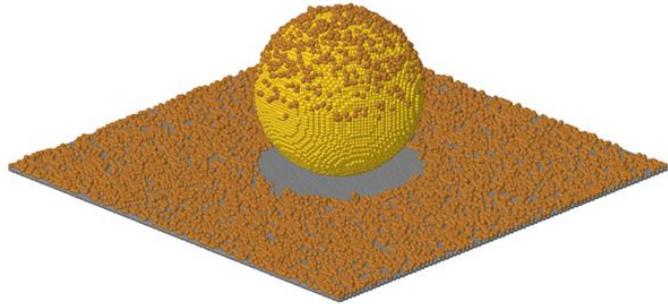


VIRTUAL CoaterTM 4.8.5



Virtual Coater suite delivers realistic simulations of your coatings by growing them *in silico* independently of the deposition method.

Virtual CoaterTM

Atomic scale film growth
simulation suite

Installation Manual for version 4.8

Prof. Stéphane Lucas slu@incosol4u.com (+32 498 975 282)

Emile Haye eha@incosol4u.com

Pavel Moskovkin pmo@incosol4u.com

Jérôme Müller jmu@incosol4u.com

Valentin Lucas vlu@incosol4u.com

Alexia Petit ape@incosol4u.com

Innovative Coating Solutions S.A.

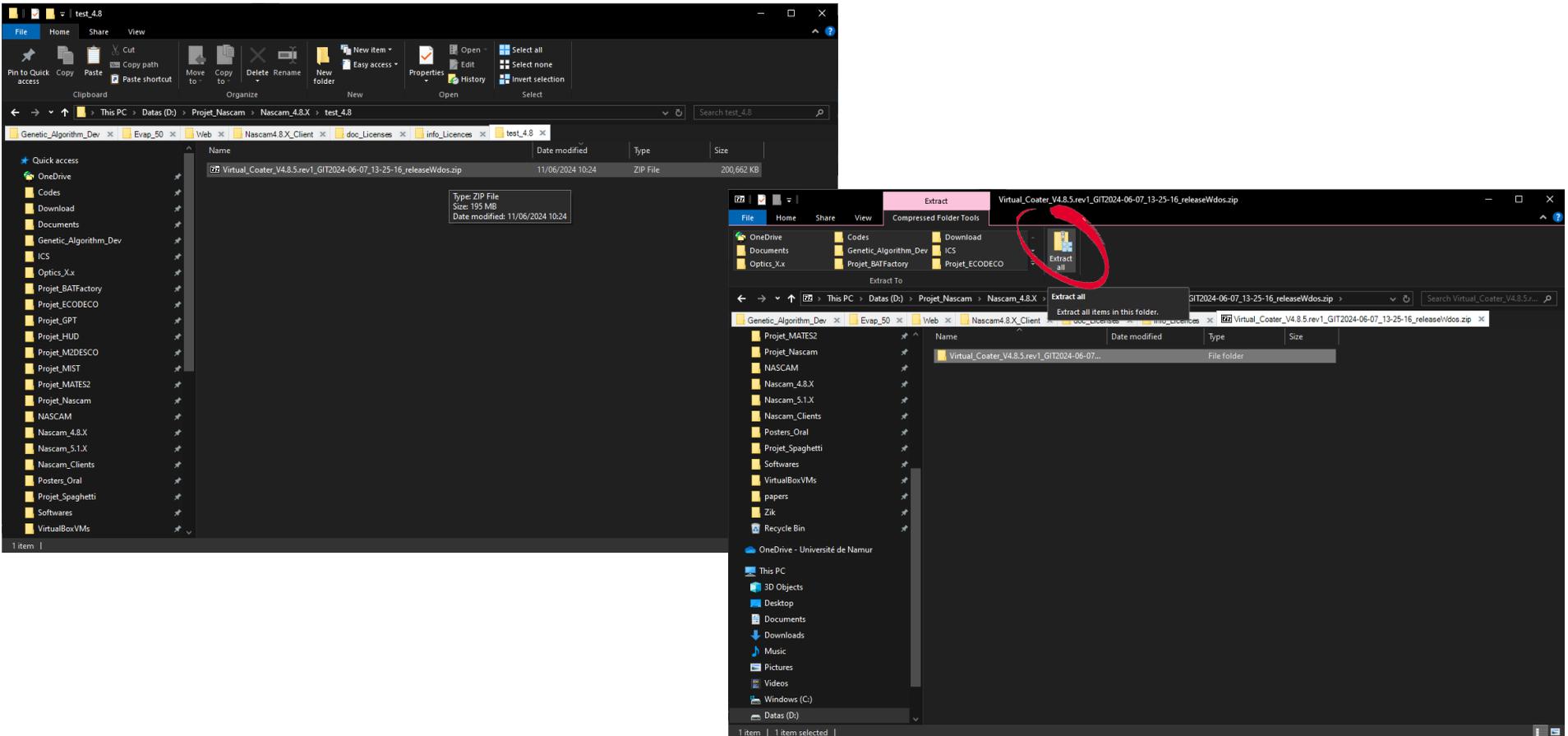
www.incosol4u.com

Headquarters: 11, Place Saint Pierre, B-5380 Forville, Belgium
Operations: 61, Rue de Bruxelles, B-5000 Namur, Belgium

Installation of Virtual Coater™

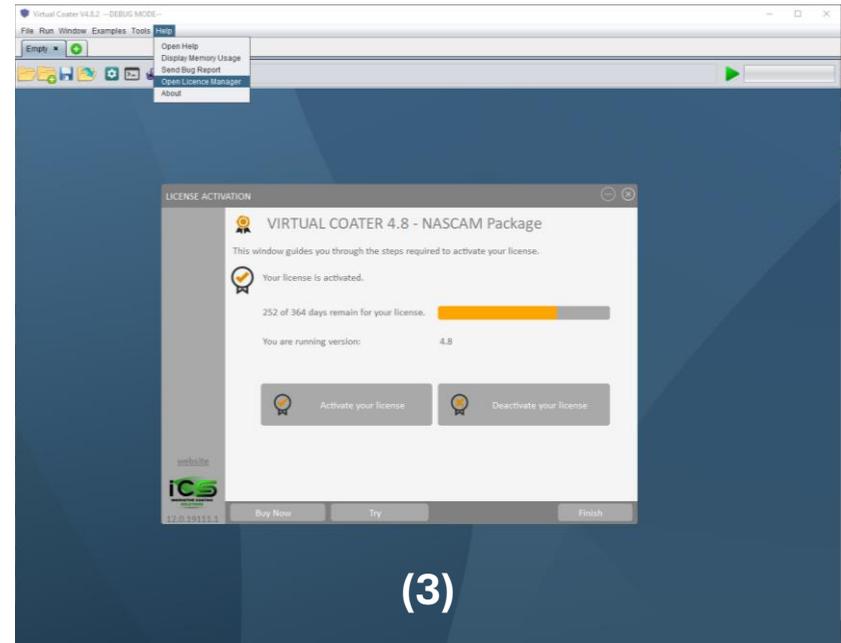
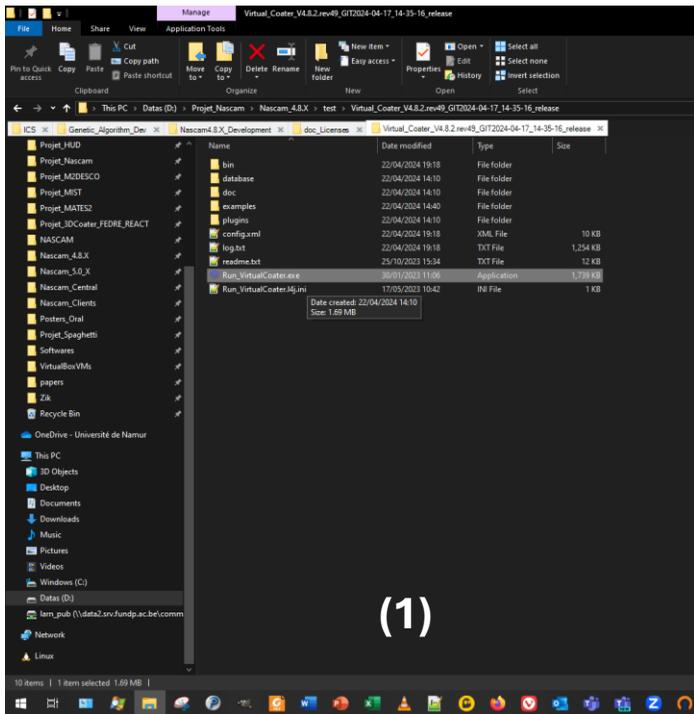
Unzip the software

- you have to unzip the zip archive in the folder that suits you best.
- we observed odd behaviour when unzipping the archive with 7zip. We suggest to use the internal tool of Windows (Winrar should work too).
- you may observe some difficulties to launch the software if you install it in your "Program Files" folder. In that case, move it or to launch it as administrator.



Launch the software (1/2)

- to launch the software, double click on "Run_VirtualCoater.exe" (1)*.
- a splash screen will popup. Just wait a few seconds (2).
- then the software main window will open. If it is your first launch, a license window will popup (3).



*for your convenience, you can create a shortcut in your desktop.

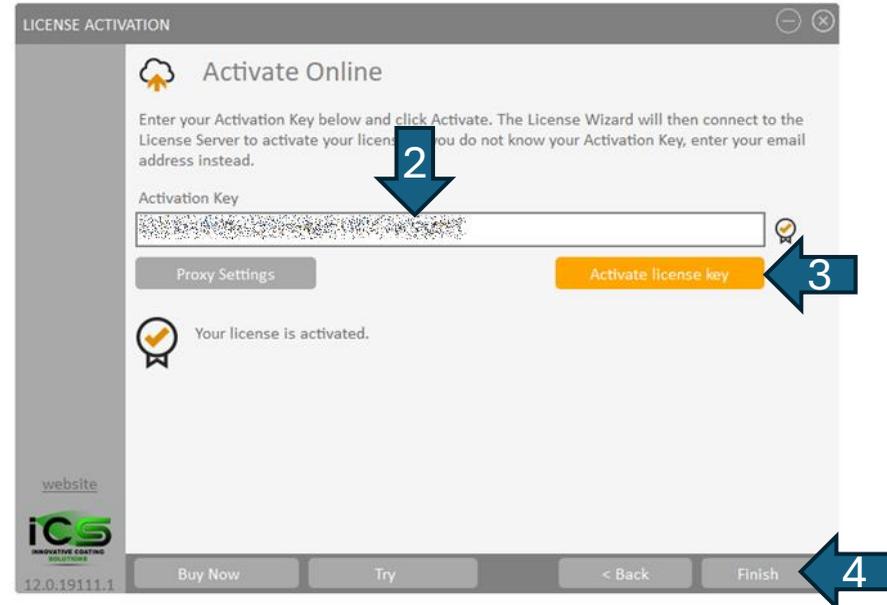
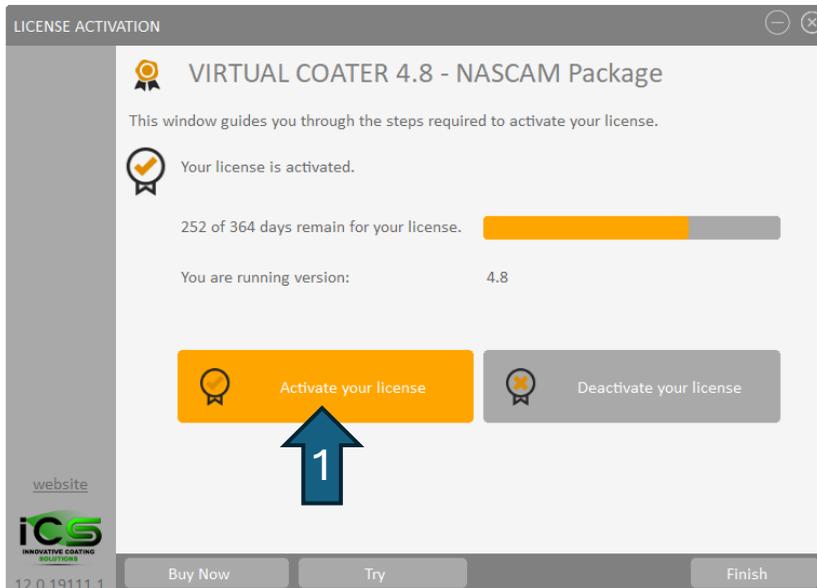
Launch the software (2/2)

- Note that Java is required (jre version 8, 64 bit, <https://www.java.com/en/download/manual.jsp>)
- Possible issues: if multiple versions of java are installed, you may observe crash-to-desktop (CTD) issues, especially if you use version 17 and higher.
- Note : to check what version of java is installed, open a command prompt and type the command "java -version".

A screenshot of a Windows Command Prompt window. The title bar reads 'Command Prompt'. The text inside the window shows the following: 'Microsoft Windows [Version 10.0.19045.4291] (c) Microsoft Corporation. All rights reserved. C:\Users\jermulle>java -version java version "1.8.0_351" Java(TM) SE Runtime Environment (build 1.8.0_351-b10) Java HotSpot(TM) 64-Bit Server VM (build 25.351-b10, mixed mode) C:\Users\jermulle>'. The window has standard Windows window controls (minimize, maximize, close) in the top right corner and a scroll bar on the right side.

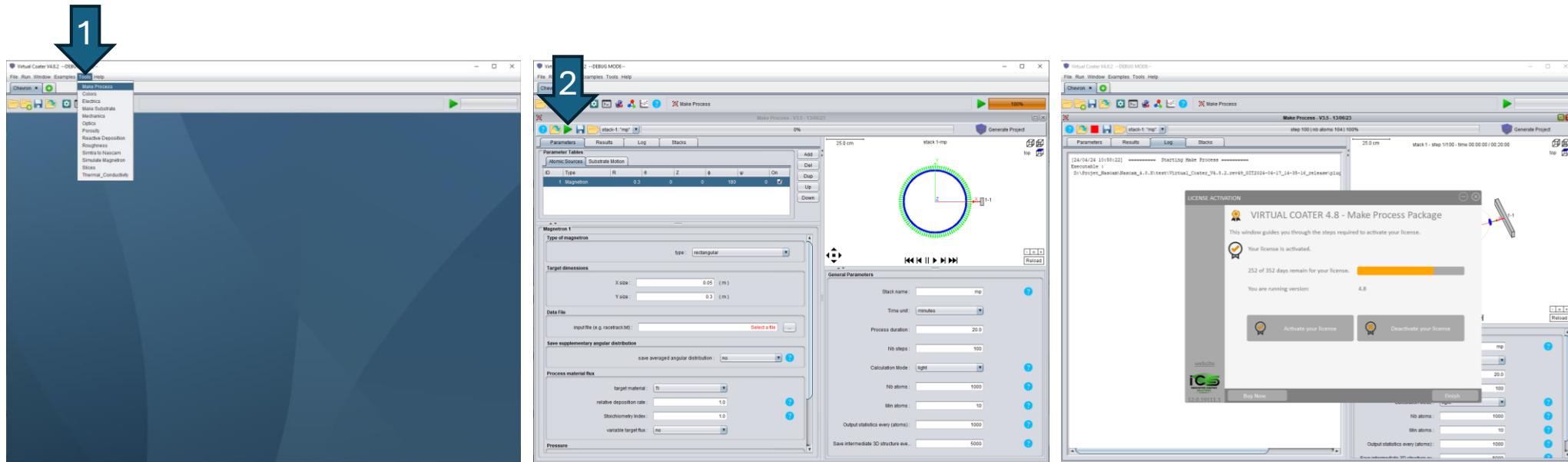
Activate the Nascam license

- At your first launch, a license window will popup
 - 1: click on "Activate your license"
 - 2: copy/paste you Activation key
 - 3: click on Activate license key
 - 4: click on Finish



Activate the MakeProcess license

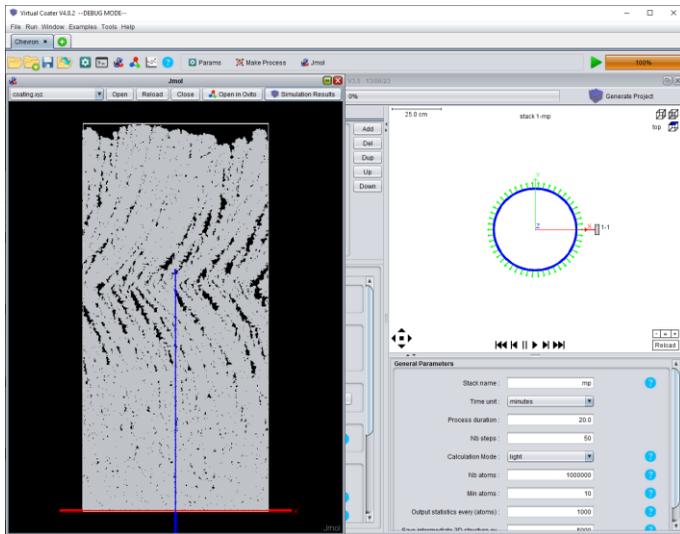
- For MakeProcess, you have to open the tool (1) and launch it a first time (2)
- Then, a license window will popup. Just do the same thing than for Nascam



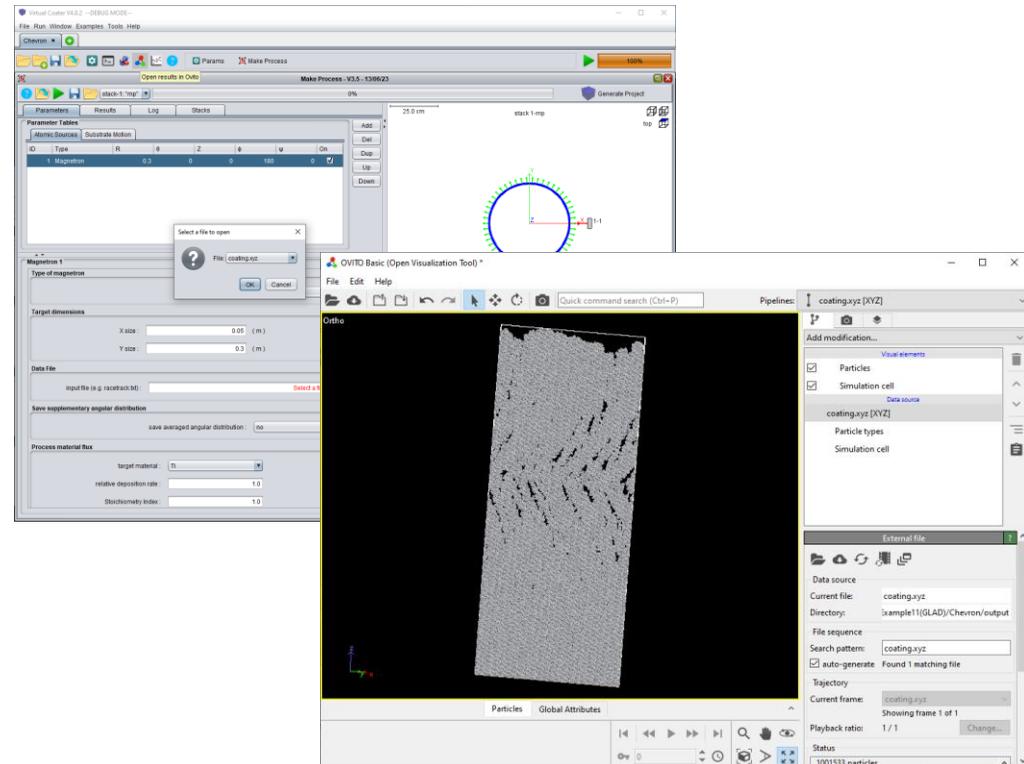
Optional features - 3D visualisation

- Virtual-Coater™ includes its own 3D visualisation tool Jmol.
- If you have to load heavy 3D structures (more than 1M atoms), we recommend to use the external software Ovito (free version) instead. Ovito will use your GPU, instead of your CPU. If you're interested, you can download it here : <https://www.ovito.org/#download> .

Jmol



Ovito



Known possible issues

- you may observe low computation speed, computation failure or CTD while using on-line synchronization with cloud storage like googledrive, onedrive,... It should be deactivated for better performance.
- you may observe issues due to your antivirus. You may have to exclude certain folders (exe folder and/or project folder) from scanning.



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