this site...

FLIPPED CLASSROOM

MARVINSKETCH

OPS

PIRE

ETUSIVU

KEMIAN OPETUS VIIKISSÄ JA TVT – 21.8.2014

ORBITAALI -SARJA – LUKION KEMIAN SÄHKÖISET MUOKATTAVAT OPPIKIRJAT (20.6.16)

MARVINSKETCH

MarvinSketch – lukion kemian opetuksen onni vai onnettomuus – OSA 6: MarvinSketch ja isomerian opetus

5 months ago admin

Muuttuuko isomerian opetus MarvinSketch -ohjelman myötä

Abitti-järjestelmän MarvinSketch- ohjelma asettaa isomerian opiskelulle ja ainakin sen osaamisen sähköiselle arvioinnille haasteita. Ohjelma kun "osaa" isomerian ja antaa valmiiksi mm. asymmetria-keskuksen (jos 2D-

Viimeisimmät artikkelit

Computex-tapahtuma Taipeiissa 6.-8.6.2018

Matka Computex 2018 -tapahtumaan Taiwaniin – Digiloikkaan visioita ja käytännön ideoita kaksi vuotta edellä aikaansa

MarvinSketch – lukion kemian opetuksen onni vai onnettomuus – OSA 6: MarvinSketch ja isomerian opetus

Kemian viimeinen "paperinen" yo-koee – mitä opittiin ja mitä jatkossa?

MarvinSketch – lukion kemian opetuksen onni vai onnettomuus – OSA 5: MarvinSketch ja vapaat elektroniparit

MarvinSketch – lukion kemian opetuksen onni vai onnettomuus

ARI MYLLYVIITA, kemian ja matematiikan lehtori, Helsingin yliopiston Viikin normaalikoulu.

1. Peruslähtökohtia

Abitti ja Marvsketch

Pitkään odotettiin YTL:n päätöstä molekyylimallisuusohjelmasta osana Abitti-koejärjestelmää ja osana tulevaa sähköistä kemian ylioppilaskoetta. Kouluissa oli pitkään ollut käytössä ChemSketch-niminen (mm. Mooli-nimisen oppikirjan rompullakin jaettu) 3D-molekyylimallinnusohjelma. Monen harmiksi tämä ei sitten tullut Abittiin mukaan. Kouluissa on ollut käytössä laajasti Molview.org-sivuston molekyylimallinnusohjelma, sen rajoitteista huolimatta – toisaalta sen erinomaisten elektronitiheyskuvausten vuoksi. Myös Avogadro -nimisen ohjelman käyttäjiä löytyy.

MarvinSketchin asennus

MarvinSketch-ohjelman asentamiseen on liittynyt

tähän löytyy Peda.netin MarvinSketch-sivustolta: <http://bit.ly/marvinsketch>. Asennuksessa vaatimus javasta voi aiheuttaa jatkossa monelle pulmia, jos itsellä ei ole admin-oikeuksia omiin laitteisiinsa. Java päivittyy aika ajoin ja MarvinSketch seuraa myös tätä.

MarvinSketch-ohjelmasta on tällä hetkellä (6.1.2018) versio 18.16.0 ja Abitin versio on 17.3.27. Versioiden välillä on eroja, mutta oleellisilta osin työskentely tapahtuu samalla tapaa – asioita löytyy hieman eri valikoista, mutta niihin tottuu käytön myötä.

On hyvä määritellä lukiolaisten kanssa ne asiat, joita itse ylioppilaskirjoituksessa käytetään ja mitkä liittyvät mielekkääseen kemian rakenteiden opiskeluun.

MarvinSketch ja Academic Teaching Licence

MarvinSketch -ohjelma on maksullinen ohjelma, se voidaan ladata kokonaisuudessaan asennettavaksi

Facebookin kemian opettajien vertaisryhmä (suljettu ryhmä)

Kemian opettajat -vertaisryhmä
Suljettu ryhmä

Tietoja

Keskustelu

Jäsenet

Tapahtumat

Kuvat

Tiedostot

Ryhmän kävijätiedot

Valvo ryhmää

Hae tästä ryhmästä

Pikalinkit

- Matematiikka 16
- Matematiikan TVT-ryhmä
- Kemian opettajat -vertai...
- Digivoimaa MaFyKe
- Tietokoneet yo-kirjoi... 15
- TVT MAOL kouluttajat
- Microsoft Office365... 20+
- Tieto- ja viestintäte... 20+
- Windows-tabletit opetuk... 20+
- Kemian opetuksen harj...
- Suomen opettajien... 20+

Olet jäsen

Ilmoitukset

Jaa

Lisää

Kirjoita julkaisu

Kuva tai video

Live-video

Lisää

Kirjoita jotain...

Kuva tai video

Tapaaminen

Katseluryhmä

...

VIIMEIKAINEN TOIMINTA

Ari Myllyviita jakoi linkin.
Ylläpitäjä · 25. kesäkuu

Kemikaalivaraston hoitajien alueelliset koulutukset järjestetään pääsääntöisesti syys-lokakuussa.
<http://opettajankoulutus.fi/kemikaalivarasto/?p=61> . Ilmoittautumiset pikaisesti (rajallinen määrä osallistujia mahtuu mukaan):
<http://bit.ly/kemikaali>

OPETTAJANKOULUTUS.FI
Alueelliset koulustilaisuudet (25.6. mennessä vahvistetut) –
Kemikaalivaraston vastuunkäsitteilykoulutus

LISÄÄ JÄSENIÄ Upota kutsu

+ Anna nimi tai sähköpostiosoite...

JÄSENET 1 049 jäsentä

Sinulla on 6 uutta jäsentä tällä viikolla. Toivota heidät tervetulleiksi kirjoittamalla julkaisu.

Kirjoita julkaisu

KUVAUS Muokkaa

Kemian opettajaksi valmistuvien ja valmistuneiden verkosto. Tuem... Näytä lisää

TUNNISTEET Lisää merkintöjä

Lisää pari kuvaavaa avainsanaa.

SIJAINNIT

Lisää sijainteja

LUO UUSIA RYHMIÄ

Ryhmien ansiosta jakaminen kavereille, perheenjäsenille ja tiimin jäsenille on helpompaa kuin koskaan.

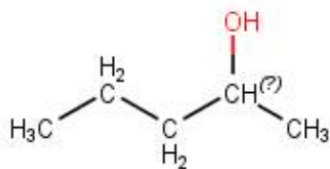
Luo ryhmä

RYHMIEN VIIMEIKAISET KUVAT Näytä kaikki

AEEF Poimintoja

10.27

Nyt iski ajatuskatkos. Mitä tuo kysymysmerkki tuolla tekee? On siis piirretty Marvinilla.



1

10 kommenttia

Tykkää

Kommentti



Ari Myllyviita Kyseinen hiili on asymmetrinen hiili, ohjelmassa päälle isomerian "tunnistus"

4

Tykkää · Vastaa · 3 pv

Ahaa! Kiitos. Olin unohtanut, että se tulee tuolla kysymysmerkillä.

1

Tykkää · Vastaa · 3 pv

Ketju runko paikka. Voiko esim antaa molekyylikaavan ja pyytää muodostamaan eri mahdolliset isomeerit?

Tykkää · Vastaa · 2 pv · Muokattu



Ari Myllyviita MarvinSketch ei tunnu taipuvan tällaiseen, mutta rakenneisomeereja voi hyvin koota japanilaisen spektroskopia sivuston avulla: <https://sdfs.db.aist.go.jp> . Tässä kuvaa "prosessista".

Screenshot of the SDBS search results page. The search criteria are: Molecular Formula: C₅H₁₂O, Molecular Weight: 88.1. The results table shows 14 hits, with the first few being 3-methyl-1-butanol, 2-pentanol, and 2-methyl-2-butanol. The 2-methyl-2-butanol entry is highlighted.

SDBS No	Molecular Formula	Molecular Weight	MS	CNMR	HNMR	IR	Raman	ES	Compound Name
541	C ₅ H ₁₂ O	88.1	Y	Y	Y	Y	Y	N	3-methyl-1-butanol
1708	C ₅ H ₁₂ O	88.1	Y	Y	Y	Y	Y	N	2-pentanol
1709	C ₅ H ₁₂ O	88.1	Y	Y	Y	Y	Y	N	2-methyl-2-butanol
2158	C ₅ H ₁₂ O	88.1	N	Y	N	Y	N	N	(S)-(+)-2-methyl-1-butanol
2470	C ₅ H ₁₂ O	88.1	Y	Y	Y	Y	Y	N	2-methoxy-2-methylpropane
4321	C ₅ H ₁₂ O	88.1	Y	Y	Y	Y	Y	N	1-pentanol
4708	C ₅ H ₁₂ O	88.1	Y	Y	Y	Y	Y	N	2,2-dimethyl-1-propanol
5529	C ₅ H ₁₂ O	88.1	Y	Y	Y	Y	Y	N	(R)-(-)-2-pentanol
7390	C ₅ H ₁₂ O	88.1	Y	Y	Y	Y	Y	N	ethyl propyl ether
10083	C ₅ H ₁₂ O	88.1	Y	N	N	Y	Y	N	butyl methyl ether
10147	C ₅ H ₁₂ O	88.1	Y	Y	Y	Y	Y	N	(+)-2-methyl-1-butanol
10370	C ₅ H ₁₂ O	88.1	Y	N	N	Y	Y	N	3-pentanol
10240	C ₅ H ₁₂ O	88.1	Y	Y	Y	Y	Y	N	3-methyl-2-butanol
50704	C ₅ H ₁₂ O	88.1	Y	N	N	Y	Y	N	sec-butyl mr

Tykkää · Vastaa · 1 pv

Ok kiitos avusta. Vähän säikähdin että olinko jättänyt huomiotta että voi määrittää muitakin isomeereja marvinilla. On mielenkiintoista nähdä että kun E ja Z avulla voi usein saada apua cis transsiin ja asymmetriset hiilet saa tosi kätevästi harveneeo niiden kysyminen. Ja yleistyykö rakenneisomeerien kysely. Vaikka että piirrä kaikki mahdolliset isomeerit molekyyli kaavasta.

29. elokuu kello 22.53

Tätä on varmasti kysytty aiemmin, mutta kysyn nyt vuorostani. Saadaanko titrauskäyrä ihan geogebraan taulukkolaskentaohjelmalla ja polynomin sovituksella? Miten olette tehneet?

4.22 Maitohappoa $\text{CH}_3\text{CH}(\text{OH})\text{COOH}$ syntyy bakteerien toiminnan tuloksena happamiin maitotuotteisiin. Kun $20,0 \text{ cm}^3$ maitohappoliuosta titrattiin kaliumhydroksidiliuoksella, jonka konsentraatio oli $0,10 \text{ mol/dm}^3$, saatiin taulukon mukaiset tulokset.

pH	V(KOH)/ml
2,50	0,0
3,10	5,0
3,40	10,0
3,70	15,0
3,90	20,0
4,10	25,0
4,40	30,0
4,80	35,0
6,00	40,0
10,90	45,0
11,80	50,0
11,90	55,0

- Laadi tuloksista titrauskäyrä.
- Määritä titrauskäyrältä ekvivalenttipiste.
- Ratkaise ekvivalenttipisteen perusteella...

1

3 kommenttia

Tykkää

Kommentti

Näytä vielä 1 kommentti

<https://youtu.be/NP25PYIJGE>

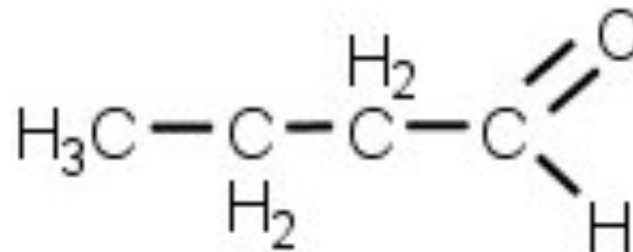
Tykkää · Vastaa · Poista esikatselu · 1 pv

Kiitos Hanna!

Tykkää · Vastaa · 1 pv

27. elokuu kello 9.27

Hei. Kun piirretään orgaanisia molekyyliä vaikka MarvinSketchillä, millaista molekyyliuotoa suositte: viivakaavaa vai näkykö kaikki sidokset ja vedyt? Käytättekö missään kuvassa näkyvää muotoa?



2

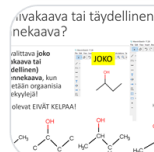
5 kommenttia

Tykkää

Kommentti



Ari Myllyviita Tässä minun ajatuksia asiasta:
<http://myllyviita.fi/kemia/?p=284>



MYLLYVIITA.FI

MarvinSketch – lukion kemian opetuksen onni vai onnettomuus – OSA 2:...

Tykkää · Vastaa · Poista esikatselu · 4 pv



Ari Myllyviita Ko. kuvassa näkyvät "vetymolekyylit" ovat minusta harhaanjohtavia merkintöjä. Itse en tätä käyttäisi missään. Tämä on yksi MarvinSketch-ohjelman pulmista, ettei se ymmärrä tiivistettyä rakennekaavaa tyyliin $\text{H}_3\text{C}-\text{CH}_2-\text{CH}_2-\text{COOH}$. Sen toki voi kirjoittaa kaavaeditorilla Abitissa.

Tykkää · Vastaa · 4 pv

Kiitos. En tosiaan osannut piirtää niin, että välissä lukisi CH_2 , vaan ne tulevat noin tuohon "ulkopuolelle".



Marvin

A full featured chemical editor for making science accessible

Marvin runs smoothly on desktops allowing you to import, draw, edit and publish your daily chemistry workflows. Marvin allows users to quickly draw molecules with the interface and advanced functionalities, such as: sprout drawing, customisable shortcuts, abbreviated groups, default and user-defined templates and context-sensitive popup menus.

DISCOUNTED LICENSES

Academic and non-profit scientific communities have always been supported by ChemAxon via free or discounted software solutions, as well as

Free tools for chemical drawing and calculations

Chemicalize provides a variety of physico-chemical calculations, chemical drawing and name-structure conversion online service. If you prefer a desktop tool, you can use **Marvin**, an advanced chemical editor, which supports publication-quality physico-chemical calculations and name-structure conversion.

The free version of Marvin is for non-commercial, internal use only.



Academic License for Teaching or Research

This option is yours if you've checked the drawing, calculation and naming functionalities of **Chemicalize** and **Marvin**, yet you need a more sophisticated and complex software solution. To apply, you must be affiliated with an educational institution that grants academic degrees, and you are allowed to run non-commercial research only. If you receive money from a 3rd party (company or government), please scroll down to read more about discounts for you. The Academic License is valid for 2 years, including the new product versions released until expiry. This period might be extended if you publish a scientific paper where ChemAxon is cited. [Read more about the conditions.](#)

Please note that your request will be queued in our system, and we might get back with an answer to you after several working days.

[APPLY FOR LICENSE](#)

SOFTWARE SOLUTIONS AND SERVICES FOR CHEMISTRY & BIOLOGY

We help you to get the most value out from life science and other R&D.

MAY 8, 2018

SciBite and ChemAxon to Deliver an Integrated Solution for Biology and Chemistry Research

[PARTNER](#) [PRESS RELEASE](#) [SCIBITE](#)

APR 23, 2018

ChemAxon European User Meeting, Budapest, March 20-22, 2018

[MEETING REPORT](#) [WENDY WARR](#) [WENDY WARR & ASSOCIATES](#)

MAR 19, 2018

Enamine collaborates with ChemAxon to create a convenient web-based search in immense chemical space

[CHEMAXON](#) [PRESS RELEASE](#) [PR](#) [ENAMINE](#)

DEC 12, 2017

ChemAxon and Simmaren Form Strategic Partnership to Accelerate the Development of New Software for the Prediction of Human Drug Metabolism

19th Annual Drug Discovery Summit

JUN 6 – 8, 2018 BERLIN, GERMANY - BOOTH #26

Master and power your chemical searchers with Reaxys and Marvin JS

JUN 14, 2018 7:00 PM CEST

[REGISTER NOW](#)

RICT 2018 Interfacing Chemical Biology and Drug Discovery

TOOLS TOO COOL NOT TO USE

ChemAxon's entire product portfolio offers out-of-the-box solutions for scientists, back-end tools for IT professionals, components to add extra functionality, and integrations to make our technology available from 3rd party software like Microsoft Excel or KNIME.

STANDALONE SOLUTIONS

BioEddie

Draw & visualize biomolecules on web

[LEARN MORE](#) [DOWNLOAD](#)

ChemCurator

Analyze & extract chemistry from docs, like patents on desktop

[LEARN MORE](#) [DOWNLOAD](#)

Chemicalize

Calculate properties, draw, extract chemical data online

[LEARN MORE](#)

ChemLocator

Find chemical info in unstructured data - web-based

[LEARN MORE](#) [DOWNLOAD](#)

Compliance Checker

Check system for shipping controlled substances - web-based

[LEARN MORE](#) [DOWNLOAD](#)

Compound Registration

Normalize, check, validate and register chemical compounds

[LEARN MORE](#) [DOWNLOAD](#)

STANDALONE SOLUTIONS

BioEddie

Draw & visualize biomolecules on web

[LEARN MORE](#) [DOWNLOAD](#)

ChemCurator

Analyze & extract chemistry from docs, like patents on desktop

[LEARN MORE](#) [DOWNLOAD](#)

Chemicalize

Calculate properties, draw, extract chemical data online

[LEARN MORE](#)

ChemLocator

Find chemical info in unstructured data - web-based

[LEARN MORE](#) [DOWNLOAD](#)

Compliance Checker

Check system for shipping controlled substances - web-based

[LEARN MORE](#) [DOWNLOAD](#)

Compound Registration

Normalize, check, validate and register chemical compounds

[LEARN MORE](#) [DOWNLOAD](#)

Instant JChem

Chemical data management from A to Z on desktop

[LEARN MORE](#) [DOWNLOAD](#)

MadFast Similarity Search

Blazing fast, web-based similarity search

[LEARN MORE](#) [DOWNLOAD](#)

Markush Editor

Draw complex Markush structures on desktop

[LEARN MORE](#) [DOWNLOAD](#)

Marvin

THE chemical editor on desktop

[LEARN MORE](#) [DOWNLOAD](#)

Marvin Live

Web-based molecule design, collaboration & report

[LEARN MORE](#) [DOWNLOAD](#)

Plexus Suite

Web-based chemical data management solutions

[LEARN MORE](#) [DOWNLOAD](#)



Marvin

A full featured chemical editor for making science accessible on all platforms

Marvin suite is a chemically intelligent desktop toolkit built to help you draw, edit, publish, render, import and export your chemical structures and as well as allowing you to convert between various chemical and graphical file formats. It is free for individual, academic and non-commercial use.

PLAY VIDEO



OVERVIEW

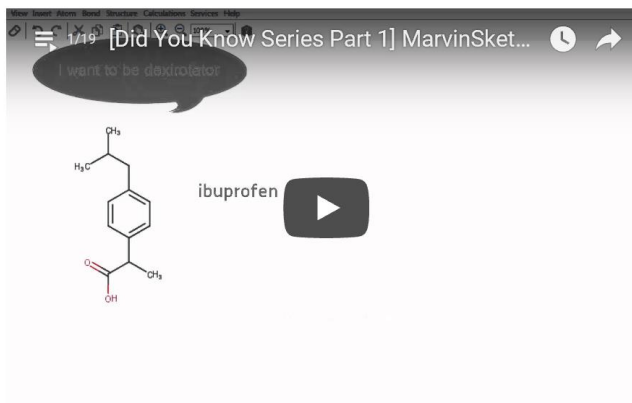
FEATURES

RESOURCES

DOWNLOAD

MarvinSketch - Create and Design

MarvinSketch features an extensive set of functionalities to enable the fast and accurate drawing of chemical compounds, reactions, Markush structures and query molecules. Furthermore, MarvinSketch has built-in structure and valence checkers to provide guidance, and integrated property calculators to pull live results - upon your request. Not only does MarvinSketch translate chemistry into a digital environment, it also supports the widest selection of industrially acknowledged standard chemical file formats. For chemical drawing on the web, please also check our browser component [Marvin JS](#).



#	structure	code	MOLFORMULA	MOLWEIGHT	product_name	c_log_p	h_bond_donors	rotatable_bo
1		BTB 03727	C13 H7 Cl2	2.861070000	N1-(2-chloro-6	0.000000000	3.000000000	
		F2 N	000000e+002	000000e+000	-fluorobenzyl	000000e+000	000000e+000	
					dene-3-ol			
					o-4-fluorobenil			

MarvinView - View your molecules

Get started instantly

For drawing, calculations or bi-directional name to structure conversion you might not even need the Academic License.

Chemicalize

Calculate properties, draw, extract chemical data online

TRY ONLINE NOW

Marvin

THE chemical editor on desktop; free for non-commercial use

DOWNLOAD NOW

Academic License for Teaching or Research

To apply you must be affiliated with an educational institution that grants academic degrees, and you are allowed to run non-commercial research only (**more about conditions**). If you receive money from a 3rd party (company or government) the **following conditions apply** to you. The Academic License is valid for 2 years, including the new product versions released until expiry. This period can be extended if you publish a scientific paper where ChemAxon is cited.

Please note that your request will be queued in our system, and we might get back with an answer to you after several working days.

APPLY NOW

Lataaminen

Lataaminen

- ❖ Ohjelman voi **ladata osoitteesta:**
<https://www.chemaxon.com/products/marvin/marvinsketch/>
- ❖ **Opettaja:** Akateeminen lisenssi, opettajien kannattaa rekisteöityä ja hakea oppilaitos-lisenssin (tsekkaus vie muutaman päivän)
- ❖ **Kaikki:** Varmista, toimiiko laitteessa 64-bittinen vai 32-bittinen versio (jos 64-versio ei toimi, kokeile 32-versiota)
- ❖ **Marvin Sketch** on koneelle asennettava ohjelma, **Marvin JS** on selaimessa toimiva ohjelma (kuten MolView), kyseisen työkalu on upotettu useaan palveluun, sen voi asentaa jopa omille www-sivuille



Marvin

A full featured chemical editor for making science accessible

Marvin runs smoothly on desktops allowing you to import, draw, edit and publish your daily chemistry workflows. Marvin allows users to quickly draw molecules with the interface and advanced functionalities, such as: sprout drawing, customisable shortcuts, abbreviated groups, default and user-defined templates and context-sensitive popup menus.

PLAY VIDEO



OVERVIEW

FEATURES

RESOURCES

DOWNLOAD

Create and Design

Marvin features an extensive set of functionalities to enable fast and accurate drawing of discrete chemical compounds, Markush structures, reactions and query molecules. Furthermore, these functionalities have built-in structure and valence checkers to provide guidance, and integrated property calculators to pull live instant results - upon your request. Not only is Marvin capable of drawing general organic

The screenshot shows the Marvin software interface. At the top, there is a menu bar with options: 'New', 'Insert', 'Arrows', 'Bonds', 'Structure', 'Calculations', 'Services', 'Help'. Below the menu bar, there is a search bar with the text '1/19 [Did You Know Series Part 1] MarvinSket...'. A speech bubble contains the text 'I want to be dexchlorator'. The main area displays the chemical structure of ibuprofen, which is a benzene ring with a propyl chain at the 1-position and a 4-methylphenyl group at the 4-position. The name 'ibuprofen' is written next to the structure. A play button icon is visible on the right side of the screenshot.

DOWNLOAD MARVIN

Version 17.28.0

[DOWNLOAD LATEST FOR WINDOWS \(64 BIT\)](#)

By downloading, you automatically accept our [End User License Agreement](#). Read more about the [upcoming changes in EULA](#).



Switch to Java8

Please note that from version 17.29.0 our tools run on Java8. Read more about these changes [here](#).

Windows

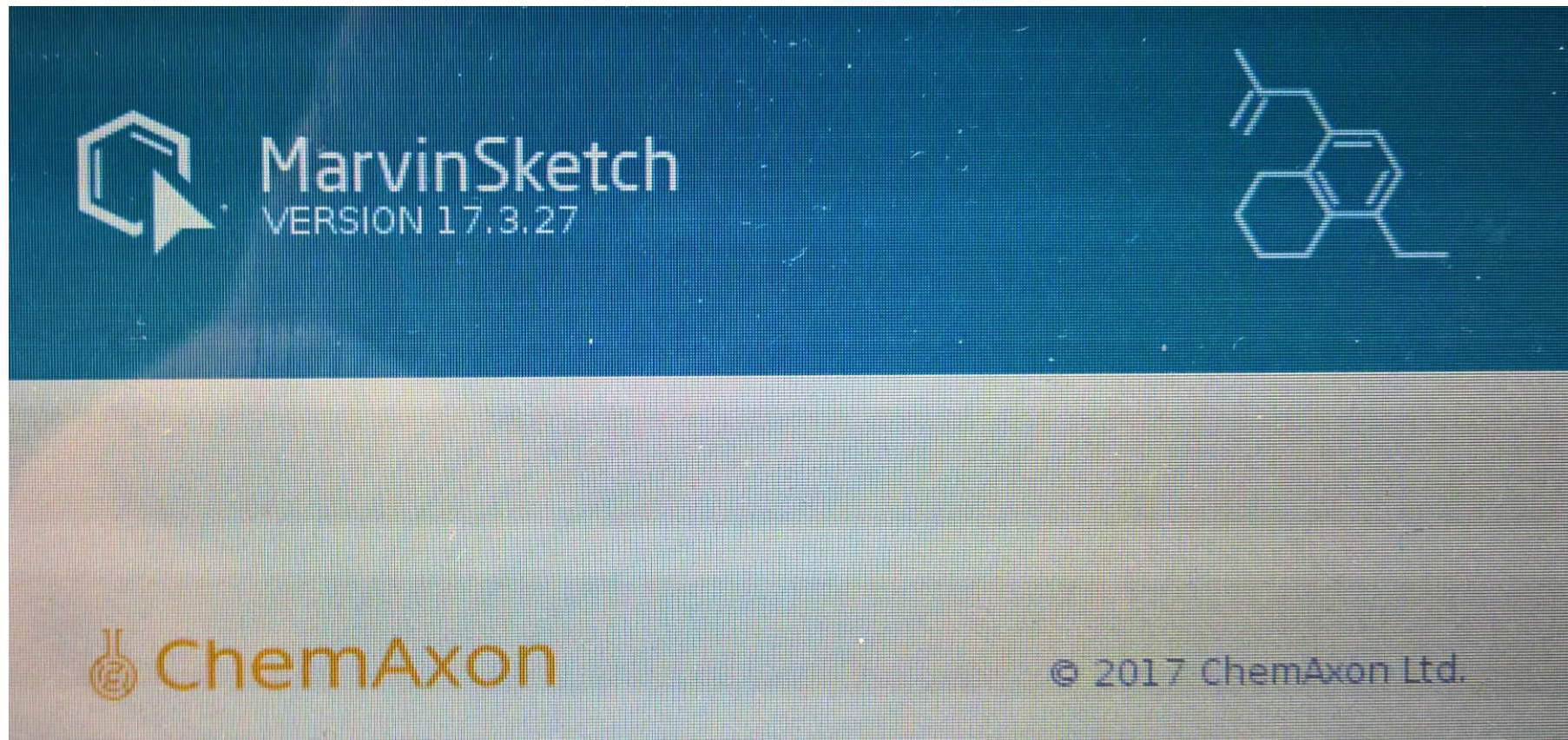
Includes Marvin desktop applications, API, examples, documentation.

[DOWNLOAD 64 BIT](#)

[DOWNLOAD 32 BIT](#)

[DOWNLOAD 32 BIT + OLE SUPPORT](#)

Mac OS X



Jakelussa oleva tuorein versio on 18.21.0

DOWNLOAD MARVIN

Version 18.11

[DOWNLOAD LATEST FOR WINDOWS \(64 BIT\)](#)

By downloading, you automatically accept our [End User License Agreement](#).



Java versions & OLE Editor

Please note that from version 17.29.0 [our tools run on Java 8](#). Marvin is compatible with Java 10 too from version 18.11. Also please [install .NET Marvin component](#) with the Java OLE supported version to use OLE Editor functions in Marvin.

Windows

Includes Marvin desktop applications, API, examples, documentation.

[DOWNLOAD 64 BIT](#)

[DOWNLOAD 32 BIT](#)

[DOWNLOAD 32 BIT + OLE SUPPORT](#)

Mac OS X

Drag and Drop installer for Marvin desktop application.

[DOWNLOAD .DMG](#)

Linux

Kirjaudu järjestelmään ennen lataamista

JOS ET OLE VIELÄ
REKISTERÖITYNYT

ChemAxon PASS

LOG IN TO CONTINUE
CHEMAXON WEBSITE

anselmi.myllyviita@viikinnormaalikoulu.fi

.....

Stay logged in [Forgot password?](#)

LOG IN

or
Not a member yet? [Sign up now.](#)

Kirjaudu tai rekisteröidy



LOG IN TO CONTINUE

CHEMAXON.COM

EMAIL

PASSWORD

Stay logged in

[Forgot password?](#)

LOG IN

or

Not a member yet? [Sign up now.](#)

Create Your ChemAxon Pass

EMAIL

FIRST NAME

LAST NAME

INSTITUTION

PHONE (OPTIONAL)

COUNTRY

Finland



STATE (IF FROM US)



POSITION



I've read and agree to the [Terms of Use](#),
[Privacy Policy](#) and [End User License Agreement \(EULA\)](#)



En ole robotti



reCAPTCHA
Tietosuojaja - Ehdot

REGISTER

Marvin

THE chemical editor on desk

[LEARN MORE](#) [DOWNLO](#)

DOWNLOAD MARVIN

Version 18.5.0

[DOWNLOAD LATEST FOR WINDOWS \(64 BIT\)](#)

By downloading, you automatically accept our [End User License Agreement](#).



Switch to Java8

Please note that from version 17.29.0 our tools run on Java8. Read more about these changes [here](#).



Windows

Includes Marvin desktop applications, API, examples, documentation.

[DOWNLOAD 64 BIT](#)

[DOWNLOAD 32 BIT](#)

[DOWNLOAD 32 BIT + OLE SUPPORT](#)

HUOM!
Valitse
oikea
bittisyys

 ChemAxon PASSCHECK YOUR E-MAILS

You have successfully created your ChemAxon Pass, but we need you to verify your e-mail address.

To complete your registration, please check your e-mails and click on the activation link inside.

If you have not received it yet, first check your junk or spam folder, otherwise please drop an e-mail to website-support@chemaxon.com

 ChemAxon PASSYOUR PASS IS READY TO USE

You have successfully activated your ChemAxon Pass.

You may continue exploring ChemAxon at:

- [ChemAxon Website](#)
- [ChemAxon Support Tickets](#)
- [Chemicalize - Instant Cheminformatics Solutions](#)

Welcome to ChemAxon

ChemAxon Pass <pass@chemaxon.com>

Tänään, 23:26

Anselmi Myllyviita ✎



Vastaa kaikille | ▾

Dear Anselmi,

Thank you for registering to ChemAxon.

In order to activate your account, please click on the button below.

[ACTIVATE MY ACCOUNT](#)

If the button does not show, you can also visit the the following link to activate: <https://pass.chemaxon.com/activate/anselmi.myllyviita@viikinnormaalikoulu.fi/8902c1b58b92d51647ccf686b641bb0ae46090f45df8faca0d14e0a027e33498>

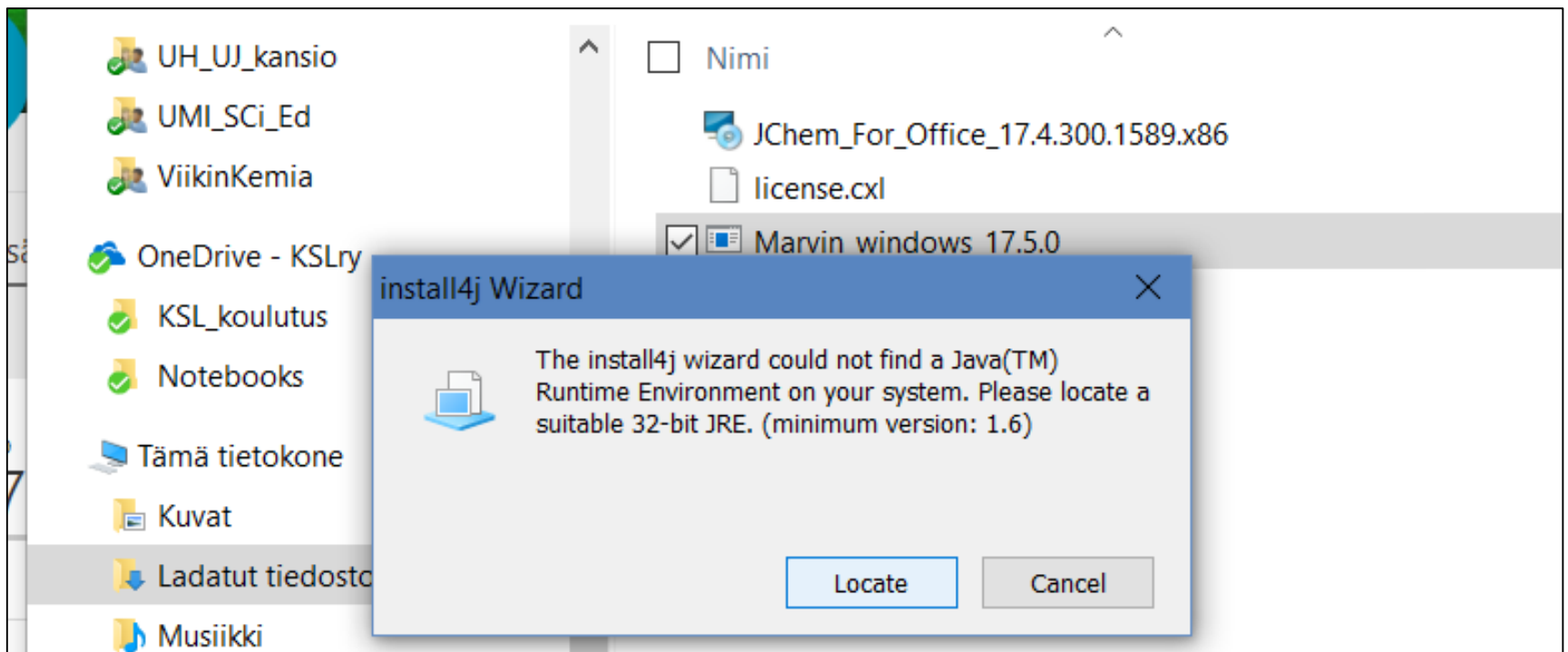
Should you have any technical difficulties, please do not hesitate to drop a line to the website-support@chemaxon.com.

Best regards,

The ChemAxon team

Asentaminen

Asennuksen yhteydessä tarkistetaan Javan olemassaolo



Javan asennus (asennus vaatii admin –oikeudet)

Search: java runtime environment

WWW Kuvat Uutiset

2 270 000 TULOSTA Kieli ▾ Alue ▾

JAVA-ohjelmistokehitystä | observis.fi
Mainos · [observis.fi](#)
Vaativat asiakaskohtaiset java- palvelut meiltä toimitus

Download Free Java Software
<https://java.com/en/download>
This page is your source to download or update your Java Runtime Environment (JRE, Java Runtime), also known as the Java SE Runtime Environment 8 Downloads. Do you want to develop Java programs? If you want to



The screenshot shows the Java website's download page. At the top, there is a red navigation bar with the Java logo, a search box, and links for 'Download' and 'Help'. The main content area is white and features a large red button labeled 'Free Java Download'. Below the button, there are links for 'What is Java?', 'Do I have Java?', and 'Need Help?'. A sidebar on the left contains a section titled 'All Java Downloads' with instructions on how to download Java for another computer or operating system, and a 'Report an issue' section with links to 'Learn more' and 'Report an issue'. The bottom of the page has a section titled 'Why download Java?' with text explaining that upgrading to the latest Java version improves system security.

Free Java Download

Download Java for your desktop computer now!

Version 8 Update 131
Release date April 18, 2017

Free Java Download

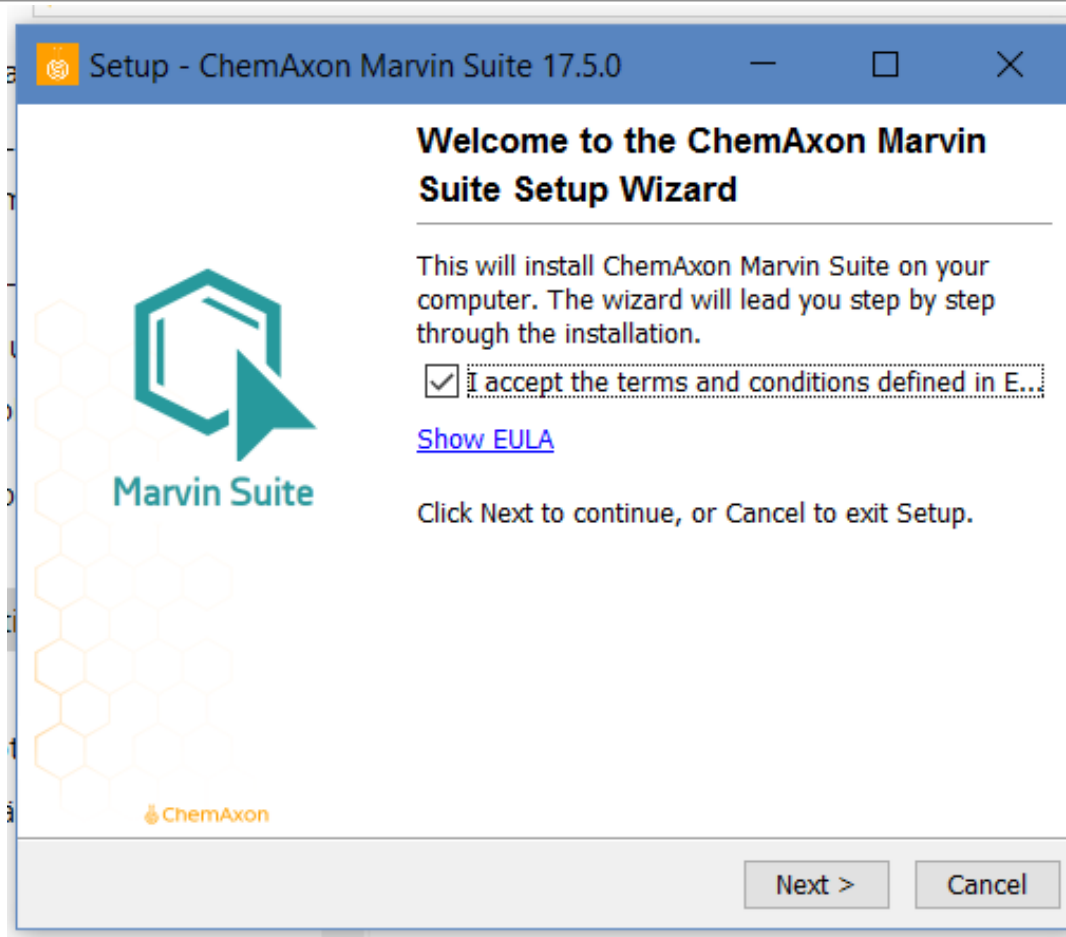
» [What is Java?](#) » [Do I have Java?](#) » [Need Help?](#)

Why download Java?

Java technology allows you to work and play in a secure computing environment. Upgrading to the latest Java version improves the security of your system, as older versions do not include the latest security updates.

Marvin Suite -asennus

Kun Java-asennus on hoidettu, käynnistetään (Ladattut kansioista) Marvin –ohjelman asennus



The image displays three overlapping windows from the ChemAxon Marvin Suite 17.5.0 installation wizard:

- Top-left window: "Select Installation Type"**

Which type of installation should be performed?

Select the type of installation that you want to perform. Click Next when you are ready to continue.

 - Standard installation**

All components required for regular usage are installed. Some rarely used components are not installed in order to save space.
 - Custom installation**

In the next step you can customize the components installed. The initial selection is set to the standard installation.
- Top-right window: "Installing"**

Please wait while Setup installs ChemAxon Marvin Suite on your computer.

Extracting files ...
lib\calculations-elemanal-master-6729.jar
- Bottom window: "Completing the ChemAxon Marvin Suite Setup Wizard"**

Setup has finished installing ChemAxon Marvin Suite on your computer. The application may be launched by selecting the installed icons.

Click Finish to exit Setup.

Marvin Suite

ChemAxon

Finish

The desktop background shows icons for Roskakori, Tama tietokone, MarvinSketch, and MarvinView.

File Edit View Insert Atom Bond Structure Calculations Services Help

The screenshot displays the MarvinSketch software interface. At the top, a menu bar includes 'File', 'Edit', 'View', 'Insert', 'Atom', 'Bond', 'Structure', 'Calculations', 'Services', and 'Help'. Below the menu bar is a toolbar with icons for selection, erasing, undo, redo, cutting, copying, pasting, and zooming. A zoom level of 100% is indicated. The main workspace is a large white area for drawing chemical structures. On the left side, there is a vertical toolbar with icons for drawing lines, zig-zag lines, curves, dashed lines, text, and various rings. On the right side, there is a vertical toolbar with icons for selecting atoms and a list of elements: H, C, N, O, S, F, P, Cl, Br, I. At the bottom, there is a horizontal toolbar with icons for drawing rings (cyclopentane, pyrrolidine, cyclopentane, cyclohexane, benzene, naphthalene) and a '2D' button.

Lisenssikuvio



Academic License for Teaching or Research

This option is yours if you've checked the drawing, calculation and naming functionalities of [Chemicalize](#) and [Marvin](#), yet you need a more sophisticated and complex software solution. To apply, you must be affiliated with an educational institution that grants academic degrees, and you are allowed to run non-commercial research only. If you receive money from a 3rd party (company or government), please scroll down to read more about discounts for you. The Academic License is valid for 2 years, including the new product versions released until expiry. This period might be extended if you publish a scientific paper where ChemAxon is cited. [Read more about the conditions.](#)

Please note that your request will be queued in our system, and we might get back with an answer to you after several working days.

APPLY FOR LICENSE

DISCOUNTED LICENSES

Academic and non-profit scientific communities have always been supported by ChemAxon via free or discounted software solutions, as well as we are offering custom tailored options for startups and research institutes.

Free tools for chemical drawing and calculations

Chemicalize provides a variety of physico-chemical calculations and properties, chemical drawing and name - structure conversion as an online service. If you prefer a desktop tool, you can use **Marvin** - our advanced chemical editor - offers quality publication drawings, physico-chemical calculations and name - structure conversion too.

The free version of Marvin is for non-commercial, individual users only.

The screenshot displays the Marvin software interface. On the left, a chemical structure of a substituted benzene ring is shown. The main window is divided into several panels:

- Basic properties:**
 - Input: CC(=O)c1ccc(O)cc1
 - Molar mass: 150.151 g/mol
 - Exact mass: 150.09312 g/mol
 - Formula: C₈H₈O₂
 - Composition: C: 66.67%, H: 5.56%, O: 27.77%
 - Lipinski's rule of five:
- Structural properties:**
 - Atom count: 21
 - Heavy atom count: 13
 - Aromatic atom count: 6
 - Rotatable bond count: 1
 - Ring count: 1
 - Aromatic ring count: 1
 - Hetero ring count: 0
- Other properties:**
 - MolLogP: 1.41
 - TPSA: 38.1
 - Molar refractivity: 34.45 cm³/mol
 - Polarizability: 17.23 Å³

The interface also includes a toolbar with various drawing and editing tools, and a sidebar with additional options.

[TRY CHEMICALIZE ONLINE](#) [DOWNLOAD MARVIN](#)

Kirjautumisen jälkeen

[PRODUCTS](#)[SUPPORT](#)[COMPANY](#)

ari.myllyviita@helsinki.fi

[My Profile](#)

[My Licenses](#)

[Log out](#)

DOWNLOAD MARVIN

Version 17.28.0

Ari Myllyviita

ari.myllyviita@helsinki.fi

[PROFILE](#)

[LICENSES](#)

Active Licenses

Valid Until	Type	Comment	
Apr 4, 2019	Academic Teaching	academic teaching license	DOWNLOAD

Ari Myllyviita

ari.myllyviita@helsinki.fi

PROFILE

LICENSES

Active Licenses

Lataa tiedosto omalle koneelle ja jaa se oppilaille koulun verkossa

Valid Until	Type	Comment	
Apr 4, 2019	Academic Teaching	academic teaching license	DOWNLOAD

Mitä haluat tehdä seuraavalle license.cxl (22.1 kt)?
accounts.chemaxon.com

Avaa Tallenna ^ Peruuta ×

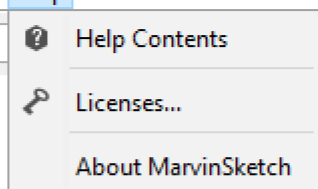
Mitä haluat tehdä seuraavalle license.cxl (22.1 kt)?
accounts.chemaxon.com

Avaa Tallenna ^

Lisenssin asentaminen

MarvinSketch 17.4.3

File Edit View Insert Atom Bond Structure Calculations Services Help



Tiedosto asennetaan kohdasta
Help | Licenses ...

ChemAxon License Manager

- Install license file
 - License overview
 - Product license details
 - Help
 - ChemAxon licensing
 - ChemAxon products
 - Request license
 - Getting help
 - Installing licenses
 - Frequently asked questions
 - Create report

License overview

Default license file location: C:\Users\arimy\chemaxon\license.cxl

Maximum Search/Minute: [empty]

Licenses are read from: C:\Users\arimy\chemaxon\lic

Software	Sta...	License Term	Licensee	E
Marvin Applets	Vali d	Academic Teaching	The Universi	2 0
Marvin Beans	Vali d	Academic Teaching	The Universi	2 0

AEEF Licenssin hyväksyminen (asentaminen)

Install license file

Please enter the location of the license file or press the Browse button to select path from the file system.

After specifying the path, press the Install button.

License file:

Browse...

Install

If your e-mail client supports drag and drop of attachments, you can drag the license file you received by e-mail to this dialog.

The following licenses

Software

- Install license file
- License overview
- Product license details
- Help
 - ChemAxon licensing
 - ChemAxon products
 - Request license
 - Getting help
 - Installing licenses
 - Frequently asked questions
 - Create report

Install license file

Please enter the location of the license file or press the Browse button to select path from the file system.

After specifying the path, press the Install button.

License file:

Browse...

Install

If your e-mail client supports drag and drop of attachments, you can drag the license file you received by e-mail to this dialog.

The following licenses will be installed by pressing the Install button:

Software St... License ... Licensee Expiratio... Support ... R

Hae (Browse...) tiedosto omalta koneelta. Ja asenna (install) se.

Asentamisen jälkeen:

ChemAxon License Manager

Open

Look in:

Viimeisim...

Install license file

Please enter the location of the license file or press the Browse button to select path from the file system.

After specifying the path, press the Install button.

License file: C:\Users\admin\Downloads\license_cd

Browse... Install

If your e-mail client supports drag and drop of attachments, you can drag the license file you received by e-mail to this dialog.

The following licenses will be installed by pressing the Install button:

Software	Status	License ...	Licensee	Expiratio...	Support ...	Restriction	Number of ...	Comment
Marvin Applets	To be installed	Academic Teaching	The Universi	2019-04-04	2019-04-04	Server Use: Not Allowed	Unlimited	academic teaching
Marvin Beans	To be installed	Academic Teaching	The Universi	2019-04-04	2019-04-04	Server Use: Not Allowed	Unlimited	academic teaching
Instant JChem	To be installed	Academic Teaching	The Universi	2019-04-04	2019-04-04	B/S/P/E: Standard Server Use: Not Allowed	Unlimited	academic teaching
JChem Base	To be installed	Academic Teaching	The Universi	2019-04-04	2019-04-04	Search/Min: Unlimited Server Use: Not Allowed	Unlimited	academic teaching
Standardizer	To be installed	Academic Teaching	The Universi	2019-04-04	2019-04-04	B/S/P/E: Standard Server Use: Not Allowed	Unlimited	academic teaching
Screen	To be installed	Academic Teaching	The Universi	2019-04-04	2019-04-04	Server Use: Not Allowed	Unlimited	academic teaching
Reactor	To be installed	Academic Teaching	The Universi	2019-04-04	2019-04-04	Server Use: Not Allowed	Unlimited	academic teaching
JKluster	To be installed	Academic Teaching	The Universi	2019-04-04	2019-04-04	B/S/P/E: Standard Server Use: Not Allowed	Unlimited	academic teaching
Metabolizer	To be installed	Academic Teaching	The Universi	2019-04-04	2019-04-04	Server Use: Not Allowed	Unlimited	academic teaching

The image shows the MarvinSketch 17.5 software interface. The main window has a menu bar (File, Edit, View, Insert, Atom, Bond, Structure, Calculations, Services, Help) and a toolbar with various drawing tools. A vertical toolbar on the left contains drawing tools for lines, rings, and text. A vertical toolbar on the right contains element selection tools for H, C, N, O, S, F, P, Cl, Br, and I. At the bottom, there are icons for 2D and 3D views and a set of chemical rings (pentagon, hexagon, heptagon, octagon, nonagon, decagon).

An "About MarvinSketch" dialog box is open in the center, displaying the following information:

- Product Version:** MarvinSketch 17.5.0
- Build Date:** 2017-04-18
- Internal build id:** 17.5.0-6729
- Operating System:** x86 Windows 10 10.0
- Character encoding:** windows-1252
- Java:** Oracle Corporation Java 1.8.0_131
- Memory:** 247,5M maximum, 38,3M total, 11,1M free
- Environment:** Application
- Browser:** -

Copyright © 1998-2017 ChemAxon Ltd.
<http://www.chemaxon.com>

Close

ChemAxon		PRODUCTS	SUPPORT	COMPANY	🔍	👤
📁	17.28.0	-				2017-11-09 10:21:21
📁	17.29.0	-				2017-12-08 11:58:26
📁	17.3.13.0	-				2017-03-21 16:57:25
📁	17.3.27.0	-				2017-03-29 14:30:37
📁	17.4.3.0	-				2017-04-06 15:40:17
📁	17.5.0	-				2017-04-20 19:29:40
📁	17.6.0	-				2017-04-26 15:14:18
📁	17.7.0	-				2017-05-05 17:09:55
📁	17.8.0	-				2017-05-09 12:40:11
📁	17.9.0	-				2017-05-26 16:49:32
📁	18.1.0	-				2018-01-12 11:28:51
📁	18.2.0	-				2018-01-18 14:11:58
📁	18.3.0	-				2018-01-30 14:45:41
📁	18.4.0	-				2018-02-13 17:33:29
📁	18.5.0	-				2018-02-27 20:54:01

Ohjeet yms.

[HTTPS://DOCS.CHEMAXON.COM/DISPLAY/DOCS/MARVINSKETCH+USER%27S+GUIDE](https://docs.chemaxon.com/display/docs/marvinsketch+user%27s+guide)

MarvinSketch –ohjeet 1

Pages

Documentation

Created by Unknown User (jvasco), last modified by Nikolett Mihalala on Apr 06, 2017

Welcome to ChemAxon's documentation home page! We provide here documentation for our products. If you still have a question please create a ticket in our [Support Ticket System](#).

✔ **Are you looking for other versions?**
[Select other version...](#)

DESKTOP AND WEB APPLICATIONS <ul style="list-style-type: none">› Compliance Checker› Plexus Suite› JChem for Office› Instant JChem› Marvin Sketch› Marvin View› Marvin JS	DISCOVERY TOOLKIT <ul style="list-style-type: none">› Calculator Plugins› JKlustor› Reactor› Screen IT PLATFORM TOOLKIT <ul style="list-style-type: none">› Compound Registration› JChem Base	MARKUSH IP <ul style="list-style-type: none">› Markush Editor› ChemCurator CROSS PRODUCT <ul style="list-style-type: none">› Licensing› File Formats› General Documentation› Chemical Fingerprints
--	---	--

com), you agree to our use of cookies to enhance your experience. See our [Privacy Policy](#). [GOT IT](#)

MarvinSketch –ohjeet 2

her versions ▾

Pages / Documentation

MarvinSketch

Created by Dora Barna, last modified by Nikolett Mihala on Aug 11, 2016

MarvinSketch User's Guide

Created by Dora Barna, last modified by Nikolett Mihala on Jul 11, 2016

Getting started

- Start to draw in MarvinSketch
- Select
- Delete
- Move / Rotate / Zoom / Scale
- Tricks and Tips

MarvinSketch Graphical User interface

- Canvas
- Menus of MarvinSketch
- Toolbars of MarvinSketch
- Pop-up Menus of MarvinSketch
- Status bar of MarvinSketch
- Dialogs of MarvinSketch
- Shortcuts of MarvinSketch
- Customizing MarvinSketch GUI

Working in MarvinSketch

- Structure Display Options
 - Customizing structure drawing styles
 - Drawing settings
 - Drawing styles
 - Structure Display
 - Colors
 - Implicit/Explicit Hydrogens
 - Displaying the label of carbon atoms
 - Error Highlighting in MarvinSketch
 - Saving Display Options
- Basic Editing
 - Selecting a Structure
 - Copy-Paste and Drag&Drop
 - Geometric transformation of

Marvin OLE User's Guide

- Install and Uninstall
- How to Use
- Customize Marvin OLE editing mode
- Redirecting other Vendors' OLE objects to Marvin OLE
- Logging
- Troubleshooting and Administration
- Known Issues

Additional information

- Calculator Plugins
- File formats in Marvin
- Name to Structure
- Scientific Background
- Structure Checker
- Structure to Name

MarvinSketch User's Guide